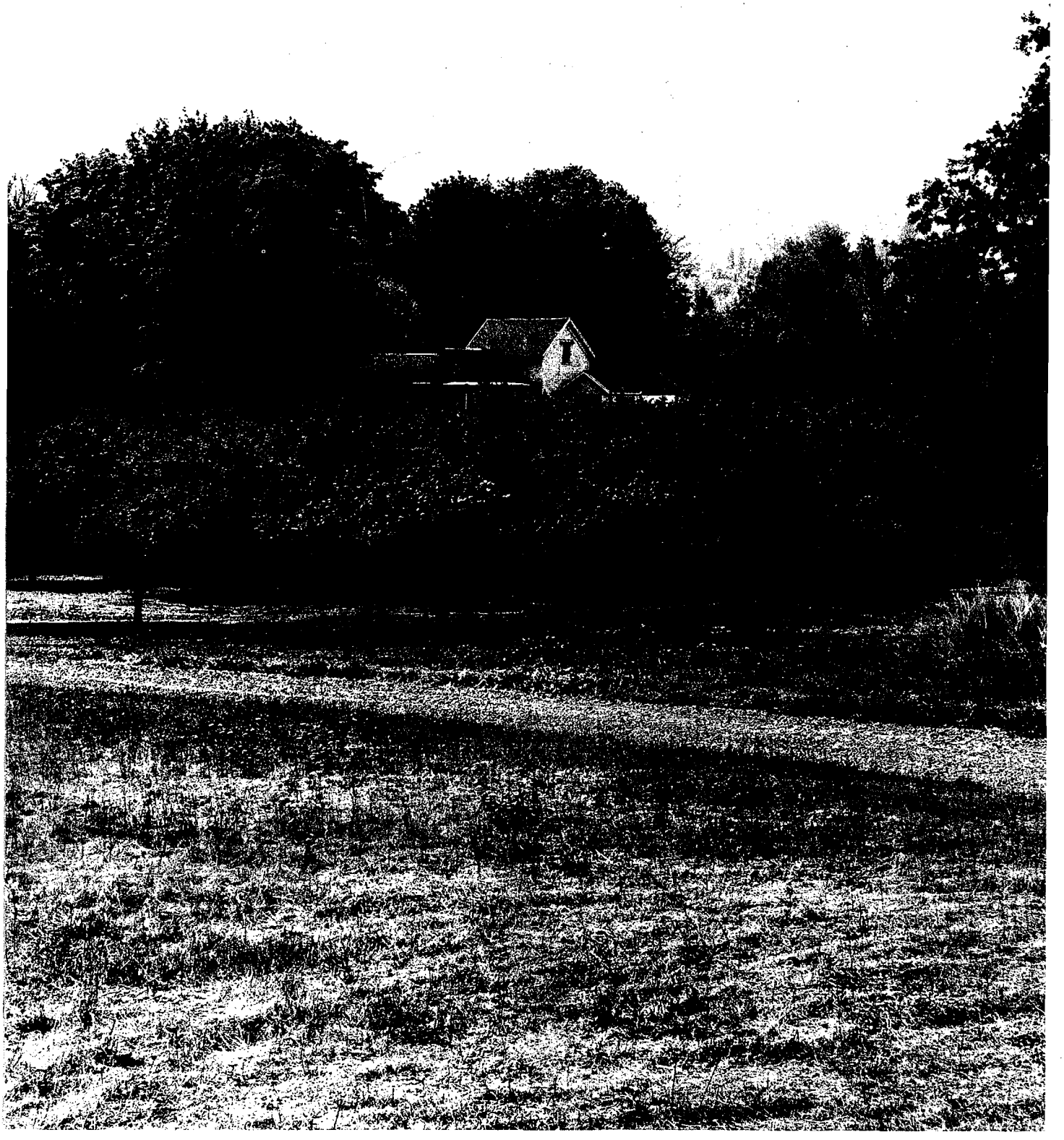


DORRIS RANCH
LAND USE PLAN

RUFF · CAMERON · LACOSS AND ASSOCIATES

LANDSCAPE ARCHITECTS & PLANNERS
1873 GARDEN AVE. · EUGENE · OREGON · 503 687-1728
ZIP 97403

November 1979

Willamalane Park and Recreation District
Board of Directors
765 North A Street
Springfield, Oregon 97477

Dear Members of the Board,

We are pleased to submit this Land Use Plan for Dorris Ranch Park.

The Dorris Ranch Land Use Plan is the first step in a four phase total plan for the Ranch. The Land Use Plan will serve as a solid base for decision making during the other three phases: Economic Planning, Program Development, and Master Planning.

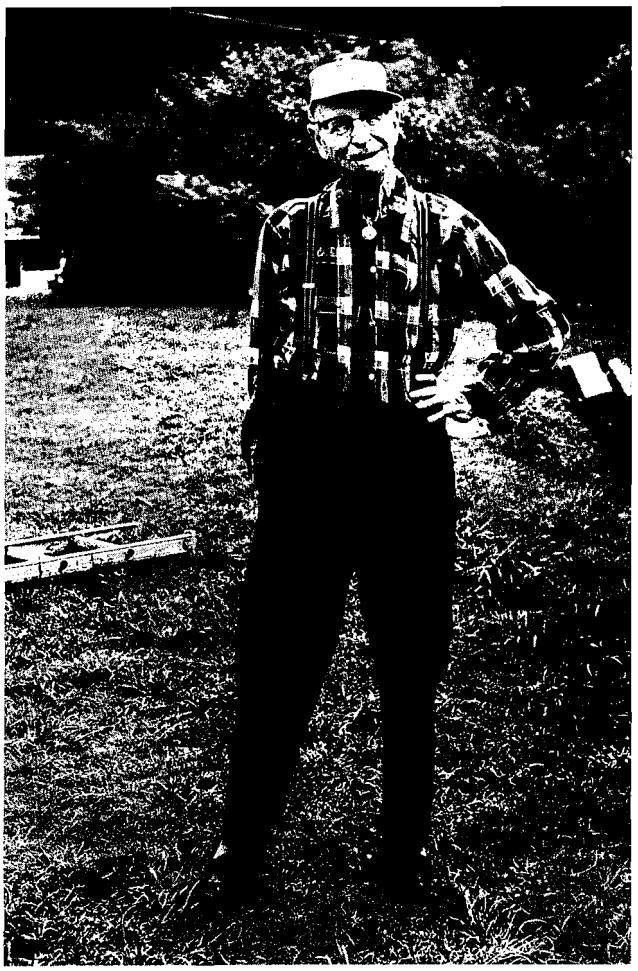
The Ranch itself is rich with history and local character, full of wildlife and varied vegetation patterns. It is situated ideally with respect to the Middle Fork of the Willamette River and downtown Springfield. It is our firm belief that this Plan will serve as a valuable guide to sensitive design development, and operations of this valuable resource.

Your District had the foresight to obtain the Ranch property. It is laudable that you are taking a careful, planned approach to assure that it is developed and used appropriately. Your efforts will be appreciated by this and future generations of park users.

We wish to thank the Board for the opportunity to take part in this planning endeavor. It has been a challenging and rewarding experience.

Sincerely,

Robert A. Lacoss



BEN F. DORRIS

Dedicated to Ben and Kay Dorris whose generosity made possible the public acquisition of DORRIS RANCH PARK.

WILLAMALANE
PARK AND RECREATION DISTRICT

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SHIRLEY LIGHTHEART,	Director
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NOTE: The cover photograph is of the "Original House" built in 1880 and is currently owned by Reynold Briggs.

ACKNOWLEDGEMENTS

During the development of this Land Use Plan many people generously provided information and ideas. Some of the people who contributed to this plan were:

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Lane County Audubon Society	
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Lane Council of Governments	Steve Gordon
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Lane County Pioneer Museum	Glen Mason
Lane County Planning	Mike Nagler
	John Bennet
Lane County Soil Conservation Service	Dick Patching
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	John Andrews
	Ray Temple
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Southern Willamette Orthinological Club	
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Springfield Historical Research Coordinator	Ellen Cox
	Barbara Graham
Springfield Planning Department	Julio Iturreria
Springfield Public Works	Bob Barret
State Department of Geology	Paul Lawson
	Stan Aumus
U.S. Forest Service Archaeologist	Claudia Nissley
University of Oregon	Head Department of Anthropology - Dr. Akins
Willamalane Park Maintenance Department	Charlie Smathers

PREFACE

Dorris Ranch is located at the confluence of the Middle Fork and Coast Forks of the Willamette River, south of downtown Springfield. The site had been farmed over the course of eighty-one years by George Dorris and his nephew Ben Dorris.

In 1970 Willamalane Park and Recreation District reviewed the land and found it to have outstanding potential for development as a park site. For the next three years, efforts were made by the District to acquire the land for public ownership. The acquisition was made, in large part, through the tenacious effort of Gary Walker, District Supervisor, who spearheaded and coordinated the effort.

The first one hundred and fifty acres were acquired in 1972. Of that amount, the State of Oregon purchased seventy-five acres along the Willamette River under the Federal Corridor Program. It leases the land to the District for development operation, and maintenance. The remaining seventy-five acres were acquired by Willamalane Park and Recreation District through a generous loan made by the following: Marian Alexander, Ed Bennet, Don Derickson, Daren Engel, Bill Fitch, Maurie Jacobs, George Litzenberger, Jack Lively, Don Lutes, Alan Marshall and Doug McKay. On June 29, 1973, the remaining one hundred acres were acquired through a donation from Ben and Kay Dorris, together with State and Federal matching funds. This placed two hundred and fifty acres of prime parkland under public ownership.

At present, the park is undeveloped except for filbert orchards and a single residence which is occupied by a park caretaker. The orchards are harvested annually with the income being used for the maintenance and future development of the park.

In May of 1979, consultants were retained by Willamalane Park and Recreation District to conduct this inventory, analysis and land use plan for Dorris Ranch.

TABLE OF CONTENTS

INTRODUCTION

Dorris Ranch is one of the most beautiful and distinctive park sites to be found in Oregon. It is a place of diversity, exhibiting the character of times past with a combination of natural and agrarian landscapes.

The variety and contrasts are endless: from open meadows to enclosed dells, hills to lowlands, dry lands and oak savanna to grassy meadows, wetlands, bogs and ponds, fine textures to coarse textures, light browns to dark greens. There are placid areas of lush wooded trails and tranquil filbert orchards which calm the soul. There are dynamic places with towering Douglas-fir standing above the rushing waters of the Willamette River.

The weathered rustic appearance of all man-made structures and objects at the Ranch often belie actual age. The pragmatic choice of materials for farm and orchard use at Dorris Ranch have established a totally appropriate character which fits the natural wooded and grassy areas as well as the agricultural portions of the site. Hints of Dorris Ranch's history reveal themselves from beneath leaves all through the site. During a walk one can find an antique piece of machinery, an old brick revetment, traces of asparagus from an old crop field, a remnant walnut tree from an old orchard and an old mine shaft. A sense of time passed prevails throughout.

Dorris Ranch is an invaluable resource which holds tremendous potential for the enjoyment and recreation of present and future generations. However, the Ranch is a fragile place and unregulated public access could easily destroy most of its potential. Careful planning for its development and use is imperative.

The Willamalane Park and Recreation District has recognized its responsibility for stewardship of the Dorris Ranch land. This study was initiated by the District as a means of identifying ways to preserve, enhance, and utilize the rich and timeless experiential values of the Ranch.

The following goals were provided by the District as guidelines for the use and development of Dorris Ranch Park:

- Preserve unique historical and natural resources on the site.
- Provide environmental education and wildlife interpretation opportunities to the visiting public which emphasize the interrelationship and interdependence of all living things.
- Provide historical educational opportunities to the visiting public which emphasize man's development in the Willamette Valley, particularly his agrarian culture.
- Insure conservation of an important, unique open space resource (by allowing appropriate uses to occur on the site) for the enjoyment of local residents and visitors.
- Integrate Ranch uses with other existing and proposed uses in the area and region.
- Preserve and enhance the site's unique character and visual quality.
- Provide a format for design of recreational and support facilities so that they can occur in a manner which does not degrade habitat or visitor experience.
- Identify and gain support from groups, associations and funding programs which can enhance park development and use.

These goals, together with analysis of a thorough inventory of the physical, biological, and cultural factors affecting the site,generated the recommendations and policies set forth in this land use plan.

The next steps will be program development and formulation of a Master Plan for the site. These steps will be followed by phased development of actual facilities and improvements.

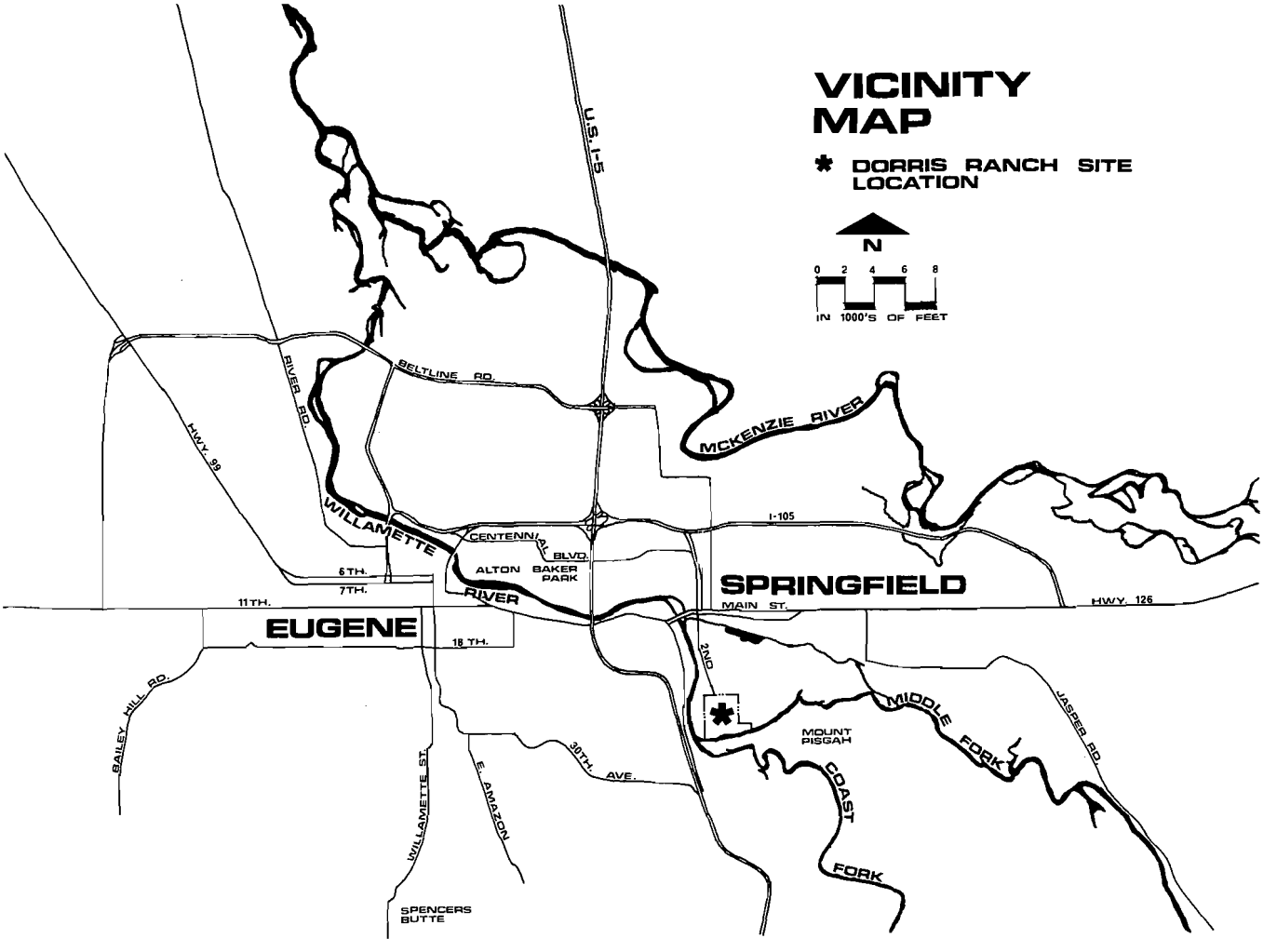
EXISTING ACCESS ROAD TO THE SECOND HOUSE.

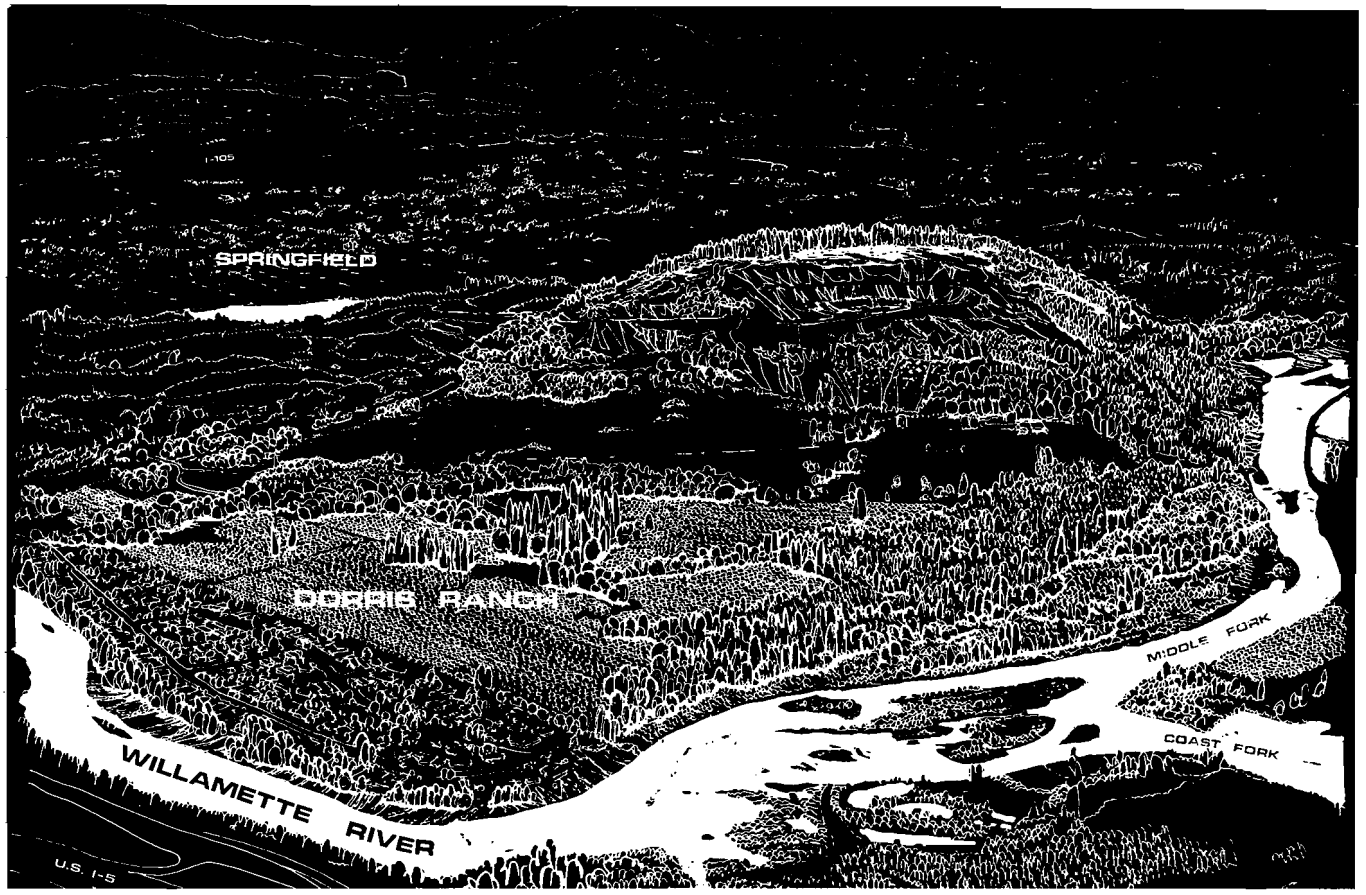
THE SITE

Dorris Ranch is composed of 250.74 acres. It contains 3,750 lineal feet of river frontage along the Middle Fork of the Willamette River at its confluence with the Coast Fork. Its location as undeveloped parkland is especially unique because it is within three-quarters of a mile of the Springfield City Center and 3 miles from the urban center of Eugene. The future park is within one-half hour driving distance of 93 percent of the population of Lane County and 6 miles or less of 50 percent of the population of Lane County.

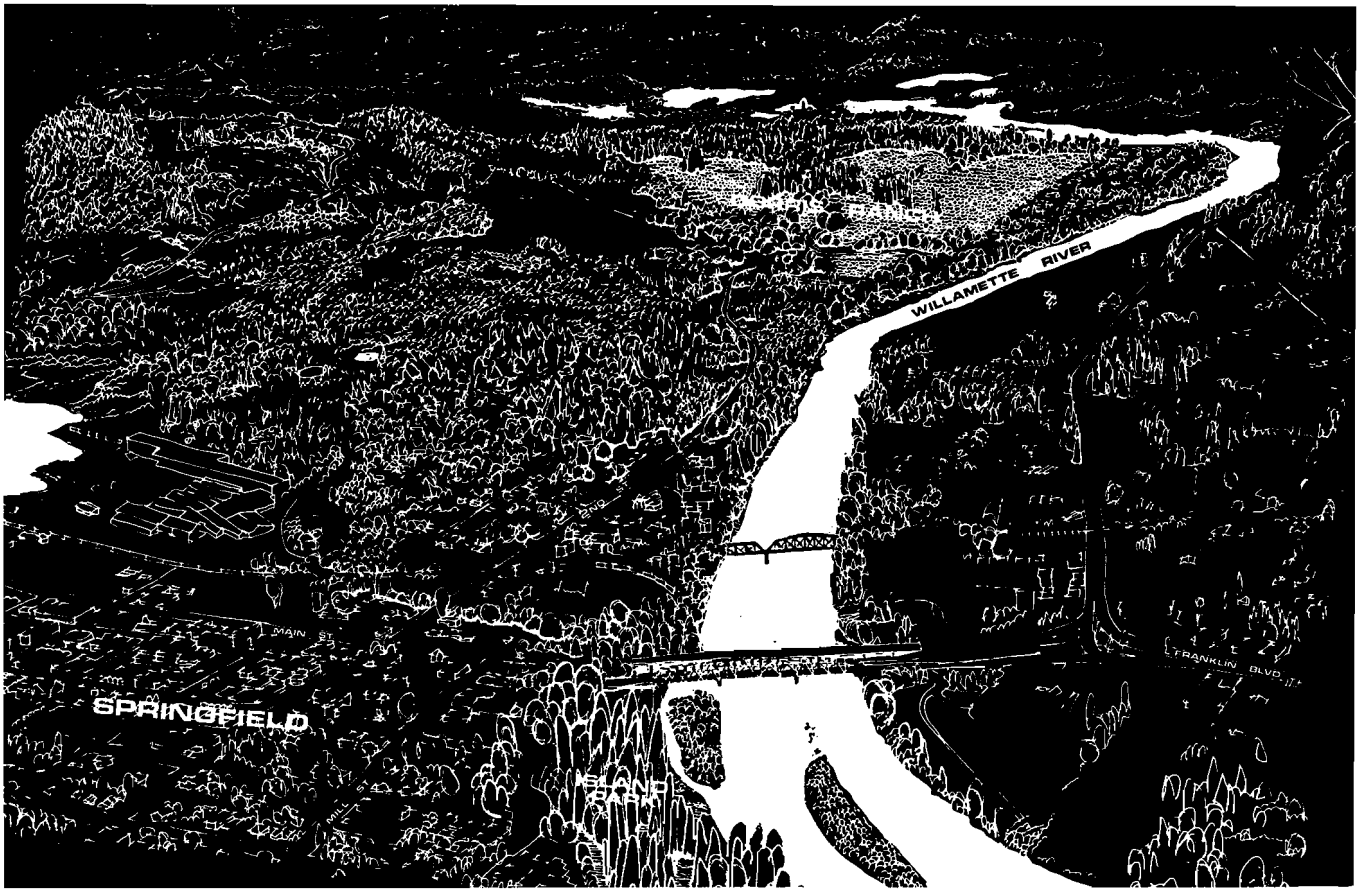
Bordering the land to the west is a permanent residence mobile home park; to the south, the Willamette River; to the north and east, rural and agricultural areas.

The site specific is undeveloped with the exception of the orchards, residences, and outbuildings. The "Original 1880s House," now privately owned, was an important and integral part of the Ranch and is included in this study.





VIEW FROM THE SOUTHWEST



VIEW FROM THE NORTH

METHODOLGY

Phase 1 of the planning process used to develop this Land Use Plan, is illustrated on the following page in a Methodology Flow Diagram. A brief description of the diagram follows.

- First, an INVENTORY was made of all physical, biological and cultural environmental factors affecting and effected by Dorris Ranch.

  Second, an ANALYSIS of each of these factors was conducted, resulting in a set of recommendations for park development. The synthesis of these environmental factors were classified into individual PHYSIOGRAPHIC AREAS each having similar characteristics. OPPORTUNITIES AND CONSTRAINTS to development of the park were listed for each of the areas. Specific POLICIES to guide use and development of the park were set forth, and a PROGRAM OVERVIEW was established to determine a character theme for development.

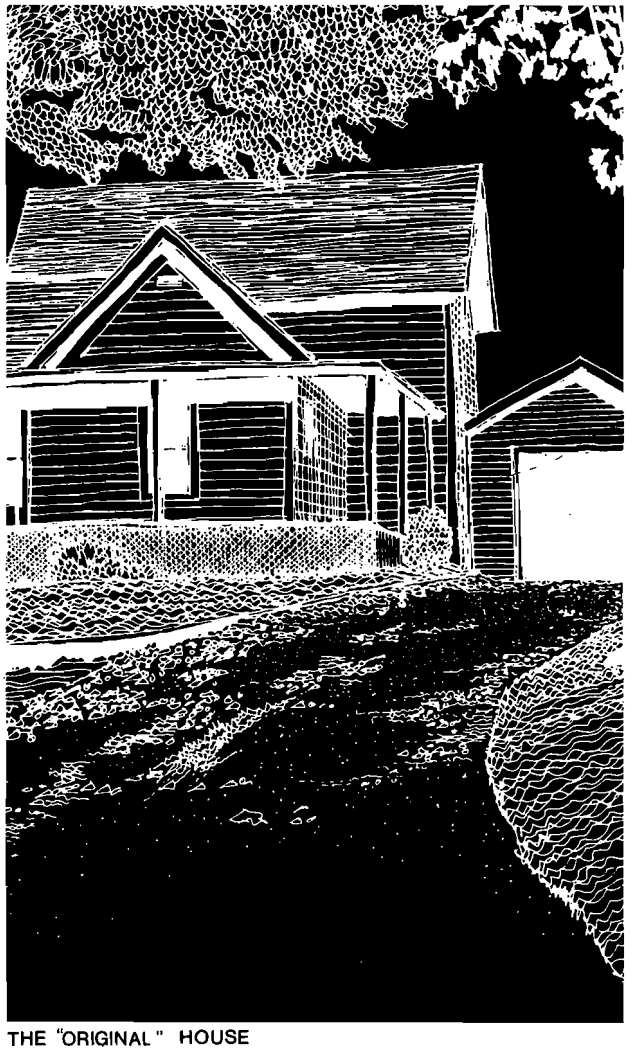
- Third, a LAND USE PLAN was developed, based on information in the ANALYSIS section. The LAND USE PLAN designates specific policy areas on the site. Policies for use and development of the site are listed and keyed to each area. They are based on the particular area's inherent capability to accommodate various intensities of use.

The remaining phases outside the scope of this study are shown in gray and include the following:

- Phase 2 involves assessing the ECONOMICS of park development in terms of capital improvements, maintenance budgeting and monetary assistance from local, state and federal agencies.

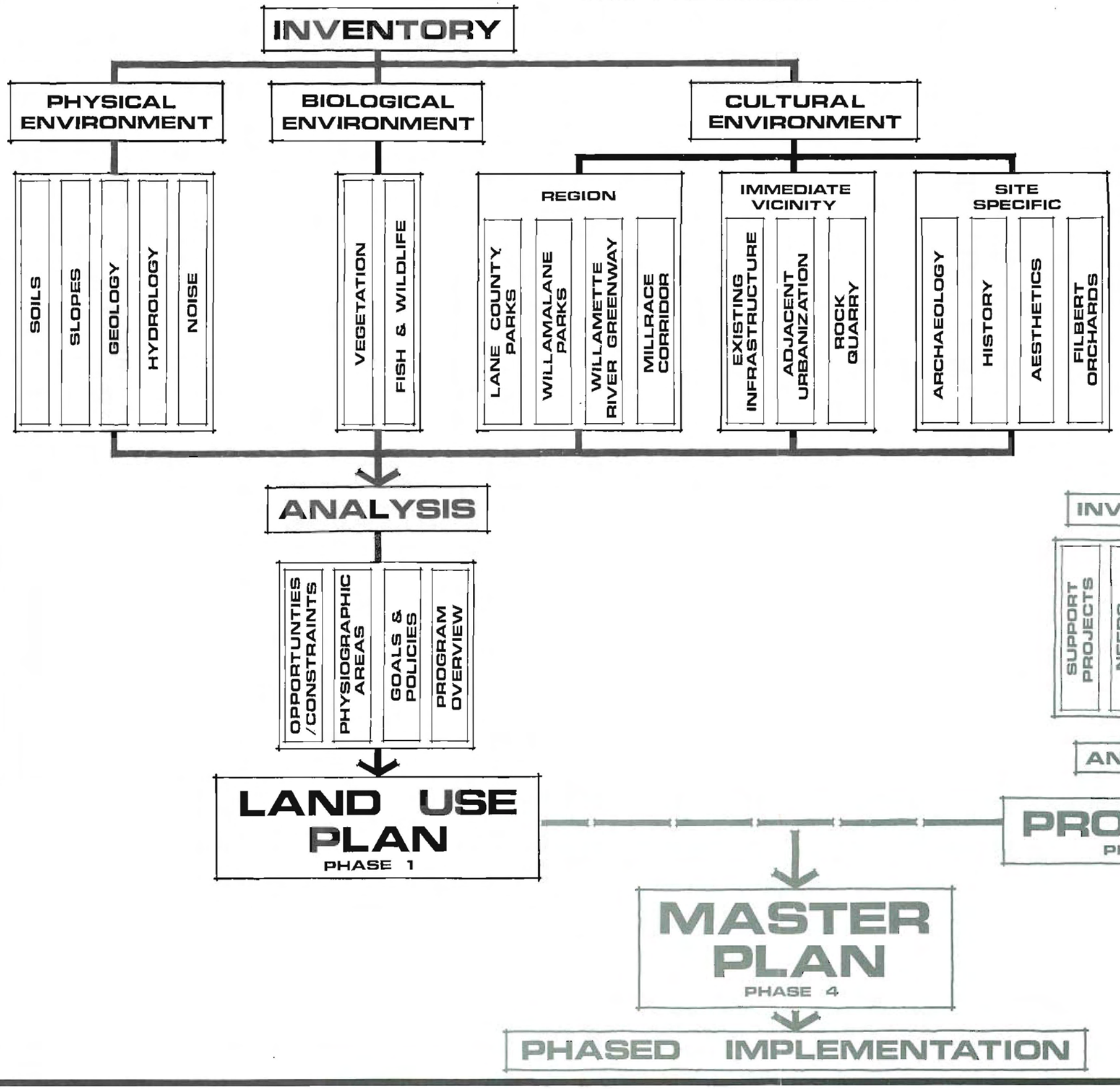
- Phase 3 is PROGRAM development which is based on community input and needs, support projects, operations and maintenance.

- Phase 4 is the MASTER PLAN which is the synthesis of the above. It is a development sequence of specific design solutions and guidelines for proposed uses and facilities within Dorris Ranch.



THE "ORIGINAL" HOUSE

METHODOLOGY



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DORRIS RANCH
WILLAMALANE PARK DISTRICT, SPRINGFIELD, OREGON

PHYSICAL ENVIRONMENT

SOILS

The Dorris Ranch site lies within two landform units characteristic of the Willamette Valley (bottom lands and foothill and valley buttes). Typically, the bottom lands have low relief (mainly 0 to 7 percent) and are composed of unconsolidated deposits of younger alluvium. The surface is underlain by coarse or moderately coarse alluvium. The foothill and valley buttes unit has slopes that vary from moderate to steep (2 to 75 percent) with about one-third having slopes of more than 30 percent) and is composed of consolidated rocks of Eugene formation and Little Butte Volcanic series. The surface is underlain by basalt lava and marine sedimentary rock.

The inventory and evaluation of the soil resources for constraints to park development are based on soil surveys and recommendations from Dick Patching and Jim Lochard of the U.S. Department of Agriculture Soil Conservation Service. Nine soil types were identified, mapped and their descriptions quoted from SCS (OR-Soils-1) Soil Interpretations. (See Soils Map).

The dominant soils found in the area of Dorris Ranch are Camas, Chehalis, Cloquato, Dixonville-Philomath-Hazelair complex, Newberg, Ritner, Riverwash and Witzel series. The Camas series includes soils developed in gravelly alluvium; the Newberg, those in sandy loam textures; and the Cloquato, those in alluvium having silt loam textures. All of these soils are frequently flooded. The Dixonville-Philomath-Hazelair complex, Ritner and Witzel consists of silty clay loams and gravelly silty clay loams that formed in colluvium from igneous rocks in the foothills along the margins of the Willamette Valley.

Camas Gravelly Sandy Loam, 0 to 3 Percent Slopes (1A):

This mapping unit of gravelly sandy loam consists of deep, excessively drained, moderately coarse textured soils. These soils are on bottom lands along the Willamette River. The soils are subject to overflow. Vegetation in areas not cultivated consists of black cottonwood, bigleaf maple, Oregon ash, blackberries, annual weeds and grass.

In a representative profile the surface layer is dark brown gravelly sandy loam about seven inches thick. The upper stratum is brown gravelly sandy loam about six inches thick. The lower substratum is very gravelly coarse sand, that extends to a depth of sixty inches or more.

Runoff is slow, and the hazard of erosion is moderate. Permeability is very rapid and the gravelly and cobbly sandy substratum restricts rooting depth. Available water capacity is 1.5 to 3.5 inches. Workability is poor.

Camas soils are used for cereal grain, pasture, hay, and orchards. It is used for specialty crops when irrigated. It is poorly suited to root crops.

The principal characteristics limiting the use of this soil are the small stones and occasional flooding.

Chehalis Silty Clay Loam, 0 to 3 Percent Slopes (30A):

This mapping unit of Chehalis silty clay loam consists of deep, well drained soils that formed in recent alluvium. They occupy nearly level to gently undulating bottom lands that are subject to occasional flooding. Where not cultivated, the vegetation consists of Douglas-fir, bigleaf maple, cottonwood, Oregon white oak, blackberries and an understory of

shrubs and grasses.

In a representative profile, the surface layer is very dark grayish brown and dark brown silty clay about 28 inches thick. The subsoil is dark brown silty clay loam about 28 inches thick. The substratum is dark brown silty clay loam to sandy loam. Coarse sand and gravel are common below 40 inches. Depth to bedrock is more than 60 inches.

Runoff is slow on Chehalis soil, and the hazard of erosion is slight to moderate. Effective rooting depth is more than 60 inches. Permeability is moderate. Available water capacity is 11 to 13 inches. Water supplying capacity is 20 to 26 inches.

Chehalis soils are used for all agricultural crops adapted to Willamette Valley climatic conditions. Other uses include wildlife and recreation.

The principal characteristics limiting the use of this soil are low strength and occasional flooding.

Cloquato Silt Loam (4A):

This mapping unit of Cloquato silt loam consists of deep, well-drained soils that formed in mixed recent alluvium. They occupy nearly level to gently undulating bottom lands. In areas where the soils are not cultivated, the vegetation consists of Douglas-fir, black cottonwood, bigleaf maple, oak, ash, and an understory of vine maple, wild blackberry, vines, shrubs, and grasses.

A representative profile of Cloquato silt loam is a dark brown silt loam surface layer about 12 inches thick. The subsoil is dark brown silt loam about 36 inches thick. The substratum is brown stratified silt loam to very fine sandy loam. Sand and gravel may occur below 40 inches. Depth to bedrock is more than 60 inches.

Runoff is slow, and the hazard of erosion is moderate due to overflow. Available water capacity is 9 to 14 inches.

Cloquato soil is used for cereal grain, hay, pasture, and orchards. When irrigated, it is used for beans, corn, mint, berries, and other raw crops. Other uses include wildlife and recreation.

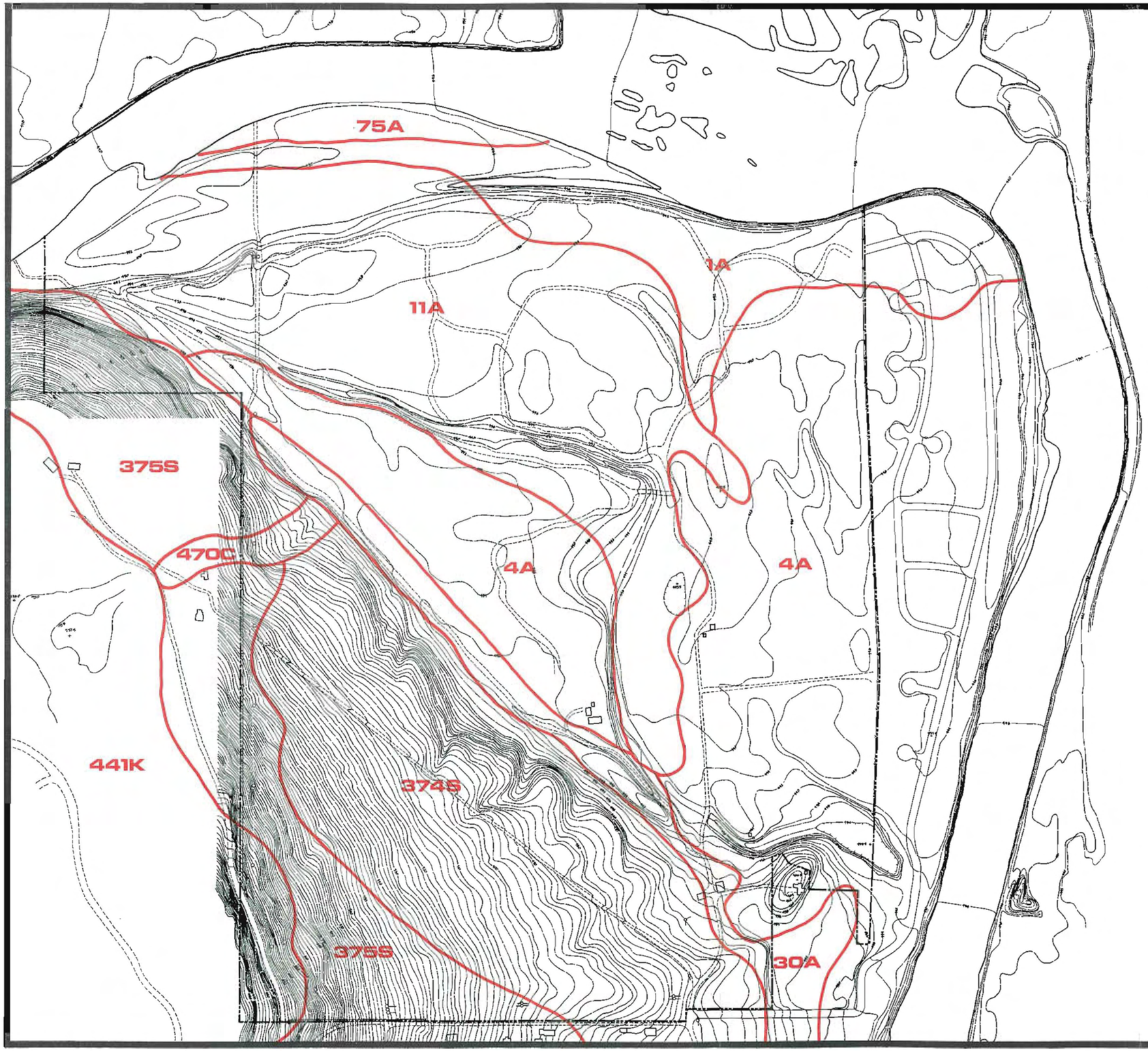
The only characteristic limiting the use of this soil is occasional flooding.

Dixonville-Philomath-Hazelair Complex, 3-12 Percent Slopes (374C):

This complex mapping unit consists of approximately 30 percent Dixonville, 30 percent Philomath, 40 percent Hazelair soils with about 10 percent inclusion of Panther soils occurring in depressions and along drainages. Vegetation in areas not cultivated consists of Douglas-fir, Oregon white oak, poison oak, rose, shrubs and grasses.

The soils in this association are used mainly for pasture, hay, grass seed, small grain, recreation, wildlife habitat, and water supply.

Dixonville soils consist of moderately deep, well-drained soils formed from basaltic colluvium and residuum. The surface layer is very dark brown silty clay loam 12 inches thick. The subsoil is dark reddish-brown silty clay and 22 inches thick. The substratum is variegated dark brown, dark red, or yellowish-brown weathered bedrock at depths of 20 to 40 inches. Permeability is slow. Runoff is medium and erosion hazard is moderate. Total available water capacity is 4 to 7 inches. Annual water supplying capacity for plant growth is 17 to 23 inches.



SOILS

LEGEND:

1A	CAMAS	GRAVELLY SANDY LOAM
4A	CLOQUATO	SILT LOAM
11A	NEWBERG	LOAM
30A	CHEHALIS	SILTY CLAY LOAM
75A	RIVERWASH	
374C	DIXONVILLE-PHILO-MATH-HAZELAIR	3-12% SLOPES
375S	DIXONVILLE-PHILO-MATH-HAZELAIR	
441K	WITZEL	VERY COBBLY LOAM, 30-75% SLOPES
470C	RITNER	COBBLY SILTY LOAM, 12-30% SLOPES

SOURCE: U.S.D.A. SOIL CONSERVATION SERVICE

0 200 400 FT.

N

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Philomath soils consist of well-drained, fine-textured soils formed from colluvium of basic igneous rocks. The surface layer is very dark brown silty clay about 6 inches thick. The subsoil is dark brown cobbly clay or clay about 12 inches thick. The substratum is partially weathered basalt rock. The depth to bedrock ranges from 12 to 20 inches. Runoff is medium to rapid and erosion hazard is moderate to high. The available water capacity is 2 to 3 inches and the water supplying capacity is 13 to 15 inches.

Hazelair soils consist of moderately well to somewhat poorly drained, silty clay loam over clayey soils formed from stratified medium and moderately fine textured and clayey unknown material occurring on slightly convex footslopes. The surface layer is dark brown silty clay about 7 inches thick. The substratum is light olive-brown very plastic clay over sedimentary rock or tuff. The depth to compact clay ranges from 12 to 24 inches. Permeability is slow. Runoff is rapid and the erosion hazard is severe. Total available water capacity is 4 to 7 inches.

Dixonville-Philomath-Hazelair Complex, 12-35 Percent Slopes (375S):

This mapping unit is similar to the 3-12 percent unit (374C) except that the steeper slopes generally contain higher percentages of Dixonville and Philomath soils. Runoff is rapid and the erosion hazard is severe. It is used primarily for native pasture.

The principal characteristics limiting the use of this soil (both 374C and 375S) are the shallow to bedrock, slopes, rapid runoff, shrink-swell, and erosion hazard.

Newberg Loam, (11A):

This mapping unit of Newberg consists of well to somewhat excessively drained loam formed from recent alluvium. It occupies flood plains. Where not cultivated, the vegetation consists of Douglas-fir , black cottonwood, shrubs, and grass.

Typically, the surface layer is dark brown loam to a depth of over 60 inches. Some areas may contain up to 15 percent gravel between 10 and 40 inches and may lie very gravelly substrata below 40 inches.

Permeability of these soils is moderately rapid. Effective root depth ranges from 24 to 40 inches. Runoff is slow and erosion hazard is slight except from flooding. (These soils are subject to occasional or frequent flooding). Available water capacity is 5 to 8 percent.

Newberg soils are used mainly for small grains, hay, pasture, orchards, and irrigated beans, corn, mint berries, and vegetables. Other uses include wildlife and recreation.

The only limiting characteristic of the use of this soil is frequent to occasional flooding.

Ritner Cobbly Silty Clay Loam, 12-30 Percent Slopes (470S):

The Ritner mapping unit consists of well-drained cobbly silty clay loam over very cobbly silty clay or clay soils formed in colluvium from basic igneous rocks. The native vegetation is Douglas-fir, bigleaf maple, Oregon white oak with an understory of bracken fern, hazel, poison oak and grasses.

In a representative profile, the surface layer is dark reddish-brown gravelly silty clay loam about 15 inches thick.

The subsoil is dark reddish-brown gravelly silty clay about 9 inches thick, underlain by dark reddish-brown very cobbly silty clay about 16 inches thick, over fractured basalt bedrock. Depth to bedrock ranges from 20 to 40 inches.

Permeability is moderately slow. Effective rooting depth is 20 to 40 inches. Runoff is medium and the erosion hazard is moderate. Available water capacity is 3 to 6 inches. The water supplying capacity is 16 to 23 inches.

Ritner soils are used mainly for timber and pasture. Other uses include wildlife habitat, water supply and recreation.

The principal characteristics limiting the use of this soil are high clay content, slopes and shallowness to bedrock.

Riverwash, 0-5 Percent Slopes (75A):

This mapping unit consists of areas of narrow, irregular strips in the bends of stream channels and along drainageways. The strips are from 40 to 200 yards in width and consist of well-rounded sand, gravel, stones and boulders generally of basalt. This unit is subject to overflow when the water is low. During each overflow, new deposits are received or some material is removed. Vegetation is occasional bunches of grass and scattered shrubs.

There is no representative profile for this land type. Depth to bedrock is 20 to more than 60 inches.

Permeability is rapid to very rapid. Available water capacity and water supply capacity is variable. Effective rooting depth is 20 to 60 inches. The water erosion hazard is severe.

Riverwash is used for wildlife habitat and recreation.

The principal characteristics limiting the use of this soil are the water-erosion hazard and rapid permeability.

Witzel Very Cobbly Loam, 30-75 Percent Slopes (441K):

This mapping unit of very cobbly loam consists of well-drained, shallow soils occurring on gentle to steep sloping low foothills. The native vegetation consists of Oregon white oak, poison oak, Douglas-fir, wedge leaf ceanothus and grass.

In a representative profile, the surface layer is dark brown, very cobbly loam, about 4 inches thick. The subsoil is dark brown, very cobbly silty clay loam about 15 inches thick. The substratum is partially fractured basalt bedrock.

Permeability is moderately slow. Runoff is rapid to very rapid and the erosion hazard is moderate to severe. Total available water capacity is 1 to 3 inches. Annual water-supplying capacity for plant growth is 13 to 15 inches. Effective rooting depth is 12 to 20 inches.

The principal characteristics limiting the use of this soil are the large stones, erosion hazard, slope, runoff and shallowness to bedrock.

RECOMMENDATIONS

The soil types were rated in terms of their limitations and suitability for shallow excavations, local roads and streets, roadfill, and topsoil. In terms of shallow excavations of less than 6 feet only, Cloquato silt loam was rated "moderate". No on-site soils exist that

SOIL LIMITATIONS	DEVELOPMENT SUITABILITY		SUITABILITY AS A SOURCE OF:		SUITABILITY FOR RECREATION FACILITIES			
	SHALLOW EXCAVATION	LOCAL ROADS	ROADFILL	TOPSOIL	PICNIC AREAS	PATHS & TRAILS	CAMP AREAS	PLAYGROUNDS
CAMAS: (1A)	SEVERE Floods, Cutbanks, Cave	SEVERE Floods	GOOD	POOR Thin layer cobbles&pebbles	MODERATE Small stones	MODERATE Floods, small stones	SEVERE Floods	SEVERE Floods, small stones
CHEHALIS: (30A)	SEVERE Floods	SEVERE Floods, low strength	POOR Low strength	GOOD	SLIGHT Dusty	SLIGHT Dusty	SEVERE Floods	MODERATE Floods
CLOQUATO: (4A)	MODERATE Floods	SEVERE Floods	FAIR Low strength	GOOD	MODERATE Dusty	MODERATE Dusty	SEVERE Floods	MODERATE Floods, dusty
DIXONVILLE - PHILOMATH HAZELAIR (375S) COMPLEX:	SEVERE Too clayey depth to Bedrock	SEVERE shrink-swell low strength too clayey	POOR shrink-swell low strength thin layer	POOR slope, shrink-swell, thin layer, too clayey	SEVERE slope	MODERATE slope too clayey	SEVERE slope	SEVERE slope, depth to Bedrock cobbles
DIXONVILLE - PHILOMATH HAZELAIR (374C) COMPLEX:	SEVERE Depth to Bedrock too clayey	SEVERE Shrink-swell Depth to Bedrock	POOR Shrink-swell Thin layer	POOR Slope too clayey	MODERATE Slope too clayey	MODERATE Slope too clayey	MODERATE Slope too clayey	SEVERE Slope depth to Bedrock
NEWBERG: (11A)	SEVERE Floods	SEVERE Floods	GOOD	GOOD	SLIGHT Floods	SLIGHT Floods	SEVERE Floods	MODERATE Floods
RITNER: (47OS)	SEVERE Depth to Bedrock slope	SEVERE Depth to Bedrock slope	POOR	POOR	SEVERE Slope	MODERATE Cobbles too clayey	SEVERE Slope	SEVERE Slope, too clayey pebbles, cobbles
RIVERWASH: (75A)	SEVERE Floods, wet small stones	SEVERE Floods	GOOD	POOR Too sandy small stones	SEVERE	SEVERE Floods small stones	SEVERE Floods small stones	SEVERE Floods small stones
WITZEL: (4AIK)	SEVERE Slope, depth to Bedrock	SEVERE Slope, depth to Bedrock	POOR Slope, thin layer	POOR Large stones thin layer	SEVERE Slope, large stones	SEVERE Slope, large stones	SEVERE Slope, large stones, depth to Bedrock	SEVERE Slope, large stones, depth to Bedrock

SLIGHT = Soil properties favorable for use. MODERATE = Moderately favorable to rated use. Limitations can be overcome or modified by treatment such as artificial drainage, runoff control to erosion, extra excavation, etc. SEVERE = One or more soil properties unfavorable for rated use, such as steep slopes, flood hazard, high shrink-swell, low bearing strength, etc.

are capable of supporting local roads and streets (i.e. an all-weather surface expected to carry automobile traffic all year). Hence, road construction will require imported roadfill material, proper compaction, and adequate drainage. Soils rated "good" for topsoil (used in an area where vegetation is to be established and maintained) are Chehalis silty clay loam, Cloquato silt loam, and Newberg loam. Suitable roadfill sources (soil material used in embankments for roads) are Camas gravelly sandy loam, Cloquato silt loam, Newberg loam, and Riverwash.

Soil types were also rated according to limitations that affect their suitability for recreational use (i.e. camp areas, playgrounds, picnic areas, and paths and trails). All on-site soil types are rated "severe" for camp areas. Soil types rated "moderate" for playgrounds (areas used for baseball, football, badminton, and similar organized games) are Chehalis silty clay loam, Cloquato silt loam, and Newberg loam. Soil types having only a "slight" or moderate rating for picnic areas are Camas gravelly sandy loam, Cloquato silt loam, Chehalis silty clay loam, Dixonville-Philomath-Hazelair-Complex, 3-12 percent slopes, and Newberg loam. Soil types suitable for paths and trails are Camas gravelly sandy loam, Cloquato silt loam, Chehalis silty clay loam, Dixonville-Philomath-Hazelair series, Newberg silt loam and Ritner cobbly silty clay loam. Thus, the lower areas of the site are most suitable for picnic areas and paths and trails.

The establishment of trails on the site will require appropriate path and trail construction (i.e. the use of asphalt, gravel, or bark mulch), depending on the intensity of use. In areas with soil limitations, seasonal use may be required to minimize the impact of path and trail useage.

Trails should be graded to minimum slopes

to reduce erosion. Where required, steps should be installed. Boardwalks would be required in wet areas and along drainage swales. Permanent logs should be graded into the trails to deflect run-off and minimize erosion.

The steeper slopes of the northeast portion of the site where debris was dumped along the quarry road should be planted with Douglas-fir seedlings to prevent soil erosion and provide a visual buffer of the rock quarry. Topsoil material should be imported where seedlings are to be established, and seedlings should be planted in early spring or fall using standard forestry practices. In less steep areas, ponderosa pines should be planted as they are more resistant to root rot.

The opportunity exists for creating a wetland habitat by constructing a pond in the grassland vegetation. An existing small stream receiving perennial spring discharge could be impounded by constructing a low level check dam. Clumps of riparian vegetation should be planted along the water's edge.

If the existing, rough, unpaved road that bisects the northeast portion of the site is to be reclaimed as grassland it would require removal of all compacted roadfill material, importation of topsoil, and erosion control seeding.

GEOLOGY

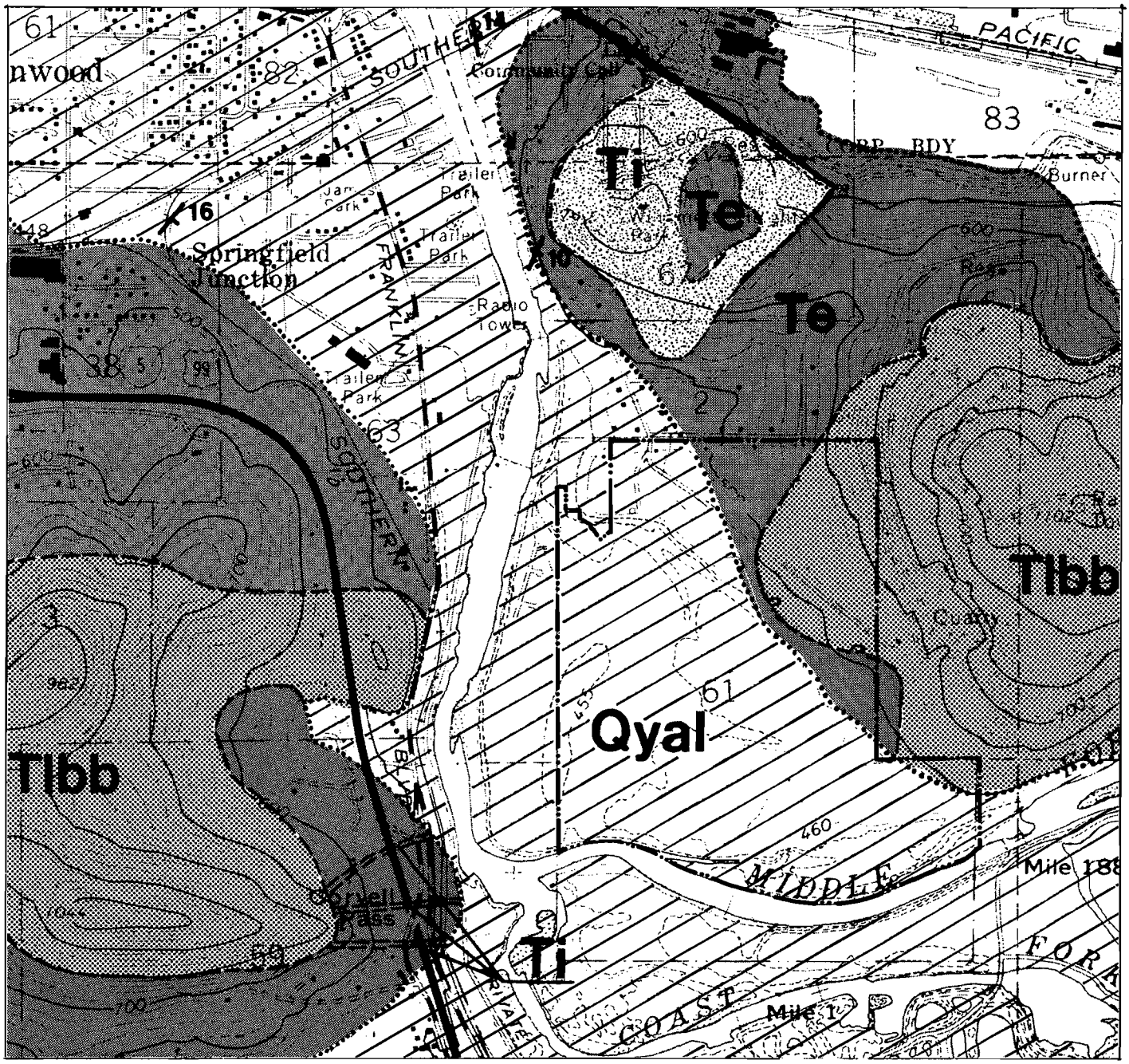
There are four geologic units in the study area of the Dorris Ranch: consolidated rocks include Eugene formation (Te,teritary Eugene), Little Butte Volcanics (Tlbb,teritary basalt), Intrusive rock (Ti, teritary intrusive), and unconsolidated Alluvial deposits (Qyal, quarternary alluvium).

The Little Butte Volcanic Series (Tlbb) is a basalt lava rock and is approximately 24 million years old. The bedrock consists essentially of olivine basalt lava rock with interbeds of tuff, breccia, and agglomerate. The general distribution of this series is in the Springfield Rock and Quarry site and lies within the northeast portion of the site. It weathers rapidly.

The Intrusive Rock (Ti) is also a volcanic material and is exposed by erosion in the form of intrusive dikes and sills of diabase and basalt rock. This unit is approximately 25 million years old and, because of its structure, it weathers very slowly.

The Eugene formation (Te) is a marine sedimentary rock consisting essentially of a fossiliferous, coarse to fine-grained, arkosic, micaceous sandstone, with intercalated laminated claystone and lenses of bedded tuff (approximately 33 million years). This unit overlays the Little Butte Volcanic Series in the northeast portion of the site. The Eugene formation weathers very slowly, and breaks down to sand, silt and clay.

The Younger Alluvium (Qyal) are floodplain deposits of assorted coarse gravel and sand overlain by a thin overburden of silty sand.



GEOLOGY

N

1000 0

FORMATION BOUNDARY LINE

FAULT LINE

6

STRIKE AND DIP

NOTE: DASHED LINE WHERE APPROX. LOCATED AND DOTTED WHERE INFERRED.

SOURCE:

Oil and Gas Investigation Map OM-110; "Geology of the West Central Border Area of the Willamette Valley, Oregon." 1951.

USGS Water Supply Paper 890 "Ground Water in Eugene Springfield Area, So. Willamette Valley, Oregon." 1973

SLOPES

Slope is one physical site characteristic that must be considered when planning and developing areas for future recreational activities and related support facilities. The slopes of the Dorris Ranch were classified in the following increments:

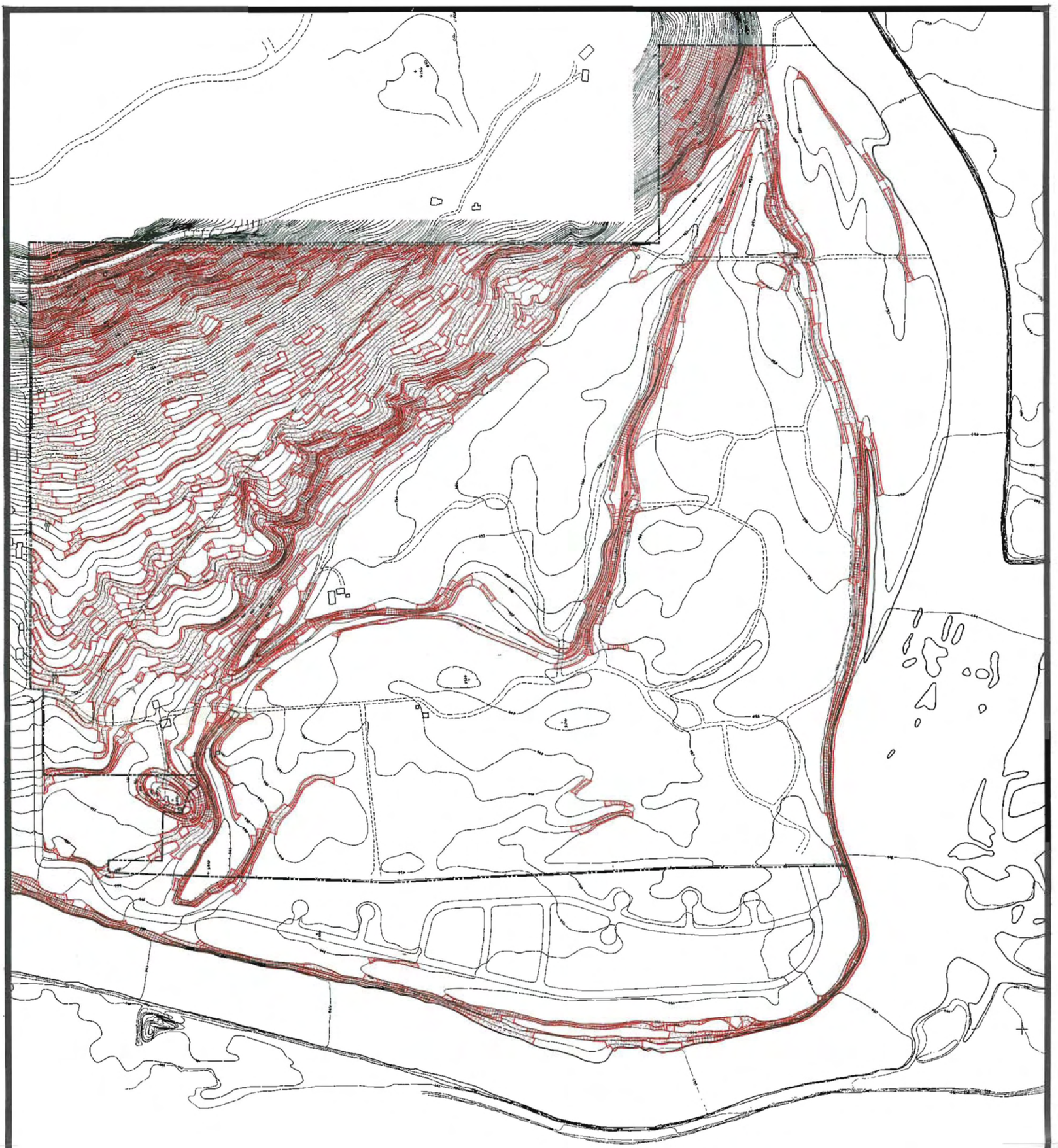
RECOMMENDATIONS

- Slopes from 0 to 8 percent are the most frequent and occur throughout the site, but are generally confined to the bottom lands. These slopes can best accommodate a wide variety of recreational activities and support facilities (e.g. parking, roads, paths, and trails, structures, etc.). Barrier free access is possible in these areas. Erosion and drainage problems are not severe.

- Slopes in the range from 8 to 16 percent are generally confined to the grassland hill slopes in the northeast portion of the site, adjacent to drainage channels and the bank of the Willamette River. These slopes are more difficult to develop, however barrier free access can be developed by locating paths and trails which traverse steep areas. The development of support facilities becomes more severe, but can usually be accommodated Soil erosion can be a problem in some soils.

- Slopes in the range of 16 to 24 percent occur in concentrated areas in hills adjacent to drainage channels and along the bank of the Willamette River. Paths and trails generally have to be constructed and soil retainage structures become necessary. Barrier free design becomes very expensive. The types of recreational activities that can be accommodated are few and the cost of support facilities becomes very expensive. Erosion control measures should be taken as the potential erosion hazard is moderate to severe.

- The steepest slopes, those greater than 24 percent are the least frequent, but do occur in small isolated areas in the hills and along the bank of the Willamette River. These slopes are generally too steep for most types of recreational activities. Development should be prohibited in these areas except for carefully constructed paths and small scale structures.



SLOPE

LEGEND:

- LESS THAN 8%
- 8 TO 16%
- 16 TO 24%
- ABOVE 24%

N

0 200 400 FT.

DORRIS RANCH

WILLAMALANE PARK DISTRICT, SPRINGFIELD, OREGON

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HYDROLOGY

WILLAMETTE RIVER WATERSHED

The principal tributaries of the Willamette River are the McKenzie, Middle Fork and Coast Fork, which flow from the Cascade mountains in a westerly and northwesterly direction, uniting and forming the main river channel. The Coast Fork, which drains the Coast Range mountains and foothills, forms a junction with the Middle Fork about one-half mile south of Springfield at Dorris Ranch.

FLOODING (GENERAL CONDITIONS & HISTORY)

The greatest flood activity along the Willamette River occurs in the winter and spring seasons. It is caused by intense rainfall augmented by snow melt at a time when the soil is most saturated. Generally, the major floods are preceded by an extended period of precipitation which saturates the soil. When the soil is no longer able to absorb additional amounts of water the rate of runoff is increased. In the tributary watersheds, e.g., the Coast and Middle Forks, the streams rise from their base flow to flood stage in a few hours, remain at crest stage for a short duration, and recede within their banks in 4 to 7 days (20,4).

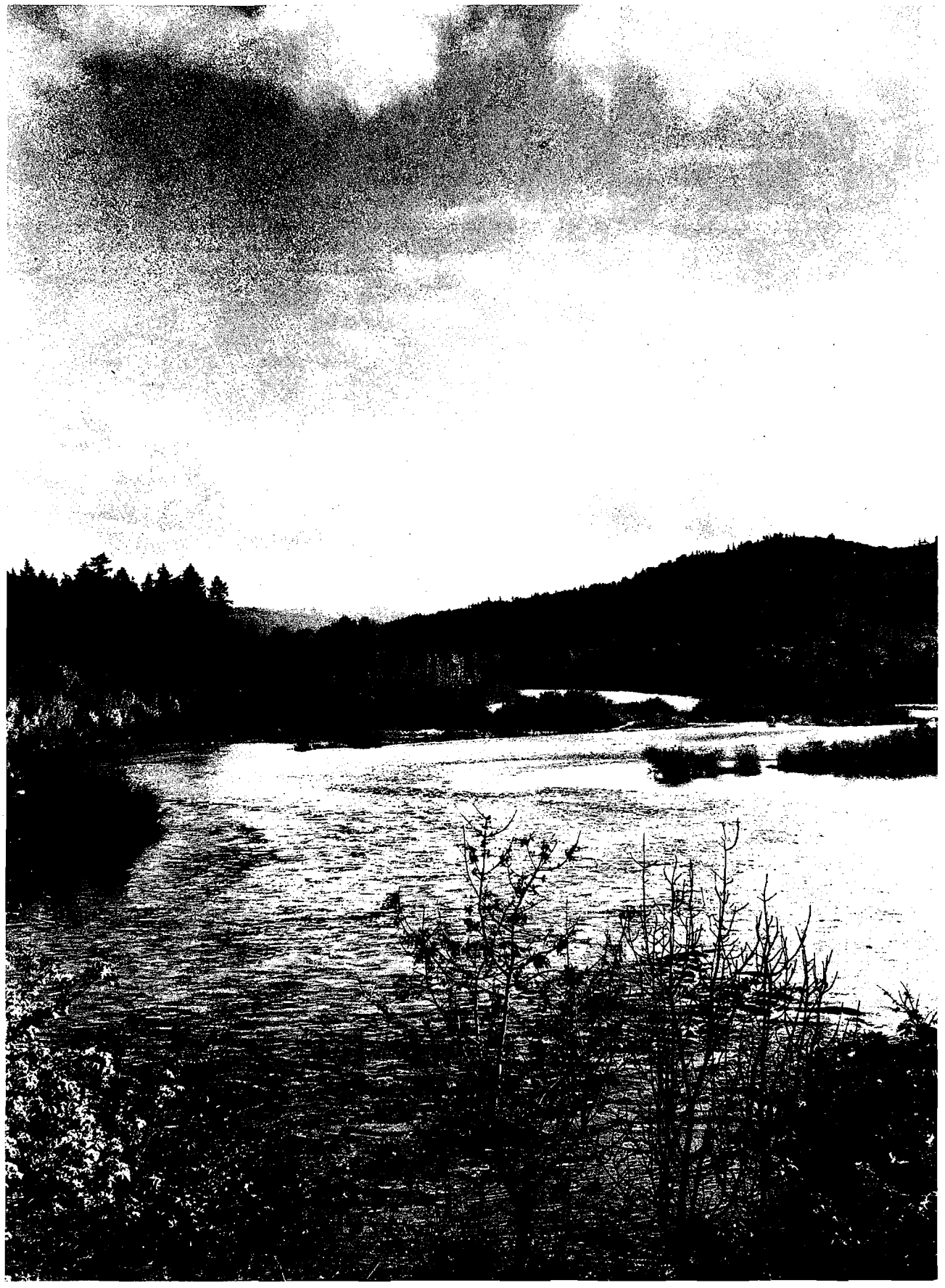
The annual flood season is from December through February (the period of greatest storm activity). Throughout the winter, storms from the Pacific Ocean bring periods of heavy rainfall over the Pacific Northwest. The possibility of flooding increases whenever rainfall is abnormally intense or prolonged.

Larger floods occur when conditions are conducive to high runoff rates. During intense rainstorms, the freezing level often rises to 10,000 feet or more, causing rapid melting of snow in the Cascades and Coast Ranges. When the ground is saturated or frozen, runoff is greater and more rapid. The storm path direction also influences the rate of runoff; a buildup of floodwaters is produced by higher flows that are generated when the storm front moves in a downstream direction. The combination of these conditions have caused the largest floods.

The greatest flood known to have occurred on the Willamette River took place in 1861, causing damage to property and distress to the early settlers in the Willamette Valley. A number of large floods have occurred since then in the Eugene/Springfield area including: January 1953, December 1955, February 1961 and December of 1964. The flood of 1974 was the most recent flood to have occurred in the Willamette River Basin (20,10).

In the early 1940s, the construction of flood control structures was undertaken on the upper Willamette streams to reduce the frequency and magnitude of flooding in the lower river basin. However, the reservoirs will not eliminate flooding entirely. The degree of protection the reservoirs provide is a function of the percentage of drainage area controlled above a particular point. The chance of flood damage has been reduced; yet, it is still to be considered a potential hazard (20,19).

Situated on the Middle Fork, Dorris Ranch has been subject to historical and recent flooding. According to Reynold Briggs (former ranch caretaker) past floods have caused considerable surface erosion damage within the filbert orchards. In addition, debris and deposits of sand, carried and eroded from upstream, have buried the orchards in 4" of sand. Since the construction of the flood control reservoirs on the upper Willamette streams, no major flooding has occurred on the site. In 1951, the Army Corps. of Engineers constructed the "Dorris-



VIEW OF DORRIS RANCH ON THE LEFT BANK OF THE MIDDLE FORK.

Leonard Revetment" on the southeast portion of the site which has prevented bank erosion and minor flooding.

FLOOD FREQUENCY

Flood frequency refers to how often a certain flood stage is expected to occur. For example, the "intermediate regional flood" with a 100-year frequency could be expected to occur on an average of once in 100 years and is commonly termed the 100-Year Flood. It is important to note that the intervals between 100-year floods will occur at various times, or even in consecutive years (20,12).

Until recently all planning decisions were based on the 1964 Corps of Engineers study on flood plain hazards. However, a more detailed study is currently being compiled with a broader data base by CH2M Hill of Corvallis. Initial findings for river miles up to Dorris Ranch on the main channel show an increase of five feet at the 100 year, 50 year, and 20 year frequency (See graph for comparisons). Additional data is currently being analyzed for portions of the Middle Fork along the project site and will be available in January, 1980.

DRAINAGE, GROUND WATER & WATER FEATURES

The 250-acre project site consists generally of moderately steep to very flat slopes. The 50 acres of grassy hillside on the northwest portion of the site is characterized by shallow clayey soils, low water holding capacity, and steep to moderate slopes. In addition, off-site runoff from the slopes above drain across this portion of the site before being collected in an existing drainage channel. The channel crosses the site from the northwest to the southwest corner. It ultimately collects in a pond in the southwest corner before draining through a two foot drain tile connection to the Willamette River. The remaining 200 acres are moderately flat, characterized by well-drained silt/loam soils with very little direct runoff from precipitation. However, in severe flooding the majority of the area would be inundated.

The alluvial acquifer, which is comprised of younger alluvium, is a reliable source of groundwater. The groundwater generally occurs under watertable or in locally isolated perched lenses. Recharge of the acquifer is by direct infiltration of precipitation through the overlying soil. Recorded onsite well locations of depths from 12 to 25 feet produce enough water for domestic use.

An exposed spring flow occurs in the southeast corner of the grassy hillside. It is estimated that the lowest gallonage during the summer months is $1\frac{1}{2}$ gallons per minute.

In the early 1920s, George and Ben Dorris excavated a stream channel that extended from the southeast to northwest corners of the property. According to Ben, the channel has a 3 foot fall from the upper to lower ends. Ben acquired water rights in 1938 from the State of Oregon which enabled him to use the waters of the Willamette River by constructing a diversion channel. The primary use to which the water was to be applied was 2.0 c.f.s. for irrigation of crops (i.e. filbert orchards, garden plots, pastureland) and 0.01 c.f.s. for livestock. A total of 99.7 acres were approved for irrigation purposes.

During the course of years, improvements were made to the stream channel, including: low-level check dams for irrigation, bridges for pedestrian access, and, in 1940, a concrete swimming pool and terrace were built directly behind Ben's house.

FLOOD LEVELS

RIVER MILES	FLOOD FREQUENCY	CORP. STUDY (1966 LEVELS)	CH2M HILL STUDY (1979 FLOOD LEVELS)	INCREASE IN PROJECTED FLOOD LEVELS
186.25	10 year	-	442.8'	-
	20 year	440.0'	-	-
	50 year	441.0'	446.8'	+ 5.8'
	100 year	443.0'	448.8'	+ 5.8'
186.50	10 year	-	444.6'	-
	20 year	442.0'	-	-
	50 year	443.0'	448.2'	+ 5.2'
	100 year	445.0'	450.1'	+ 5.1'
(Confluence of Middle and Coast Forks)				
187.00	20 year	446.0'	Flood study currently in process for these portions of the river (Completion date January 1980).	no data
	50 year	447.0'		
	100 year	449.0'		
187.50	20 year	451.0'		no data
	50 year	452.0'		
	100 year	454.0'		

KEY:

10 Year Flood = 10% chance of occurring in one year
20 Year Flood = 5% " " " " " "
50 Year Flood = 2% " " " " " "
100 Year Flood = 1% " " " " " "

SOURCES:

"Flood Plain Information of the Willamette River", Lane County Oregon Supplement #3, Army Corps. of Engineers, Portland, Oregon.

A preliminary study of the "Flood Plains of Lane County", by CH2M Hill, August, 1979.

RECOMMENDATIONS

1. A detailed flood hazard analysis should be completed for Dorris Ranch as soon as the flood profiles are completed by CH2M Hill (tentatively January 1980).

2. All buildings or other facilities which would be damaged significantly by periodic flooding should be raised above the intermediate flood level by filling to raise landforms or by using piers.

3. Improve and maintain existing surface drainageways, including culverts,to minimize erosion and slope failure.

4. Re-establish the water rights by renovating the abandoned stream channel for recreation, wildlife habitat and irrigation purposes. A feasibility study and survey of the stream channel needs to be conducted to assess what improvements are needed.

5. Improve the existing pond at the northwest corner of the site for wildlife and recreational use. This can be done by increasing the water flow in the stream channel or pumping from a well.

6. Utilize the existing spring waters in the grassy hillside by developing a freshwater impoundment for wildlife habitat improvement. Install a French drain that would feed into the spring channel increasing the g.p.m. flow. Funding and engineering expertise are available through the Agriculture Stabilization and Conservation Service, Upper Willamette Resource and Conservation Development for Public Water - Based Fish and Wildlife and Public Water-Based Recreation Developments.

CONSTRUCTION OF THE DIVERSION CHANNEL IN THE EARLY 1920's.

NOISE

Dorris Ranch is bounded on all sides by offsite point sources of noise. Specifically, variable background noises are due to the following:

- The Wildish Sand and Gravel Company's operations plant and truck haul roads (located on the south and east side of the Middle Fork and Main channel of the Willamette) are sources of background and occasional intrusive sounds.

- Springfield Quarry Rocks Products, Inc., an active basalt mine creates occasional intrusive sounds from blasting and background noise from trucks on the haul roads.

- Variable background noise levels occur from traffic on I-5 and seasonal wind direction. Noise levels increase with winter winds being predominantly from the southwest.

RECOMMENDATIONS

In order to maintain noise levels at an acceptable level within the site, existing vegetation should be retained. Plantings of conifer trees in the northeast portion of the site below the Springfield Quarry Rocks would help screen undesirable noise pollution.

BIOLOGICAL ENVIRONMENT

VEGETATION AND WILDLIFE

The Middle Fork of the Willamette River extends from Cascade Summit to the valley floor where it joins the Coast Fork of the Willamette River. The Middle Fork flows through agricultural lands, intermixed with woodlands, creating some very productive fish and wildlife habitats. Large areas of streambank woodlands provide for the protection and production of numerous wildlife species.

Along the Forks of the Willamette River "native wildlife, afoot or on wing, move almost at will. Blue herons, singly and in pairs, rise clumsily from the waters, yet with massively spread wings move deftly through a maze of trees. Mallard ducks explode suddenly from behind leafy blinds. A belted kingfisher screams angrily at any disturbance. Overhead, sometimes an osprey climbs, diving swiftly riverward to snare his dinner. Quite frequently, deer with fawns, their nostrils twitching, lift through dense greenery and trustfully walk across a sunny glade.

"The traverse of these creatures is through dense-grown evergreens, salal, big-leaf and vine maple, alder, dogwood and willow. Their movements are over thicketed terrain, along streams, and by turbulent rapids-churned waters that a short distance below may be as tranquil as the wilderness silence itself" (3,194).

Dorris Ranch is typical of the Middle Fork; being a mixture of agricultural land, riparian vegetation, conifer and deciduous woodlands, ponds and river-edge habitats. Because of the diversity and interspersion of habitat types, the entire area as it now stands has considerable value to many species of fish and wildlife. The Lane Council of Governments as part of their "Metro Plan Update" has identified Dorris Ranch as an area of "significant vegetation and wildlife which warrants protection as open space or as natural areas."

The site was deemed significant on the following criteria: On-site corridors (drainageways, ridgetops and utility and transportation rights-of-way, etc.) provide valuable habitat for mammals, birds, and some plants. Existing wetlands provide highly productive and valuable habitat for most wildlife species and many plants. Natural areas (containing old growth Douglas-fir stands) are habitats of climax vegetation and contain diverse vegetation types and wildlife habitats.

Various wildlife species require different habitat types based on vegetation, soils, micro-climates, and the influences of man. Dorris Ranch contains many of the numerous habitats which wildlife species need in order to survive.

The distribution of wildlife tends to correlate with the types and succession of plants. Some species are found to nest or rest in one type of vegetation, yet feed on another. Other species may be found to inhabit an exclusive area of vegetation or occupy only the ecotone (transition zone between two different vegetation types) (37,4).

In order to maintain and enhance the site's ecosystems with limited disturbance to the unique and significant biological resources, an inventory was compiled.

The inventory concentrates on three areas: Vegetative Cover, Wildlife Species and Wildlife Habitats (See appendix 1 and 2 for a list of plant and wildlife species).

VEGETATION

Dorris Ranch has been classified into six vegetation zones. On-site field checks and mapping of plant types were used to identify significant vegetation areas that are characteristic to the site. The following descriptions are of vegetation zones found on the site (See Vegetation Map) by the study team. A list of plant species is in Appendix 1.

DOUGLAS - FIR/ MAPLE WOODLAND

"Large block of woodland, all with dominance of Douglas-fir (Pseudotsuga menziesii) in overstory, with much bigleaf maple (Acer macrophyllum) subdominant in the overstory, and abundant in mixed ages between the overstory and the tall shrub understory. Generally open understory, fairly easy to walk through, except for occasional shrub thickets. Generally shady, especially in the south-central and east sections, (Areas # 4 and # 1) with a rich herbaceous understory.

Special areas: a) Southwestern edge of area # 4, approximately 10 yards north of the main trail, is a dense thicket of nine-bark and hazel containing one young western hemlock (Tsuga heterophylla), the only one on the entire site, with a small clump of starflower (Trientalis latifolia) and wild ginger (Asarum candatum) at its base. All three species are unusual in low-altitude Willamette Valley forests, being more typical of mid-altitude Cascade Mountain forests.
b) Northwest section of area #4, approximately 25 yards south of orchard edge, is a large clump of wild ginger along a dry slough bed.

Sensitive areas: All of areas # 1 and # 4 include herbaceous understory plant groups which are easily damaged by trampling. Trails and foot traffic in these areas should be kept to a minimum, especially near the two special areas noted above.

MAPLE WOODLAND

The Maple Zone is primarily linear in form, following a stream, or slough or along an edge of another vegetation zone. This lineal quality facilitates a more refined zoning system because the changes are so distinctly perceived. The bigleaf maple is, of course, the dominant tree, dominant in number and in size. The other common component of the canopy is the Oregon ash and less frequently the mazzard cherry, chokecherry, willow and poplar. The shrub layer is often very dense. The herb layer, while richly varied, is not particularly fragile.

INCENSE CEDAR

There are two Incense Cedar Zones, both very obvious and distinct. The mature incense cedar stand is an island in the middle of the filbert orchard - they tower like landmarks above the filberts. The understory of this area grades from

VEGETATION

LEGEND:

- DOUGLAS - FIR, MAPLE WOODLAND
- MAPLE WOODLAND
- INCENSE CEDAR
- GRASSY HILLSIDE
- CULTURAL ELEMENTS
- OAK WOODLAND
- RIPARIAN
- FILBERT ORCHARD
- SUB-ZONES
- *A SPECIAL AREAS

SOURCE: PLANT INVENTORY BY BERNART, BETTMAN & LAWERENCE

WILLAMETTE RIVER

0 200 400 FT.

N

DORRIS RANCH

WILLAMALANE PARK DISTRICT, SPRINGFIELD, OREGON

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low and grassy on the north side to tall and shrubby on the south.

The area of young incense cedars is strongly identifiable within the Douglas Fir-Maple Zone. The trees here are very densely distributed and are all of the same (young) age.

The distribution of incense cedars throughout the property seems to radiate from these two areas.

GRASSY HILLSIDE

The Grassy Hillside Zone is composed of clumps or isolated trees and shrubs within a large grassy slope. The clumps of trees and shrubs are predominantly members of the Rose family: three species of roses, blackberry, serviceberry, hawthorn and feral cherry, pear and apple trees. It is difficult to ascertain the pattern to the apparent random distribution of the trees and shrubs, although the ashes tend to be confined to the lower elevations where the water would be more abundant. On the southern half of the hillside are many bulbs (Camas, Brodiaea and Triteleia) which flourish among the grasses providing a sequential seasonal bloom.

CULTURAL ELEMENTS

The developed and cultural areas consist of the following: fruit and nut trees, street trees and shrub layer of indigenous and exotics species, and a forb layer of yard and grass areas of indigenous and exotics.

OAK WOODLAND

This zone is characterized by the oak overstory. There are basically two types of areas within this category.

The first is the Open Oak Woodland characterized by a tall oak canopy and understory of grasses and clumps of rose, serviceberry, snowberry, blackberry, and osoberry. It has an open, dry character.

In the second area the oak mixes with maple, ash, and Douglas-fir and develops a richer, moister understory.

RIPARIAN VEGETATION

The Riparian Zone is the band of river-associated vegetation. Within it are four main areas: the gravel bar, the willow edge, the sloughs, and the poplar/maple woods.

Adjacent to the river are areas of shrubby willows, and low herbaceous growth on gravel bars. The river's edge is bordered by taller, denser willows. Beyond the band of willows the overstory becomes more diverse. The area is marked by many narrow, linear topographic features running parallel to the river. There is a major slough near the river where alder dominates.

Generally ash and willow dominate the lower areas with poplar and/or maple

dominating the higher ground. A typical transect through this area takes one from willows to a maple or poplar woodland with rich understory to a dry, grassy clearing to a band of poplar and blackberry. (Written by Bernat, Bettman, Lawrence, 32)

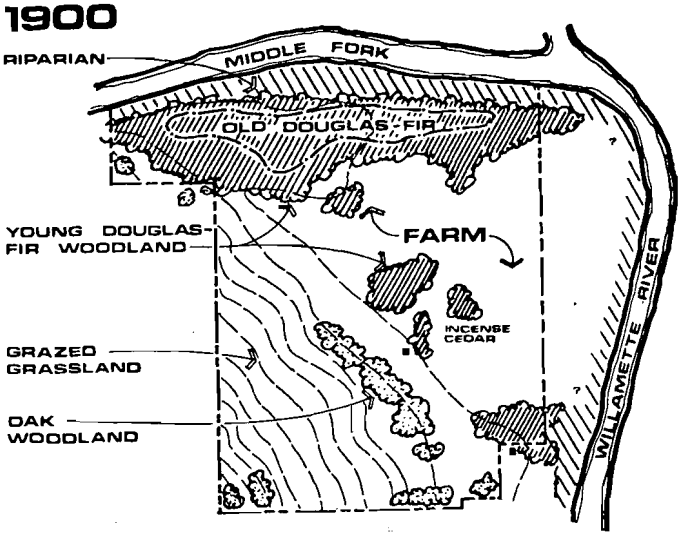
FILBERT ORCHARD

The Filbert Orchards consist of three types of trees: the Daviana, DuChilly, and Barcelona, with the latter being most abundant.

THE NATURAL VEGETATION HISTORY: FROM THE YEARS 1825 TO 2030.

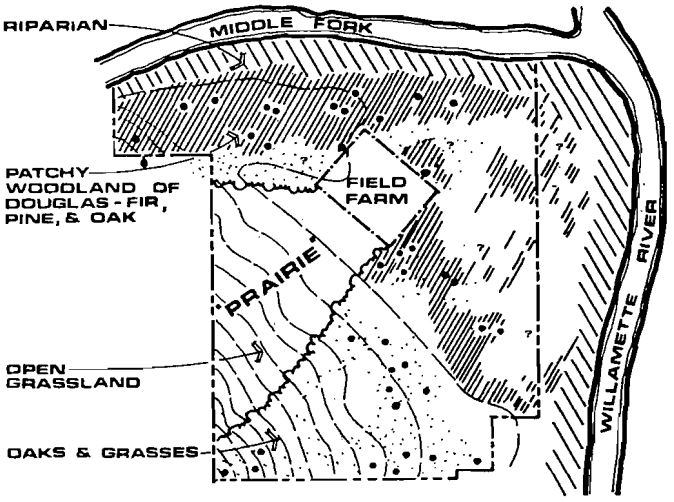
"As shown by the General Land Office Surveys of 1851-53, most of the site was wooded, with open grassland on the central section of the hillslopes. The woodland was probably patchy and brushy with little shady forest except in some places along the terrace edge above the river. Woodland composition was probably scattered oaks on the hillside, with grass and poison oak beneath; a mix of Douglas-fir, ponderosa pine, and oak on the lower elevations; and a mix of cottonwood, maple, ash, alder and willow along the river edge. This pattern was due to repeated fires set by the local Indians, a practice common throughout the Willamette Valley until white settlement began.

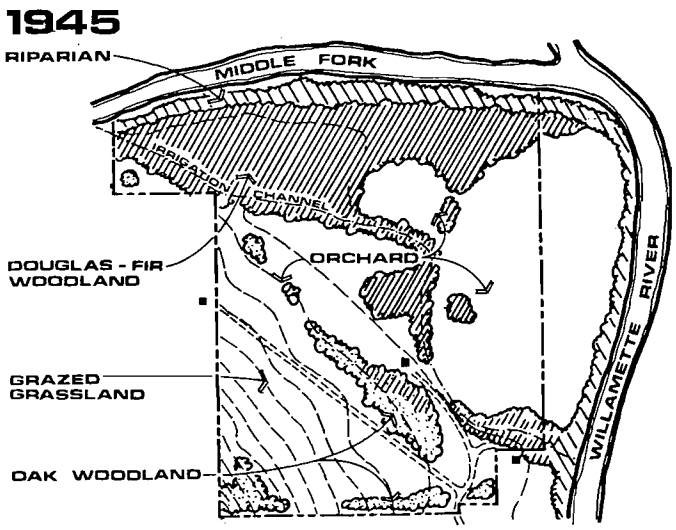
1900



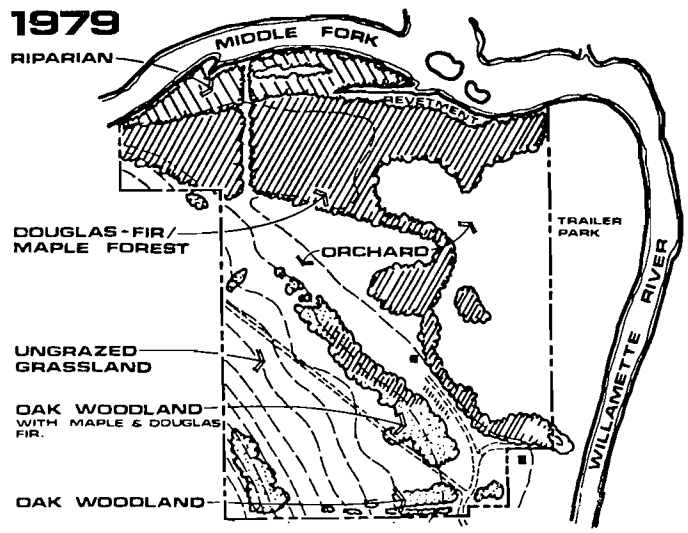
Clearing of farm land between 1852 and 1900 removed much of the previous woodland. Grazing kept the hillside grassy except along fence rows and on the rocky slope at the base of the hillside, where young oaks began to grow around a scattering of old ones. Along the southern edge of the property a young thick growth of Douglas-fir spread out from a core of older trees which shaded a small but growing forest of Douglas-fir with a few maples coming in. Along the river's edge repeated flooding left a mixture of patches of old and new growth of riparian species.

1852

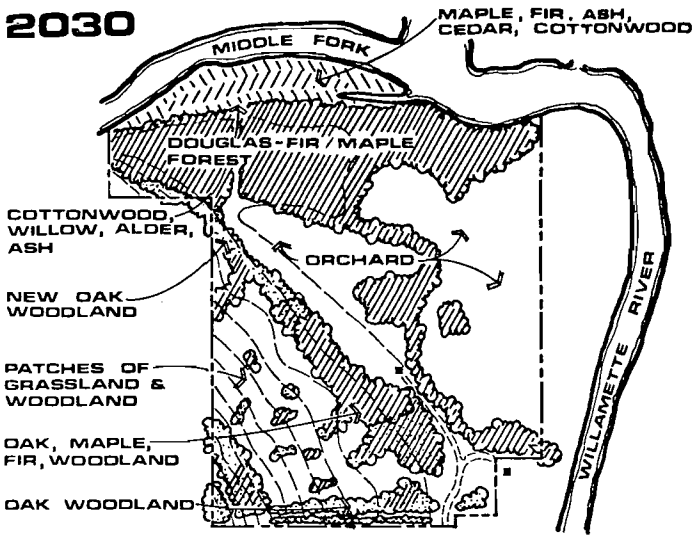




The basic pattern of woodland/grassland/farm remained the same from 1900 to 1945 although the farmland was almost entirely used as filbert orchards by 1945. All of the woodlands grew taller and shadier. In the Douglas-fir woods, maples grew abundantly in the understory and began to join fir in the canopy along the southern edge of the forest. In the oak woods at the base of the hillside, maples grew with some firs, especially among the oaks at the bottom of the rocky slope. Construction of the irrigation ditch through the site produced a new community of maples and firs along its banks.



The basic pattern is still the same as before, although grazing has ended on the grassland, allowing for a new growth of rose thickets and scattered tree seedlings. Continued succession in the woodlands has brought more shade and more shade-tolerant species. In the middle, oak woods, maples and firs have begun to over-top and shade out many oaks. In the Douglas-fir/maple forest the firs have all grown tall, leaving a second layer of maple beneath them in most places. Grand-fir and incense cedar, scattered in the overstory, are reproducing in the understory along with the maples. Construction of the river revetment in the 1950s removed a large area of woodland, but flood control by dams upstream has allowed for a denser more stable growth of riparian species along the river banks. The Columbus Day Storm of 1962 removed a large number of Douglas-fir, especially along the irrigation canal and at the base of the rocky slope of oak woodland.



Assuming continued farming and/or park use in the present (1979) orchard areas and preservation of existing forests and grasslands the following natural changes are likely to occur. A continued growth of all woodland can be expected as well as an increase of shade-tolerant species. In the former middle oak woods, maple and fir will have replaced oak and brought shadier conditions

(much like in the Douglas-fir/maple woods of 1979). Maple and fir will be spreading into the other existing oak woods, but new oak woods will form outward from these on the grasslands. Much of the grassland will be covered with shrubs and trees in clumps and patches and the beginning of pockets of woodland. Most common colonizing trees and shrubs will be then as now: hawthorn, ash, oak, pear, rose, Oregon grape, poison oak, snowberry. Only a few pockets of actual grassland will remain unless vandals or accidents lead to fires.

In the fir/maple woodland,existing firs will continue to dominate the overstory but will be joined by slowly increasing numbers of grand-fir, incense cedar and maple. Regeneration in the understory will be mostly these three species with an occasional western hemlock and red cedar. The last of the ponderosa pines will probably have died and this species will be found only in the northeast corner's oak woodland in the future.

Along the river, flood protection will allow a mixed maple-fir-cedar community on the high ground between sloughs while minor flooding will keep the present distribution of cottonwoods, willows, etc. in the lower areas.
(Written by Hank Lawrence, 34).

WILDLIFE HABITATS

The Wildlife habitats of Dorris Ranch are classified into six types based on the Oregon Department of Fish and Wildlife and Lane Council of Governments coding system. The habitat classifications are derived from vegetation associations, water and wildlife use. On-site field checks were made to identify unique wildlife habitats that are characteristic to the site (See Wildlife Habitats Map).

MIXED CONIFER / DECIDUOUS WOODLANDS

A variety of conifers and deciduous trees occur on approximately forty acres of the southern portion of the site. The habitat consists of predominantly mature Douglas-fir, ponderosa pine, western red cedar, incense cedar, western hemlock, Oregon ash, bigleaf and vine maple, red alder, trailing blackberry, salmonberry, Oregon grape, and other similar species. Douglas-fir and bigleaf maple are the dominant species.

The mixed conifer/deciduous woodlands habitat provides a vital breeding and feeding area for a variety of wildlife species. Waterfowl, like wood ducks, use hollow trees to nest in. Suitable cavity nesting sites for screech owls, woodpeckers and mammals to inhabit are found in this habitat type. Canopy trees are used by birds such as the blue heron, sparrow, and red-tailed hawk for roosting and nesting. Both common birds and gamebirds (e.g., quail, grouse, pheasants, wrens, sapsuckers, and swallows) use the understory for feeding and breeding.

The trees and shrubs provide food and cover for a number of mammals. Game animals (e.g., black-tailed deer) and non-game animals (e.g., red and gray fox, raccoon, skunk, and California ground squirrel as well as other species) can be found in this habitat. Beaver, muskrat, and river otter use the habitat in and adjacent to water.

RIPARIAN

The riparian vegetation habitat occurs along a dense irregular band of the Middle Fork of the Willamette River and in and adjacent to an existing pond at the northwest corner of the site. Plant species identifying this type are those dependent on water such as alder, willow, Oregon ash, and cottonwood. The shrub layer includes nine-bark, snowberry, creek dogwood, and evergreen blackberry.

As a wildlife habitat, the riparian vegetation provides a vital feeding and cover area for a variety of wildlife species that are dependent upon the adjacent marshes, ponds, and Middle and Coast Forks of the Willamette River.

WILDLIFE HABITATS

LEGEND:

- CD — CONIFER / DECIDUOUS WOODLANDS
- R — RIPARIAN VEGETATION
- G — GRASSLANDS
- M — FRESHWATER MARSH
- W — OPEN WATER
- C — DEVELOPED / CULTURAL (NUT, FRUIT, HEDGE-ROW, & STREET TREES.)

SOURCE: OREGON FISH & WILDLIFE-GREENWAY INVENTORY OF THE MIDDLE FORK OF THE WILLAMETTE RIVER AND IT'S CODING SYSTEM.

RUFF · CAMERON · LACOSS AND ASSOCIATES

LANDSCAPE ARCHITECTS & PLANNERS
1873 GARDEN AVE. · EUGENE · OREGON · 503 687-1728

DORRIS RANCH

WILLAMALANE PARK DISTRICT, SPRINGFIELD, OREGON

Blue heron, wood duck, common and hooded merganser roost and nest along the water's edge.

The riparian habitat provides food and cover for a variety of mammals. Black-tailed deer, beaver, muskrat, raccoon, and skunk are present in this habitat type. Occasionally red and gray fox and mink can be found.

GRASSLANDS

This habitat type consists of approximately forty acres located in the northeast portion of the site. Plants of this habitat consist of clumps of ash, hawthorn, fruit trees, large masses of shrubs of the Rose family and perennial and annual grasses.

The grassland habitat is important to a variety of birds and mammals. Black-tailed deer, red and gray fox and other mammals are occasionally found foraging in the grasslands. Upland grand birds like the ring-necked pheasant, ruffed grouse and California quail, nest and feed in this area. Raptors, such as red-tailed hawks, Cooper's hawk, screech owls, and numerous species of common and songbirds feed on the grasslands.

FRESHWATER MARSH

The freshwater marsh habitats are small damp areas that often hold water year-round. Small springs and slow-moving water from intermittent and perennial streams collect, creating the freshwater marsh. This habitat occurs in the north-west corner of the site with patches of open water and is shallow enough to support vegetation like horsetail, water plain-tain and similar species.

Freshwater marsh habitats are important to a variety of waterfowl and common birds for nesting, feeding, and resting. Raptorial birds, (e.g., osprey, marsh hawk, and red tailed hawk) forage over the marsh for rodents. This habitat also provides cover and forage for furbearers like muskrat, beaver, mink, raccoon and skunk.

OPEN WATER

Areas of open water along the Middle Fork of the Willamette River provide good furbearer habitat, fish spawning areas and nesting waterfowl habitat. Mallards, pintail, teel, wood duck, grebes, and a variety of species of waterfowl and shore birds use the open water for resting and feeding.

The Oregon Fish and Wildlife Department has identified river miles from 0.0 to 0.4 on the Middle Fork of the Willamette River as having "excellent trout, fur-bearer and waterfowl habitats." The back-waters at river-mile 7.5 are "good waterfowl resting areas."

Beaver and muskrat reside in ponds and along the river's edge. Raccoon and mink forage along the shoreline.

DEVELOPED / CULTURAL

Approximately 75 acres of filbert orchards exist throughout the center portion of the site. This area has been farmed for a nut crop over the last eighty years. Hedgerow, fruit and street trees are found in and near the main houses and housebuildings.

OAK WOODLANDS

FRESHWATER MARSH

Wildlife species that use the developed/cultural habitat are similar to those found in the grasslands. Both common and game birds and raptors feed in the area. Western gray squirrels, moles, shrews, are common and an occasional red fox and black-tailed deer can be seen.

WILDLIFE SPECIES

The following is a discussion of wildlife species known to use wildlife habitats characteristic of Dorris Ranch. Information is based on existing resource inventories conducted by the Oregon Fish and Wildlife Department and the Lane Council of Government for the Middle Fork of the Willamette River. Lane County District Biologist, Bob Jubber, and fisheries biologist, John Andrews, provided on-site review and recommendations for fish and wildlife preservation and enhancement. The Lane County Audubon Society and Southern Willamette Ornithological Club, in a cooperative effort, conducted a morning field check of existing bird populations and assessed the site as having high value as a bird habitat. The two groups have consented to inventory bird populations known to use the site for feeding, nesting, or resting for a period of one year starting in the fall of 1979. A list of fish and wildlife species is in appendix 2.

COMMON BIRDS

A number of upland ground birds (e.g., ruffed grouse, ring-necked pheasant, and California quail) are known to reside in and near the subject property. Small bird species (e.g. hairy woodpecker, downy woodpecker, common flicker, tree and violet green swallows, American goldfinch and other similar species) are permanent or seasonal residents.

In the fall of 1978 the Oregon Fish and Wildlife Department released approximately 60 ring-necked pheasant in and adjacent to the grassland habitat. The population levels are expected to increase, providing the nesting, feeding and resting areas are protected and left undisturbed.

RAPTORS

Raptors (birds of prey) that are known to reside or frequent the vicinity for nesting, feeding and resting include red-tailed hawk, Cooper's hawk, sharp-skinned hawk, osprey, screech owl, and great horned owl. The main raptor habitats are the riparian and conifer/deciduous woodlands along the Middle Fork of the Willamette River.

A number of hawk and owl nests are known to exist in the upper canopies of the conifer/deciduous habitat.

WATERFOWL

Waterfowl use the freshwater marsh, ponds and Middle and Coast Forks of the Willamette River for nesting, feeding and resting. Mallards, wood duck, common and hooded merganser, green and great blue heron are known to reside in the area. The highest use by waterfowl occurs during fall migration and wintering.

Significant waterfowl populations are known to reside in close proximity to Dorris Ranch: Heron rookeries at Mount Pisgah; waterfowl at the Wildish Sand and Gravel borrow pits; and the sandhill crane in the waterfowl flyway.

MAMMALS

The lower valley of the Middle Fork of the Willamette River is known to support a wide variety of terrestrial mammal species. Mammals that are occasionally seen or abound on the site include black-tailed deer, beaver, red and gray fox, raccoon, opossum skunk, mink, river otter and similar species.

Some wildlife species like the black-tailed deer occasionally forage in the area and require remoteness from human contact. However, through preservation and management practices, food and shelter can be enhanced to insure continued use by a diversity of mammal species.

FISH

The waters of the Middle and Coast Forks of the Willamette River are Class I streams and should be preserved. The Forest Practice Act of 1972 defines Class I streams as "any stream regardless of size whether perennial or intermittent, that is utilized by anadromous fish or supports a resident population of game fish during any period of the year." The waters serve as good spawning, rearing, or migration areas for salmon, steelhead, and resident trout.

According to the Oregon Department of Fish and Wildlife, the Middle and Coast Forks of the Willamette River support spring and fall chinook, searun cutthroat, winter-run steelhead, small and largemouth bass, bluegill and other species of cold and warm water fish. Non-game fish (e.g., whitefish, dace, and suckers) are also found in Middle and Coast Forks of the Willamette River.

Excellent spawning and rearing areas for anadromous fish (those that migrate from the ocean to spawn and rear in the fresh water streams where they were born) exist from river miles 0.0 to 0.4 on the gravelly river bottom of the Middle Fork.

Sport fishing along river miles 0.0 to 0.4 of the Middle Fork is rated as "excellent trout angling water and good to fair salmon angling waters." River miles 1.0 to 1.5 are rated as "excellent warm water angling waters."

RECOMMENDATIONS

A. HABITATS

1. Riparian Habitat

The riparian vegetation habitat provides a high quality habitat for numerous fish and wildlife species and should be maintained through river management. A preservation corridor should be designated along the Middle Fork of the Willamette River to allow the natural processes to predominate. Recreation development should be limited, allowing riparian dependent wildlife species to inhabit the area. Waterfowl viewing areas could be located along the river bank via a limited boardwalk access for nature viewing with self-interpretion material.

2. Freshwater Marsh Habitats

Freshwater marsh habitats can be created and improved for the benefit of wildlife. Construction of a shallow impoundment from an existing seep in the grasslands would provide additional water surface and brood cover. Clump plantings of riparian trees should be established. Funds for habitat and recreational improvements are available through the ASCS Department in conjunction with the Upper Willamette Resource and Conservation Development Project.

Rehabilitation of an existing small pond ($1\frac{1}{2}$ acres) in the northwest corner of the site is possible if the water level is raised either by increased flow in the drainage channel or additional water pumped from a well. The western portion of the pond is not currently in ownership by Willamalane; however, it should be acquired by or dedicated to the park district.

3. Grassland Habitat

The grass-covered hillside should be preserved because it provides

CATTAILS

a unique habitat for numerous species of wildlife for cover, feeding and rearing. Removal of the existing unimproved gravel road that bisects the grasslands is necessary to restore and enhance the habitat. Native grasses, shrubs, and trees could be planted along the disturbed area to minimize erosion and improve cover and food for wildlife. Alternative access to the properties adjacent to the eastern portion of the site could be routed to the county road known as "Dorris Road."

4. Mixed Conifer/Deciduous Habitat

The existing natural area composed of coniferous and deciduous trees should be preserved. Some dead and fallen trees should be retained for snag dependent wildlife. Trails should be sited where they do not disturb nesting locations.

5. Cultural Areas

The existing orchards should be maintained in agricultural use where possible because they provide food for wildlife.

Areas not being cultivated could be planted with cereal grains and left for wildlife to harvest.

B. MANAGMENT

1. The potential exists for increasing the resident bird populations such as wrens, woodducks, and small raptors by strategically placing nesting boxes throughout the mixed conifer/deciduous woodlands habitat. District Wildlife Biologist, Bob Jubber, for the Department of Fish and Wildlife, will assist in supplying and installing the nesting boxes.

2. The Fish and Wildlife Department expressed a need to develop a boat launch and recovery area to enable water recreationists access to the Middle and Coast Forks of the Willamette River. Access to the landing would be from Harbor Drive, thus keeping vehicular traffic out of the main park area.

3. According to John Andrews, Assistant District Fish Biologist, the Fisheries Department will stock the portion of the river adjacent to Dorris Ranch with spring chinook if a public boat landing is provided at the southwest corner of the site.

4. Provisions that would improve the visiting public's appreciation and understanding of the local wildlife, habitats, natural processes, and history can easily be established and maintained.

The diversity and quantity of vegetation and wildlife present on the site is very high. The opportunity exists for developing parts of the ranch as a natural or nature study area. It has the components of a natural area: a richness and diversity of habitats, numerous species of wildlife, and a close proximity to an urban area. Physical development needs would be minimal.

The Fish and Wildlife Department is interested in such a project and is willing to provide assistance as development of the park occurs. Additional passive recreation opportunities (activities of relatively moderate impact that are non-concentrated) might include bird watching, wildlife observation, photography and picnicking in primitive picnic areas. A network of trails, boardwalks and overlooks for nature interpretation and bicycling would not adversely affect wildlife. Visitors could be

encouraged to stay on the trails by not removing the vegetative understory.

5. Proposed recreational activities and support facilities for public enjoyment should be designed to avoid degrading habitat quality or visitor experience. Access beyond parking facilities should be limited to pedestrians.

6. Bank-side fishing would be an acceptable activity only in designated areas along the Middle Fork.

GRASSLANDS WITH DOUGLAS - FIR / MAPLE WOODLANDS IN THE BACKGROUND

AERIAL VIEW OF THE "2nd. HOUSE."

CULTURAL ENVIRONMENT

CULTURAL HISTORY

INDIAN OCCUPANCY (20,000 B.C. - 1846)

Occupation by the native Indians in the Willamette River Valley probably began with a gradual drift downward from the Northwest Territories (2,39). They followed the course of the river in a southward movement that resulted in the peopling of the valley in small groups of about 20 persons. Sometimes the influx of outside visitors would increase to 100 or more (7,8).

The Willamette River derived its name from a tribe of Indians who inhabited the lands along the stream between the Clackamas River and the Willamette Falls at Oregon City. The river was known among the Indians as the "Wallamette," pronounced by them as "Wallamut," and meant "to spill or pour water" (2,28).

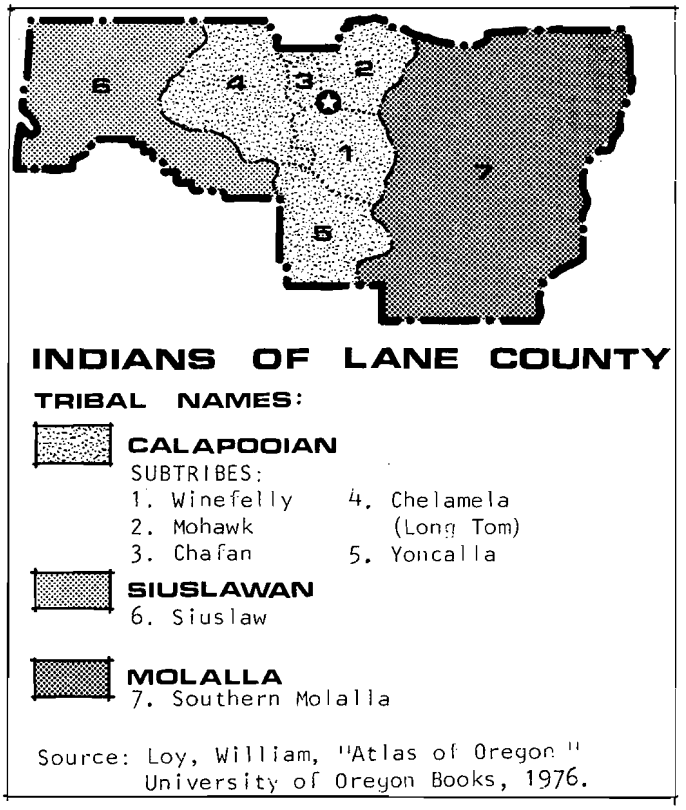
The upper Willamette River Valley was inhabited by three Indian tribes who lived and passed through the region: the Calapooias (Kalapuyan) who made the region a permanent home and the Molallas and Kalamath who regularly visited the valley and found it a "veritable garden of eden" (7,8). The valley abounded in game, many varieties of blackberries, salalberries, huckleberries, and several types of edible roots such as the wapato and camas. The Indians crushed acorns into flour and they steamed and dried the camas root (2,29).

According to records of 1835, the number of the Calapooia nation was estimated to have been over 8,000 divided among 17 tribes. Since they were largely nomadic, the counting of houses and villages to compute population was difficult (2,62).

Indian artifacts found in the upper Willamette area include obsidian arrowheads, manos (hand rollers used for grinding), rock scrapers, metates (flat table-like stones), and mortars (7,8).

Early contacts with white settlers were made by the Klamath Indians who came over the mountains on the old Indian trail each fall to pick hops. According to early writings, the trail led down the north bank of the Middle Fork, probably passing through Dorris Ranch.

The 1850's government records of the Calapooias Indians are inexact and incomplete. However, of the several treaties secured with the Calapooias in January of 1855, a dozen tribes were listed. The Winefelly, Mohawk, and Yoncalla bands, listed in the treaty, resided in the southern end of the Willamette Valley (8,6).



The Indian occupancy ended in 1855, when the Calapoopian Indians ceded the Willamette River area to the United States Government. The Grande Rhonde Reservation was established for them (7,8). At this time white settlement and the pioneering era had begun.

PIONEER SETTLERS (1846-1890)

The goal of the first settlers who came to the "Oregon Country" was to reach the Willamette Valley. "In 1853,the first great flow of pioneers crossed the Willamette Pass from Eastern Oregon following the Middle Fork of the Willamette River to the valley below" (7,5). The open prairies, abundant rainfall, mild climate and easy access to the sea were the Willamette Valley's primary attractions. A majority of the land needed no clearing and could easily be turned by the plow as soon as a claim had been made.

The Government Donation Land Claim Act caused a considerable increase in the population of Oregon and Lane County. By law "all citizens of the U.S. over 18 years residing in the territory of Oregon at the time of the passage of the Donation Act or who became such residents on or before December 1, 1850 - who continued to reside upon and cultivate a tract for four successive years were entitled, if single men, to 320 acres and, if married, to 640 acres. Settlers between December 1, 1850 and December 1, 1853, recieved 160 acres if single and double that amount if married" (11,2).

One of the early arrivals to the county was Elias M. Briggs, who in 1849, "located his donation claim where the village of (Springfield) now stands, he chose as the site of his dwelling a spot convenient to a spring of water that sent up its little bubbles with ceaseless energy. A portion of the prairie where stood this fountain in due time was fenced in, the inclosure becoming known as the Springfield - hence the name of the town"(1,452).

"The Briggses,father and son, ran a ferry across the Willamette. Until 1853, their home and J.N. Donald's small trading post were the only buildings on the site. However, in the previous year, work was begun on a canal intended to bring water from the Middle Fork, close by, to operate a saw and grist mill under construction. Thereafter, a few additional settlers trickled into the area that is surrounded on three sides by low mountain ranges deciduous growth. So Springfield grew slowly into a village with a future" (3,116).

EARLY SPRINGFIELD (1851-1884)

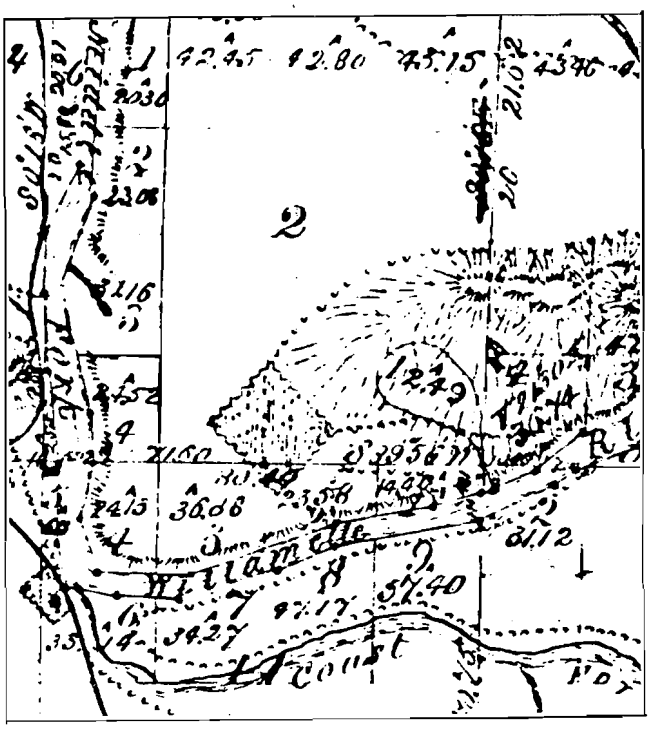
"Springfield's pioneering epoch reached its zenith with the coming of the steamer 'Relief,' riding the December flood waters of 1851. Thereafter, the depth of the river permitting - which meant exceptional rain or melting snows increased the stream's normal flow - a few boats reached as far as Springfield.

"Water transportation on the upper Willamette was practically abandoned following construction of the railroad in 1871. The milling of lumber grew in importance, while more and more grain raised by the farmers of the countryside was fed to meat stock. Manufacturing drew an increased settlement. For a time the gold and copper mines discovered in the mountains to the south added to the region's prosperity" (3,116).

Springfield by 1884 derived its prominence from the mills and link with the Oregon and California railroad.

EARLY BEGINNINGS (1852-1892)

The original legal owners of what is now Dorris Ranch, were William A. Masterson and his wife Eliza Jane. They left Lincoln County, Kentucky, for the "Oregon Territory" in September of 1851. In October of 1852, they filed a donation land claim with the U.S. Land Office in Roseburg, Oregon, for 320.87 acres at the confluence of the Middle and Coast Forks. Over the next thirty years the land ownership changed a total of thirteen times. Then in October of 1892, George and Lulu Dorris bought the land from George and Marietta Thurston for the sum of $4,000.



(1851-53 U.S. Land Office Survey Map of what is now known as Dorris Ranch).

DORRIS FAMILY HISTORY
(1858 TO PRESENT)

According to the Eugene Register Guard "George A. Dorris was recognized as one of Lane County's most progressive and successful farmers, and was a member of a family which has been figured conspicuously in the development and history of the county"(4). He was born March 17, 1858, in Crescent City, California, the son of Ben F. Dorris,Sr., and Cecile Pellet Dorris.

George's father came to California from Tennessee via the Isthmus, arriving in August of 1852. In 1853, he went to the gold mines in Josephine County, Oregon, where he remained until October of that year before returning to California. In 1854 he settled in Crescent City, and four years later moved to Eugene (1,493). Ben F. Dorris,Sr.,married Cecile Pellet in 1857, who had come to America in 1855 with her brothers from Neuchatel, Switzerland. Ben and Cecile made their home at 400 Pearl Street, Eugene, Oregon, where they raised eight children(9).

Ben F. Senior was one of a small group of Eugene leaders who helped to found the University of Oregon in Eugene and was a member of the University Board of Regents. He also served as Eugene's City Recorder for twenty years and was elected to the State Legislature in 1878 (1, 493).

Their son, George, attended the local schools and the University of Oregon. He was admitted to the bar with the class of 1882. He practiced law for a number of years with George Noland in Astoria before returning to Eugene where he practiced until 1898 (4).

"It was then that he retired to a farm on the well-known Dorris Ranch near Springfield" (4). According to 89 year-old Benjamin Fultz Dorris (nephew and benefactor of George's estate), "George retired because he just couldn't take sitting in an office doing nothing. So, he bought the land and lived in the main house" (built in 1880 and currently occupied by Reynold Briggs). Later, in 1899, George built a $1\frac{1}{2}$ story frame house where he resided until his wife died in 1936.

Ben said, "there were hops already planted when Uncle George bought the place" in 1892. He had two hop houses for drying and annually he grew 2,450 pounds of hops per acre on a total of 12 acres.

"In 1904, he went into the asparagus raising, and grew good asparagus," Ben recalled. By 1907, the first asparagus was cut and in the years to follow "he grew too much asparagus - more than he could sell at the fresh market." So he built a shed that was used for the preparation and canning of asparagus. The asparagus was delivered to a few stores in Eugene, but the bulk of it was sent by train from the Springfield depot to a commission house in Portland. "The asparagus always got a premium price on the market because it was labeled. You could cut it all with a fork. It was a good cash crop as it sold for 25 cents in Eugene." By 1926, "he got out of the

business because the asparagus beds were on their last leg and were too susceptible to frost." Also, the asparagus crops in Yakima and Pasco, Washington, were beginning to flood the market.

"Uncle George became interested in the organization of a cannery largely because prices on fresh vegetables were so unsteady," Ben said. In conjunction with J. Beebe and Dr. H.F. McCormick, he was instrumental in selling the idea of starting an organization. The result was the organization of the Eugene Fruit Growers Association in January of 1908. George was one of the first directors (4). From its simple beginning, the organization became a flourishing industry in the local economy. In 1967, the E.F.G.A. became known as Agripac.

According to Ben, "Uncle George tried most everything." This was best described in the March 15, 1907 "Morning Register Industrial Edition " (10). "George A. Dorris resides three and one-half miles east of Eugene and owns 277 acres of Lane's best land, and devotes it to diversified farming, to-wit: Hops, 12 acres; peaches, 10; cherries, 2; and grapes, 3. The English walnuts are in their third year. The bulk of the cherries, grapes, and peaches are in their second year. All of the above are tried products of the county and have been found successful.

"Mr. Dorris has been particularly successful in raising peaches and contemplates planting of 2,000 trees in the coming spring. On a two-year-old orchard of peaches, Mr. Dorris has harvested four full crops during the last five years. In addition to the above, Mr. Dorris raises a few sheep and cattle. All of the above crops are on deep rich river bottom land, the fertility of which is demonstrated by the yield as above mentioned which cannot be excelled in the world outside of the Willamette Valley, Lane County, Oregon. Mr. Dorris has also demonstrated on his ranch that alfalfa can be grown to perfection, but the other crops as mentioned above are more profitable."

According to Ben Dorris, George chose to plant filbert trees because the peach and cherry orchards were "too susceptible to ruin and disease." Also, the walnuts were inferior in size, because the trees had been planted as seedlings instead of on grafted rootstock.

As early as 1903, George Dorris had started what was to become "the most successful commercial filbert planting in the United States, and laid the foundation for the Pacific Northwest's present filbert industry " (4).

GEORGE A. DORRIS

George acquired his first trees from Felix Gillet, a nurseryman from Nevada City, California. Gillet tried and introduced many varieties of filberts from France, his native country. He propogated

NEW MAIN CHANNEL OF THE COAST FORK

MAIN CHANNEL OF THE MIDDLE FORK

OLD MAIN CHANNEL OF THE COAST FORK
THE RIVER COURSE WAS CHANGED DRAMATICALLY BY GRAVEL EXCAVATION.

"DORRIS LEONARD REVETMENT"
BUILT IN 1950 BY THE ARMY CORPS. OF ENGINEERS.

EXISTING TRAILS WERE WIDENED TO HAUL ROCK FROM THE QUARRY TO REVETMENT.

STREAM INLET

DIVERSION DAM
TUNNEL WAS DUG IN 1923. IT IS 300' LONG AND 8'6" WIDE. THE DAM IS 8' HIGH AND 40' WIDE OF CLINKER AND ROCK.

OLD STREAM CHANNEL

1
10 ACRES - ORIGINAL FILBERT TREES (1903) THAT WERE FRUIT TO FRENCH PRUNES PLANTED HEREIN (MOST TREES REMAIN). OLDEST TREES WERE PLANTED IN 1908.

6
7 ACRES ORIGINALLY PLANTED IN CHERRIES THEN CHANGED TO FILBERTS

5

4

2
25 ACRES - A MIX OF FILBERTS AND WALNUTS

3

ASPARGUS FIELD
(12 ACRES - REMOVED IN 1926 AND REPLANTED WITH FILBERTS).

CANNING SHED

7
EQUIPMENT SHED

8
5 ACRES - NURSERY STOCK

CONCORD GRAPES
3 ACRES WERE ONCE PLANTED - 3 ROWS REMAIN.

HT FILBERTS PLANTED BEHIND HOUSE IN 1903.

SWIMMING POOL & TERRACE
BUILT IN 1940.

10
4 ACRES CONVERTED FROM CHERRIES TO FILBERTS IN 1950's.

2ND. HOUSE (BUILT IN 1899)
GEORGE DORRIS BUILT THE HOUSE AS AN ADDITION IN 1899.

9

CINNIBAR MINE
THE MINE WAS ONCE A VERY WORLD FAMOUS MINE. IT WAS OPEN FOR BUSINESS IN 1892.

CRUSH ON ROAD TO THE NURSERY.

OLD DAIRY BARN SITES

LOCATION OF OLD WOOD BRIDGE

OPEN PASTURE
ONCE USED FOR ORCHARD

HAY FIELD
4 ACRES

BARN-LIKE BARN BUILT WITH WOOD FROM DAIRY BARN IN 1940.

ORIGINAL HOUSE (BUILT IN 1880)
GEORGE SHIFTED THE HOUSE FROM 1882-1899

PLANTED PRUNES HAY THEN FILBERTS

STREAM OUTLET

2 HOP DRYERS

WILLAMETTE RIVER

SITE OF THE OLD SLAUGHTER HOUSE.

1920's STYLE HOUSE (HAS BEEN REMODELED)

OLD BASALT ROCK QUARRY
EXTRACTED ROCK USED TO CONSTRUCT THE "DORRIS LEONARD REVETMENT" IN 1950.

MANNING LEONARD CLAIM
THE LAND WAS FIRST PLANTED IN HOPS AND REPLANTED IN WALNUTS AND FILBERTS.

HISTORY

ORCHARD NAMES:

1. BACK - WALNUT
2. WALNUT
3. GOAT
4. CLUMP
5. MANN

ORCHARDS 1-6 WERE PLANTED BEFORE 1927. THE OLDEST TREES ARE IN THE "BACK WALNUT ORCHARD."

6. 7 ACRE CHERRY
7. CANNERY
8. NURSERY
9. ROAD
10. 4 ACRE CHERRY

ORCHARDS 6-10 WERE PLANTED AFTER 1927, WITH THE YOUNGEST BEING THE "NURSERY ORCHARD" PLANTED IN 1957.

0 200 400 FT.

N

RUFF · CAMERON · LACOSS AND ASSOCIATES
LANDSCAPE ARCHITECTS & PLANNERS
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DORRIS RANCH

WILLAMALANE PARK DISTRICT, SPRINGFIELD, OREGON

only the best varieties, and most of the plantings of the Northwest trace their origin to these early importations of the "nut-loving Frenchman "(14).

From an article written by C.E. Schuster in 1922 for the "Country Gentleman", George Dorris said:

"I bought a lot of two-year-old trees in 1903 and set them out near the house. A few of them bore a nut or two that year. In that purchase were Red Avelines, White Avelines, Davianas and Barcelonas. Of these, the Barcelona is the only variety to consider for commercial plantings," because of their vigorous growth, heavy nut yield, and the fact that the nut is self-husking. The Barcelona trees are still in widespread use throughout the Willamette Valley (15).

LULU DORRIS (GEORGE'S WIFE)

Ben recalled that the first few years' harvests of nuts were marketed in the Eugene-Springfield area. Then when the Eugene Fruit Growers Association acquired a drier for walnuts and filberts in 1926, the nuts could be dried and sent to a larger market.

In January of 1920, Ben Dorris became associated with his Uncle George in the farming venture. "Since George had no children to carry on the ranch he suggested that I come out and go into the ranch with him, " said Ben. "I had to start in farming but didn't know anything about it. Then I got married in 1929," to Klysta (Kay) Cornett of Prineville and Bend (12). Ben and Kay rented a place in Eugene on Lincoln Street until 1936, when George died. Then they moved to the ranch where they raised five children and managed the orchards.

Reynold Briggs began working for George Dorris in 1931. Briggs managed the orchards under both George and Ben Dorris until 1973. According to Briggs, there were 30 acres of filberts planted on the property when he arrived in 1931. An additional 45 acres were planted, making a total of 75 acres.

The orchard is comprised of a number of distinct areas that acquired unique names with historical meanings. For example: the filbert trees of the "Walnut Orchard" were interplanted with walnuts as early as 1906 and are the oldest trees on the property; the "Goat Orchard" acquired its name because the goats ate the first planting; the "Clump Orchard" was a name coined for the area where clumps of cuttings were planted annually for rootstock; the "Cannery Orchard" denoted the site of the old asparagus canning shed; the "Mann Orchard" was named after the adjacent homestead of Leonard Manning; and the "4- and 5-acre Cherry Orchards" is the name of the area where the cherry trees once existed. This system of naming enabled the hired hands to know which orchards to work in.

Prior to 1931, George Dorris had established two acres of filbert nursery. In 1935, three more acres of nursery were

planted producing 70,000 trees annually that were sold throughout the Pacific Northwest. Many of the orchards today are composed of trees from Dorris Ranch Nursery.

The nursery continued operating at full capacity until 1956, when 4 acres were converted to orchard. The remaining acre of nursery continued until 1965 when sales terminated.

Ben recalled that over the years, "I had 11 or 12 men working for me at 25 cents an hour. Even if I didn't need them I couldn't afford to fire them - so, we beautified the place. We put in a diversion channel to get water to irrigate. We dug the ditch by hand so there was 3 foot fall from the upper end." When Ben was on the Game Commission in 1923, "I had a bunch of small trout planted in the channel and we had good fishing for a couple of years. We put in a swimming pool and terrace. At the end of every nursery row there was a great big sun flower and iris planted. Where the roads were coming in there were marigolds and climbing roses. Oh - it was a beauty!"

THE "2nd. HOUSE" BUILT BY GEORGE DORRIS IN THE EARLY 1900's.

RECOMMENDATIONS

1. Commemorate and acknowledge the site's unique local history in the names and designs of facilities.

2. A historical interpretation theme should be developed which would increase the appreciation of the pioneer settlers, early Springfield, and Ranch history. Facilities might include such activities as a Living Historical Museum, animal contact farm, farm equipment displays, demonstrations, exhibits, and special events.

3. Protect, preserve and restore existing historic sites, structures, facilities and objects within Dorris Ranch.

4. Establish an on-going program of historical data collection and inventory for Dorris Ranch and the local area.

5. Conduct a detailed survey of the historic significance of existing buildings on the site.

6. The "Original 1880's House," lived in by George Dorris and now owned by Reynold Briggs,was an important and integral part of the original Ranch property. Willamalane Park and Recreation District should acquire this house and property as part of the long term development of the park.

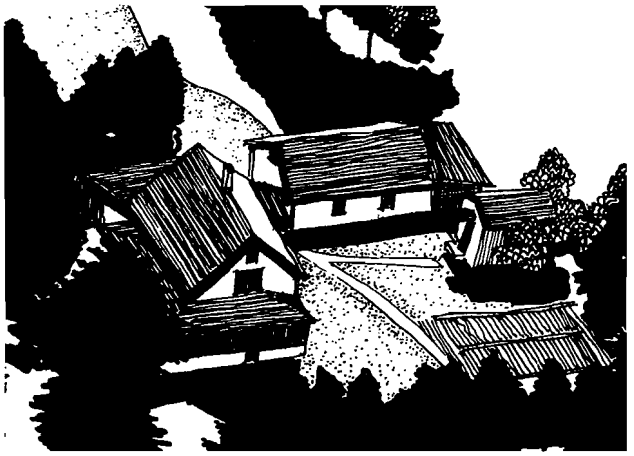
7. Investigate the feasibility of placing Dorris Ranch on the National Register of Historic Places.

8. Seek funding for restoration from the State Department of Transportation (D.O.T.), Heritage Conservation Recreation Service (H.C.R.S.) and State and Federal Committees for Humanities.

9. Coordinate park and program development with the Springfield Historic Preservation Program, Lane County Pioneer Museum and State Historic Preservation Office. Encourage special events and lending programs between agencies.

10. Seek the advice and assistance of a consultant from the American Association for State and Local History (A.A.S.L.H.) concerning program development, exhibit planning and fabrication.

11. Coordinate park and program development with Springfield, Eugene, and other local school districts, so that the park program can accommodate school field trips and history classes.



THE "2nd. HOUSE" AND OUTBUILDINGS

ARCHAEOLOGY

Areas of known archaeological value are scattered throughout Lane County, with a total of 19 recorded sites occurring along the banks of the Willamette River (the majority are within the Greenway Boundary). One of the sites identified is contiguous with Dorris Ranch. It has not been subjected to an intensive archaeological survey.

There is ample evidence to suggest that the area including Dorris Ranch was used by indigenous people. An examination of

the local history was conducted through informant interviews with Ben Dorris, previous owner and Reynold Briggs, ex-caretaker. Both talked of finding artifacts during their years at Dorris Ranch. Included in their findings was a mortar, pestle, and obsidian flakes and chips.

RECOMMENDATIONS

1. Specific locations of known and potential archaeological significance should not be publicized. There are two reasons for this: first, to avoid vandalism and degradation of a site; and second, to minimize the legal implications in identifying a site on private property.

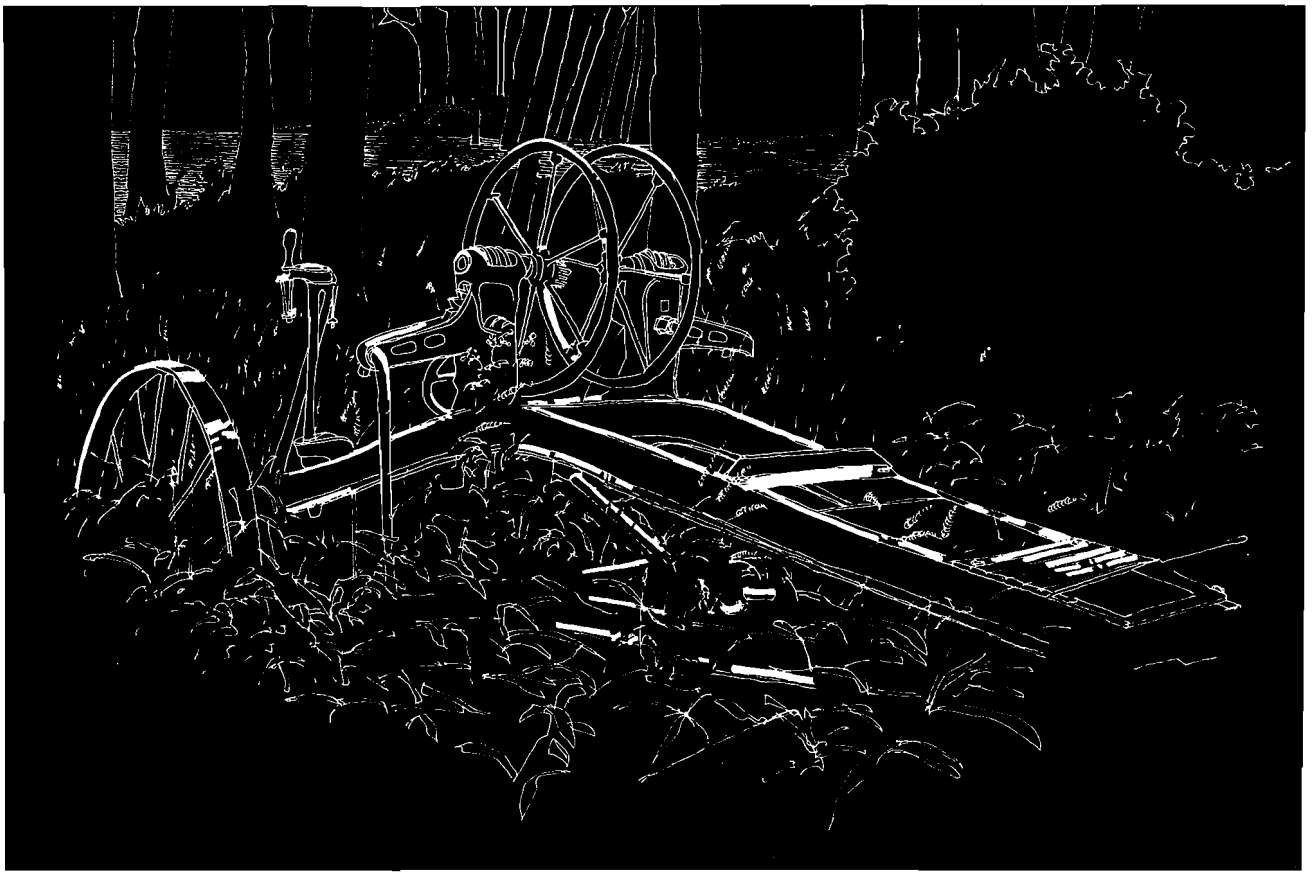
2. A qualified archaeologist should be retained to survey potentially significant sites.

3. Areas of potential archaeological value should be avoided, if possible, until a test investigation can be conducted.

4. If any artifacts are unearthed during future park development, a qualified archaeologist should be consulted.

5. An archaeological interpretation theme should be developed which would increase the appreciation of pre-history inhabitation of the Upper Willamette Valley.

6. Funds from the State Department of Transportation should be sought to assist in preserving archaeologic sites.



AESTHETICS

SPATIAL CHARACTERISTICS - Much of the experiential value of Dorris Ranch is due to the effects of topography and vegetation which create a variety in spatial character. Specifically, spatial definition within the site is provided predominantly by the grasslands, filbert orchards and mixed conifer/decidous woodlands.

The landscape is generally typified by a variety of spatial character consisting of vast open expanses in the grasslands to a semi-enclosed area in the orchards and woodlands. The edge between the filbert orchards and mixed decidous/conifer woodlands meanders throughout the site providing a variety, contrast and richness of spatial sequences.

VIEWS - Major views of recognizable land features (e.g., the Willamette River, Spencers Butte, Mt. Pisgah and the Upper Willamette Valley) are available from various on-site viewpoints. A number of prominent visual features stand out of the surrounding area providing important orientation landmarks. These consist of existing buildings, structures and vegetation masses.

RECOMMENDATIONS

1. Preserve the scenic and open qualities by retaining the existing vegetation (i.e., grasslands, filbert orchards, and woodlands) in addition to prominent visual features.

2. Screen unsightly views with vegetation where needed (i.e. utilities, rock quarry, etc.).

3. The introduction of buildings and support facilities should be designed and sited to fit harmoniously and inconspicuously with the existing site character.

4. A revegetation program (plantings of trees, shrubs and groundcover) should occur in areas disturbed by park development.

FILBERTS

"A filbert is a small round nut with a thick brownish-colored shell. The kernel, which completely fills the inside of the shell, is sweet and edible and is covered with a coarse brown layer called a pellicle.

"The name filbert is supposed by some people to have come from the term "full beard" because in some varieties the husk, in which it grows on the tree, entirely covers the nut. Others think the name is derived from St. Philibert because 22 August, the date dedicated to him, corresponds to the ripening date of the earliest filberts in England. The nuts have also been known as hazelnuts because of their medium-brown color"(13).

DEVELOPMENT & PRODUCTION

From the first commercial crops introduced to Oregon by George Dorris, the industry has grown to approximately 2500 growers, farming more than 25,000 acres in the Willamette Valley. According to Maxine Thompson, OSU Horticulturist, in 1978, 14,000 tons were harvested. Oregon produces 95 percent and western Washington 5 percent of the total U.S. filbert crop and shares the world market with Turkey, France, Spain and Italy.

GROWING REQUIREMENTS

The climatic and soil conditions of the Willamette Valley are very favorable for the cultivation of filberts, being comparable with regions around the Mediterranean Sea where filberts have been grown for centuries. Because the flowers of a filbert tree bloom in the winter, they require a moderate climate with fairly mild winters. Temperatures below freezing will kill the male catkin (pollen-producing organ) and female flowers. Adequate air movement is needed to prevent damage to trees by freezing. In addition, excessive dry summer heat or shade will cause reduction in nut quality and yield. Filbert trees require deep, medium rich soil and adequate moisture during the growing season (13).

VARIETIES

Barcelona is the mainstay used in the commercial industry in Oregon. Its popularity is due to its round shape and superior flavor. Other varieties include Daviana (used as a pollinizer), DuChilly, and Royal. The Barcelona has several drawbacks. The trees bear in alternate years and yield less nuts per cluster than other varieties. They also tend to produce more empty shells than other varieties. However, researchers are currently attempting to develop a new variety of filbert to offset its problem characteristics (17).

EXISTING ORCHARDS

At present, the 70 acres of filbert trees are managed by Norman Evonuk under a sharecrop agreement which includes pruning, spraying, fertilizing, preparation, and maintenance of the orchard floor. Under the agreement one-third of the gross income from each harvest season shall be paid to the park district for the rent of the property.

In 1972, a freeze severely damaged a number of trees, requiring major pruning of the orchard. The main trunks on the hardest hit trees were cut back in order to promote sucker growth from below ground level. After eight growing seasons, the damaged trees have developed

into multi-trunked "bush trees." Last year they produced a bumper crop of over one ton per acre.

According to Maxine Thompson (foremost authority on filbert trees), the orchards of Dorris Ranch are in very good condition considering the impact of the 1972 freeze. The "bush tree" method is an appropriate method of managing the orchards and the practice has been used in Turkey where 200-year-old Barcelonas are producing nuts.

RECOMMENDATIONS

1. Maintain the filbert orchards in agricultural production for a number of reasons: The orchards have a historical significance in being the first commercial filbert orchard in the United States; second, the orchards are an economical asset providing an annual income for maintenance and development of the park; third, much of the value this site accrues is from the spatial character provided predominantly by the filbert orchards; fourth, it provides food for wildlife.

2. Incorporate the processes of filbert farming with the overall theme of the park by creating well-developed interpretive displays.

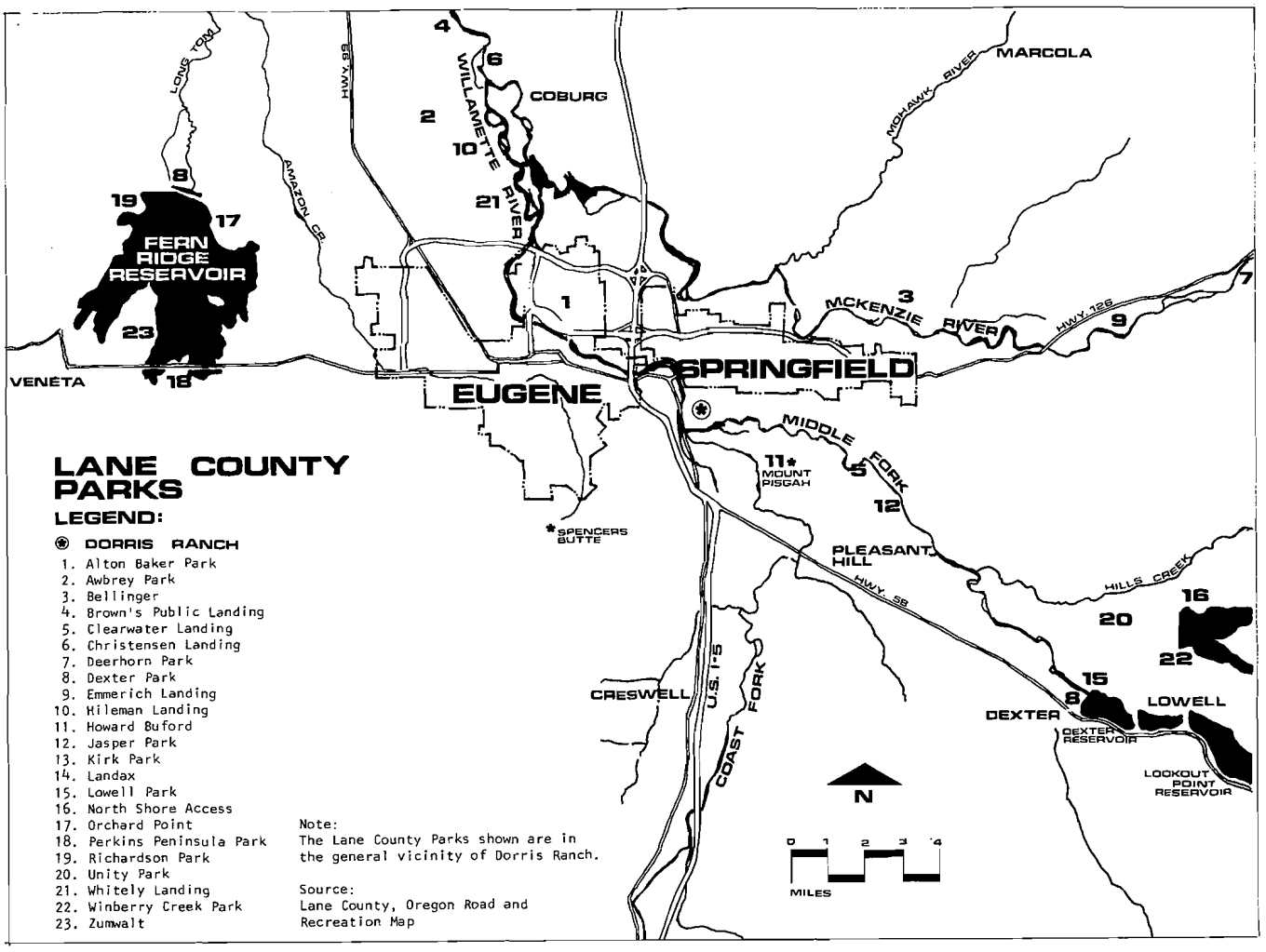
3. Regulate public use within the orchards to well-defined trails and specific activities in order to maintain the integrity of the orchards. Restricted use areas may be necessary during orchard operations of spraying, ground maintenance and harvesting.

LANE COUNTY
PARKS & OPEN SPACES

This section is a brief assessment of how Dorris Ranch integrates with Lane County Parks and Open Space plans, goals and policies. Lane County currently has six regional parks. Three are reservoir parks (park areas at Fern Ridge, Dexter and Lookout Point Reservoirs). The others are Alton Baker Park, Howard Buford Park at Mt. Pisgah, and Spencers Butte Park. The existing recreation facilities provided or planned for at these parks are oriented toward such activities as picnicking, hiking, swimming, boating and fishing (see map below). A number of County boat ramp facilities are located along the McKenzie River, Main, Middle and Coast Forks of the Willamette River.

There are presently no recreational facilities in the County which accommodate educational, interpretive, and recreational uses similar to those proposed for Dorris Ranch. The development of Dorris Ranch as a living Historical Farm/Nature Study would provide a unique recreational facility that compliments the existing County Parks and Open Space System.

The current direction of the Oregon State Parks Department is to encourage counties to put their resources into park facilities close to urban centers. More remote facilities would be developed and maintained by the State. While Lane County has no official policy which parallels the State Park's orientation, it is essentially what is happening in the County Park sys-



tem. Most of the County Parks' resources are being directed to regional parks near urban centers.

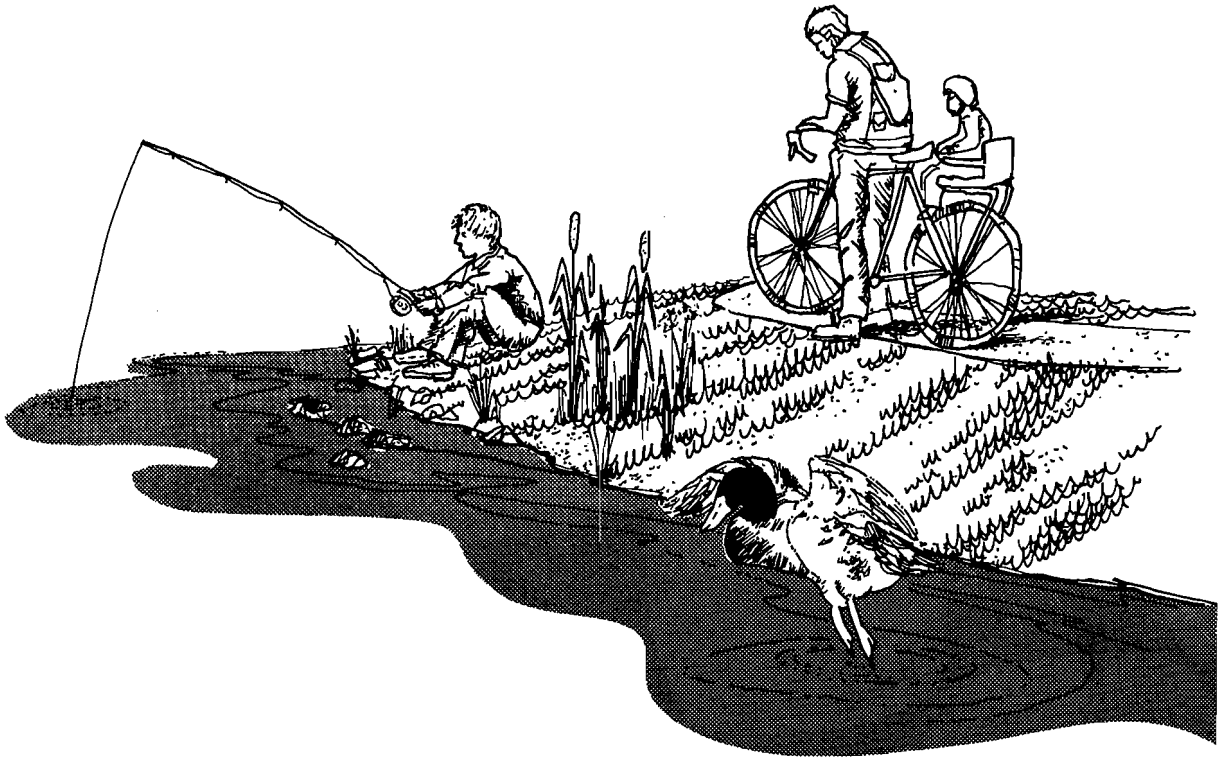
Lane County Parks and Open Space does not operate recreation programs; it provides facilities and parkland and maintains them. The recreation facilities can be used by other park departments and districts for their programs. Currently, the Eugene Park Department is using Alton Baker Park for various classes.

The concept of linear park connections between parklands along the Willamette River and its tributaries is fully supported by the County Parks.

RECOMMENDATIONS

1. Coordinate the planning and design of Dorris Ranch to connect to linear Park connections with county parks and other parklands along the Main and Middle Forks of the Willamette River.

2. The use of Dorris Ranch as a Living History Farm/Nature Center would provide a unique recreational/educational opportunity for residents at a County and Regional as well as local level.

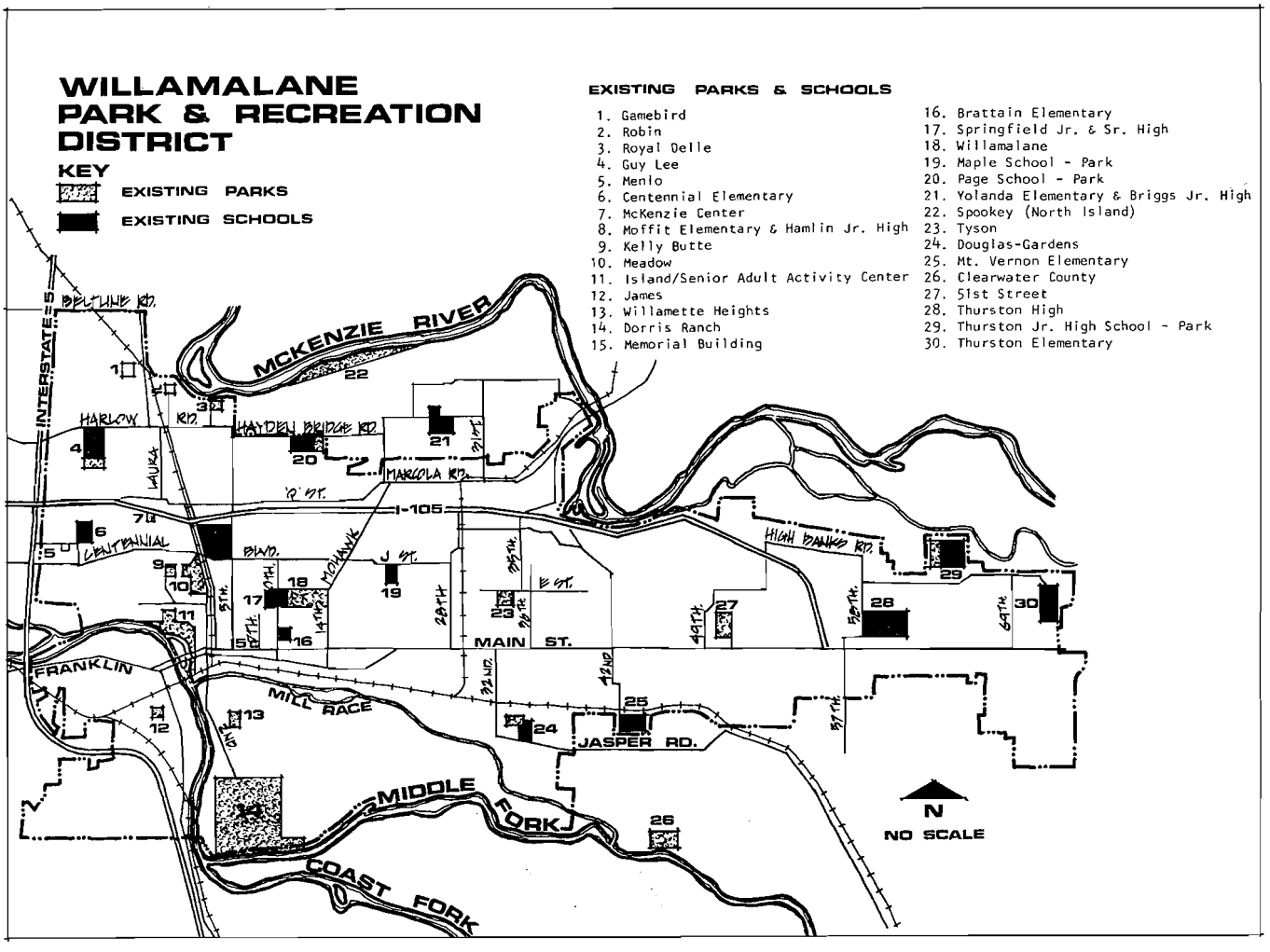


WILLAMALANE
PARK & RECREATION DISTRICT

Willamalane Park and Recreation District is a special purpose district having its own legal authority, tax base and legal boundaries. It serves an estimated 55,000 people including the City of Springfield and urban fringe. The park district also serves a major portion of the Springfield School District and provides specific youth program sources.

Willamalane had adequate recreation facilities until the area east of Springfield was annexed into its district boundaries. In addition, population projections for Springfield by the year 2000 are estimated by the Lane Council of Governments to reach 72,000 people. This projection combined with the district boundary expansion creates an increased need for park acquisition and development of recreation facilities. To meet these needs, Willamalane is presently involved in preparing a comprehensive guide for park and recreation services that will be completed in the fall of 1980. Efforts are being made to inventory existing facilities within the service area to determine the extent of current and future recreation demands.

Alton Baker Park and Dorris Ranch are two regional parks within the Willamalane service area. Howard Buford Recreation Area (Mount Pisgah) lies just south of the district boundary across the Middle Fork of the Willamette River. The only regional park in the immediate area, with development, is the portion of Alton



Baker Park just west of the park district in Lane County.

Dorris Ranch offers a unique opportunity, that once developed cannot be found elsewhere in the region. Specifically, the park offers a wide range of educational, interpretive and recreational activities based on the site's existing natural and cultural resources.

RECOMMENDATIONS

1. Encourage the proposed trail connection between Alton Baker, Dorris Ranch and Howard Buford, to form a Willamette River Park System including the metropolitan Island Park.

2. Develop recreational programs that meet local needs and compliment the unique recreational resources of Dorris Ranch.

3. Encourage the use of Dorris Ranch by educational interests and other interested groups.

WILLAMETTE RIVER GREENWAY

Oregon State Legislature Orders of 1973 (ORS 390.310 to 390.368) set policies to guide the implementation of the Willamette River Greenway. The Land Conservation and Development Commission established Goal # 15 that provides guidelines for state and local land use plans within the Greenway. The purpose is to "protect, conserve, enhance and maintain the natural, scenic,historical,economic and recreational qualities of lands along the Willamette River Greenway."

Currently a Preliminary Sub-Area Plan is being developed for Lane County of which Dorris Ranch is part of the "Lower Middle Fork Plan" (See Greenway Map).

RECOMMENDATIONS

Park development of Dorris Ranch should comply with L.C.D.C. Goal # 15 which includes the following:

1. Maintain recreation as an essential activity and resource within the Greenway.

2. Protect significant and historic resources.

3. Control the extent and location of access to the river and its banks.

4. Insure that land use proposals and decisions for riparian properties are compatible with the Greenway.

5. Protect,preserve or conserve important fish and wildlife habitats and natural areas.

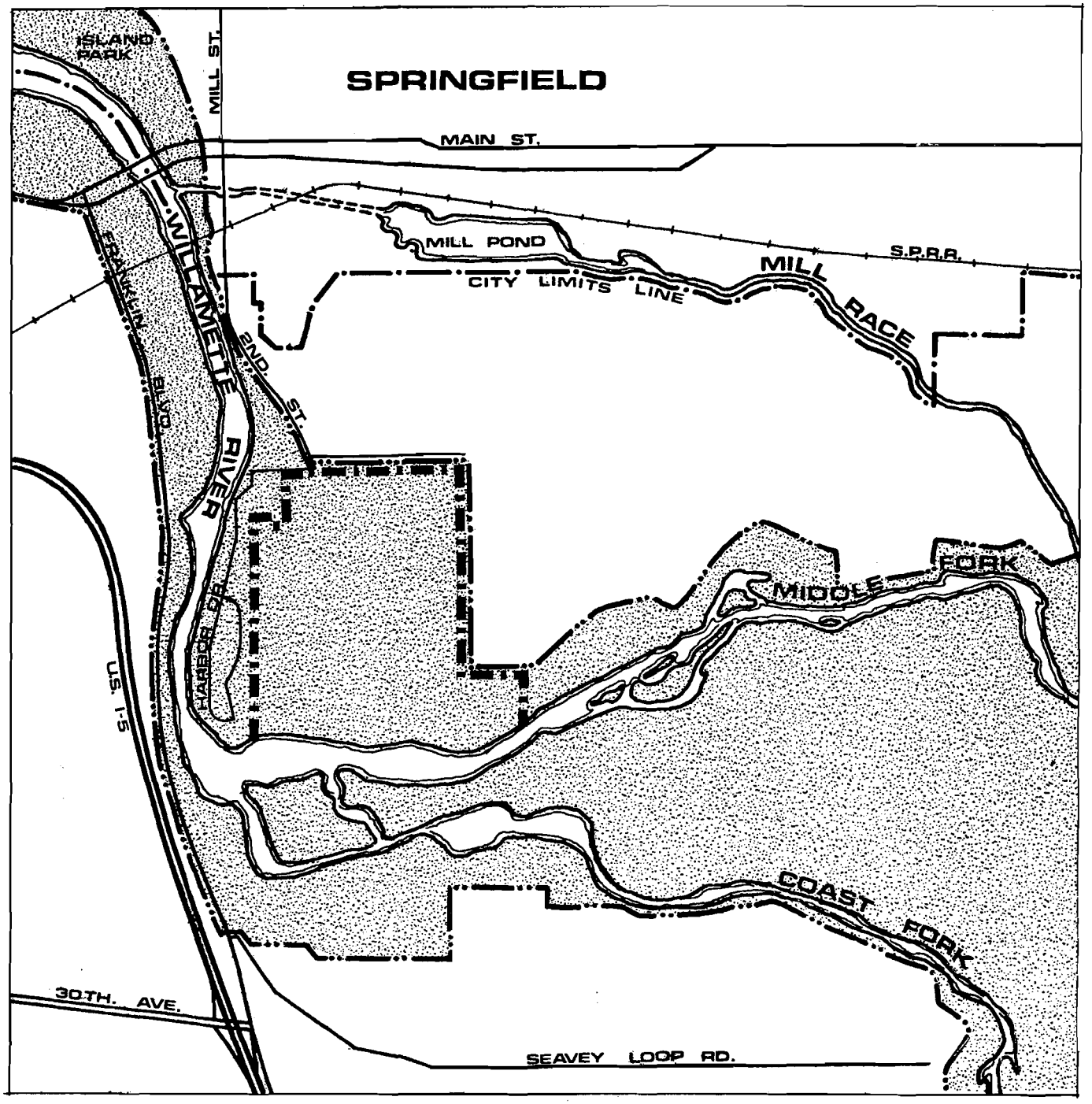
6. Maintain form use as an essential activity within the Greenway boundary.

7. Maintain sufficient water flows to support water users and sustain and enhance water quality.

8. Protect, conserve and preserve riparian and other important vegetation as an essential resource.

9. Manage, conserve, and preserve the flood plain within the Greenway for open space.

10. Respect the physical limitations of the lands within the Greenway.



GREENWAY

GREENWAY BOUNDARY ALONG THE MIDDLE AND COAST FORKS OF THE WILLAMETTE RIVER.

SOURCE:

"Preliminary Willamette River Greenway Plan" Technical Report, May 1979

"A Proposal for the Willamette River Greenway" July, 1976, Lane County Book No. 4

MILLRACE CORRIDOR

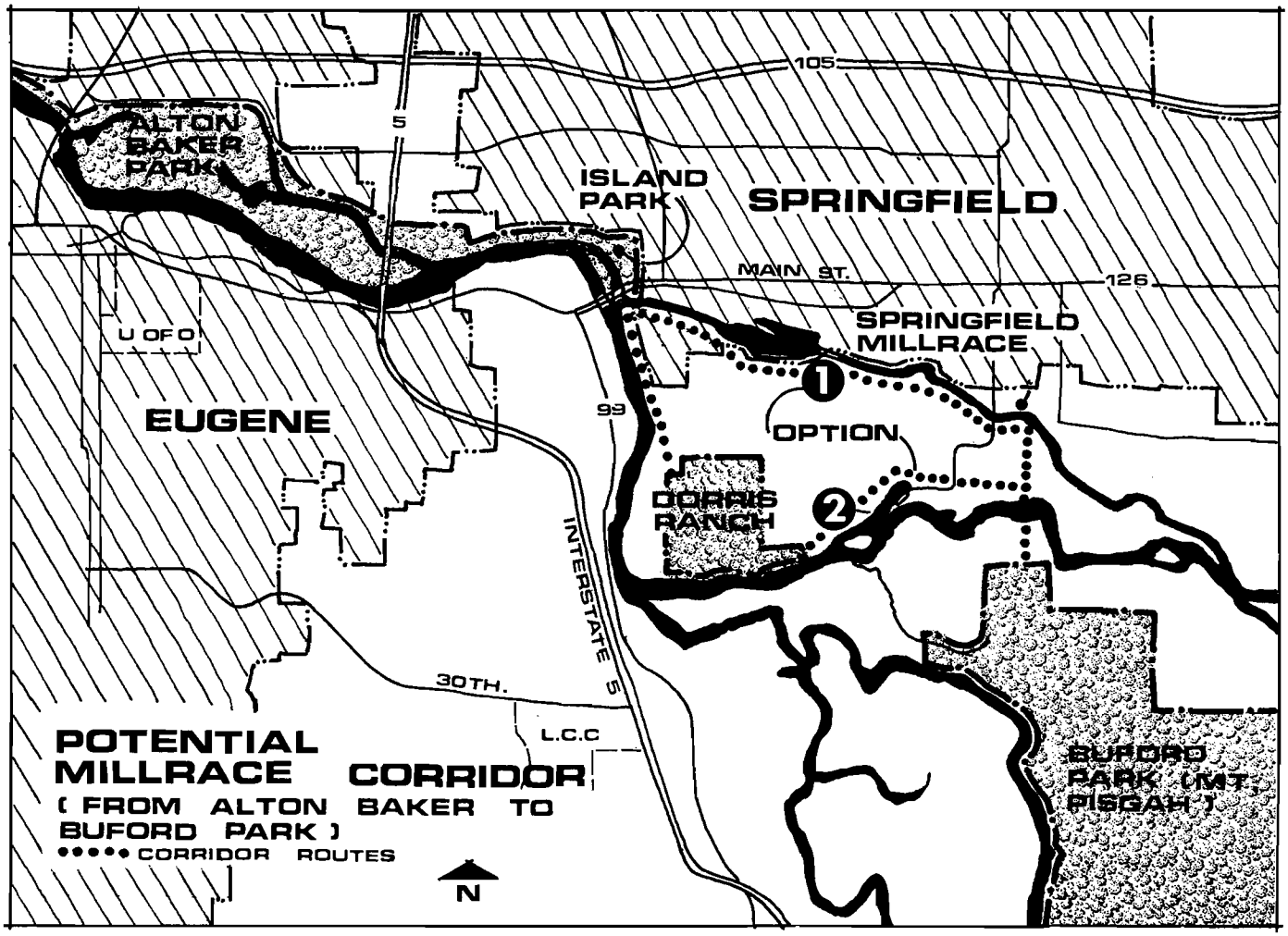
The origin of the Millrace began in 1852, when Elias Briggs (founder of Springfield) cut a 3.5 mile channel north of the Willamette with a team of oxen. It was Briggs and a group of pioneers who envisioned the Millrace driving the sawmill and gristmill, thus promoting growth in the growing community.

Since then the Millrace has been owned and used primarily by Georgia-Pacific for storing uncut lumber. However, in 1973 the concept developed to make the "Springfield Millrace" into a continuous recreational corridor along the Willamette River waterway from Mt. Pisgah through Island Park to Alton Baker Park. The corridor could include bike paths, jogging trails, picnic areas, rest stops and overviews along the waterway.

Two potential corridor links have been proposed (see diagram). The options include locating the corridor south of Georgia-Pacific Mill and/or along the river through Dorris Ranch.

In 1974, Willamalane Park and Recreation District endorsed the concept. In 1975, the Springfield City Council, Lane County Parks and Open Space Division and Oregon and Metropolitan Bicycle Committees expressed interest in such a project.

In 1976, a feasibility study was conducted by the Federal Department of Agriculture through the Upper Willamette Resource Conservation Board. They agreed to provide funds for improvement only if a local agency matched funds and if the agency obtained legal easements or



outright title for the Millrace corridor.

Problems have prolonged any improvement of the corridor project such as the lack of funds and commitment of agencies to other projects.

RECOMMENDATIONS

1. The Millrace Corridor concept should be supported as an integral connecting link to Dorris Ranch to and from other parks. The proposed circulation route would provide alternative access (i.e., for pedestrians and bikers) and amplify the visitor arrival and departure experience along the waterway.

2. Planning and design of Dorris Ranch should include a circulation system that could be integrated with the proposed corridor routes.

ADJACENT URBANIZATION

Land uses on lands adjacent to Dorris Ranch are controlled by the Eugene-Springfield Metropolitan General Plan, Lane County "Lower Middle Fork Sub-Area Plan,"and Lane County zoning ordinances. These plans and ordinances were reviewed for influence on the park, resulting in the following summary.

Dorris Ranch is bordered on the west by a permanent residence mobile home park, on the south by the Willamette River, on the north by agricultural areas, and on the east by agricultural areas and an active rock quarry.

A major change in land use patterns as shown in the "Eugene-Springfield Metro Plan Update" includes the expansion of the Urban Growth Boundary to encompass Dorris Ranch and most of the lands north of the Middle Fork.

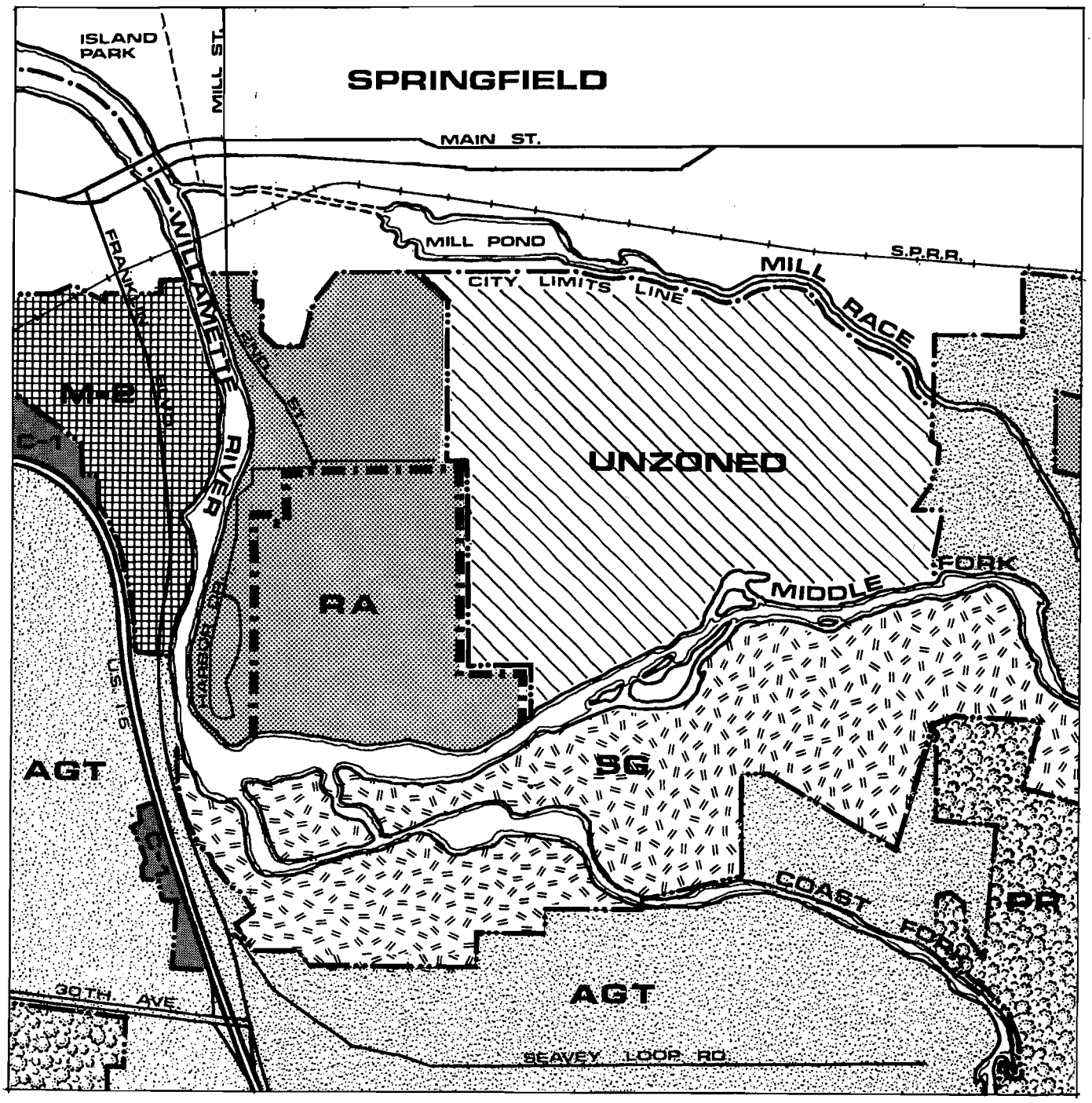
In addition, the area north of the study site has been designated as low density residential in the update plans, but has not been annexed into the Springfield City Limits. Once this occurs, city services may extend to Dorris Ranch. This could eventually result in the site being surrounded by urbanization on the north and east.

The prospect of urban growth makes Dorris Ranch a valuable resource as a natural buffer to urban expansion along the Willamette River. Furthermore, the site is a unique preserve of a rural landscape in the midst of an urban area. This contrast makes the site significant when compared to sites of similar merit in remote areas.

RECOMMENDATIONS

1. Change the existing site zoning designation from suburban residential (R.A.) to public reserve (P.R.) to insure compatible land use within the greenway boundary.

2. Protect the natural rural integrity of Dorris Ranch from urban encroachment by creating a protective scenic easement. Encourage the preservation and re-establishment of vegetative cover along the site's perimeters in order to insure and enhance scenic values.



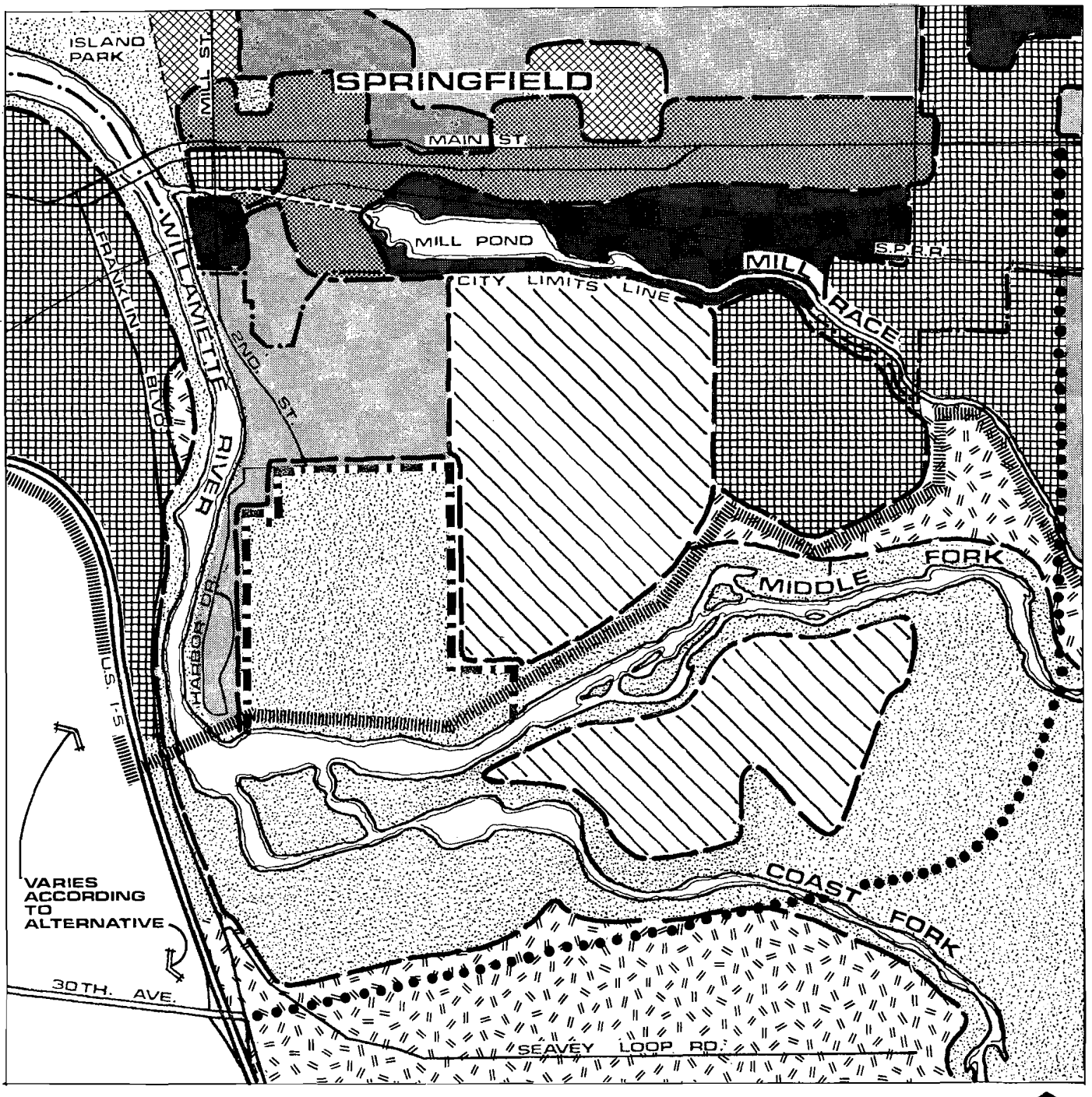
ZONING

N
NO SCALE

AGT	AGRICULTURE, TIMBER RAISING, GRAZING
C-1	LIMITED COMMERCIAL
M-2	LIGHT INDUSTRIAL
PR	PUBLIC RESERVE
SG	SAND, GRAVEL AND ROCK PRODUCTS
RA	SUBURBAN RESIDENTIAL
	UNZONED

SOURCE:

Lane County Zoning Maps, 1975 & 1979, Township 18, Section 2, Range 3



COMPREHENSIVE PLANS

N
NO SCALE

- LOW DENSITY RESIDENTIAL
- MEDIUM DENSITY RES.
- HIGH DENSITY RES.
- LIGHT / MED. INDUSTRIAL
- URBAN GROWTH BOUNDARY
- HEAVY INDUSTRIAL
- PARKS & OPEN SPACE
- AGRICULTURE
- COMMERCIAL
- PROPOSED 30 TH. AVE. EXTENSION
- SAND & GRAVEL

SOURCE:

"Eugene-Springfield Area Metropolitan General Plan Update" (January 1979)

"Lower Middle Fork Subarea Plan (Nov. 1974)

NOTE:

The map is an abstract of the comprehensive plans.

EXISTING
ACCESS & CIRCULATION

Dorris Ranch is readily accessible from Springfield by automobile. It is three quarters of a mile from downtown, via Second Street. This street also provides access to Harbor Drive and Filbert Acres Mobile Home Court. An unimproved county road runs perpendicular to Second Street and runs parallel to the northern boundary of the site. A portion of the northeast corner of the site is bisected by a gravel road that is leased to Springfield Rock and Quarry by Willamalane Park and Recreation District.

At present, access to Dorris Ranch is by an unpaved road which enters the site from Second Street. This road branches to the east through the middle of grassy hillside providing access to two residences and to the south into the interior of the site, providing access to the orchards and the "Second House."

Currently Dorris Ranch is not directly linked to any developed bicycle routes; the closest one is near Island Park, one mile north. There are possible future links to other parks including Island Park and Alton Baker Park as well as Mt. Pisgah (Buford Park) and other up-river areas (See Millrace Corridor).

RECOMMENDATIONS

1. Encourage alternative modes of transportation, including bus (L.T.D.), bicycle, pedestrian and horse drawn vehicle connection from Island Park.

2. Develop an integrated bikeway system that links Dorris Ranch to other park lands via the Millrace Corridor proposal.

3. Re-direct the access road that serves the two single-family houses east of the site along the county road north of the property. This road currently bisects the grassy hillside meadow, spoiling its integrity as a space and as a habitat.

4. Minimize the impacts of motorized vehicles on the park. Access and parking for vehicles should be provided at designated places where the level of human activity is least destructive to the local environment and visitor experience.

EXISTING
SERVICES

Existing water and sewer services extend as far as the city limits line and no extension of municipal services to Dorris Ranch is foreseeable in the near future. Power from the Springfield Utilities Board serves the site by above ground lines. A major P.P.&L. power line extends the length of the east boundary of the site and crosses the Middle Fork. The main source of potable water is from on-site wells. Sewage is treated by on-site septic tanks and drainage fields.

Fire protection services are provided by the Springfield Fire Department and the Eastern Lane Forest Protective Association.

RECOMMENDATIONS

1. Development of utility systems should be coordinated with park development and phased sequentially so that a functional and efficient total system is developed.

2. All utilities should be planned to facilitate future expansion. On-site wells should be used as the main source of potable water. Sewage treatment can be accommodated through the use of septic fields.

AERIAL VIEW OF THE "ORIGINAL HOUSE" AND BARNS.

3. All exposed utilities should be well screened from viewing and public areas. Existing and future power services should be placed underground.

4. Provisions should be made for proper fire protection, including fire access throughout the site and to the river as a water pump source. Stream channel rehabilitation and construction of water impoundments could provide water sources in case of fire.

BASALT QUARRY

Springfield Quarry Rock Products, Inc. has an active basalt rock quarry in operation due east of Dorris Ranch. The quarry site supplies the Eugene/Springfield construction industry with crushed rock. According to the State Geology Department, the quarry site has a projected ninety year supply of basalt rock.

Mining of the eastern face of the butte has negatively affected views from the west, including views from Dorris Ranch and Interstate 5. Extraction will continue to occur on the eastern slopes and top of the butte. No further mining of the west and northwest portions of the quarry will take place due to excessive slopes, heavy overburden, and existing vegetation.

Areas mined prior to the 1972 Federal Surface Mining Act are exempt from reclamation procedures. All extraction permits issued since the federal law requires reclamation procedures designed to minimize the impact of such operations on the environment and to provide for the rehabilitation of land. Specific procedures include the rehabilitation of vegetative cover, soil stabilization and water resources.

A reclamation plan guideline was submitted by Springfield Quarry Rock, Inc., to the State Department of Geology and Mineral Industries in July of 1975. Under the plan the reclaimed lands are to be restored as forest land. Douglas-fir seedlings are to be planted as a visual screen in disturbed areas.

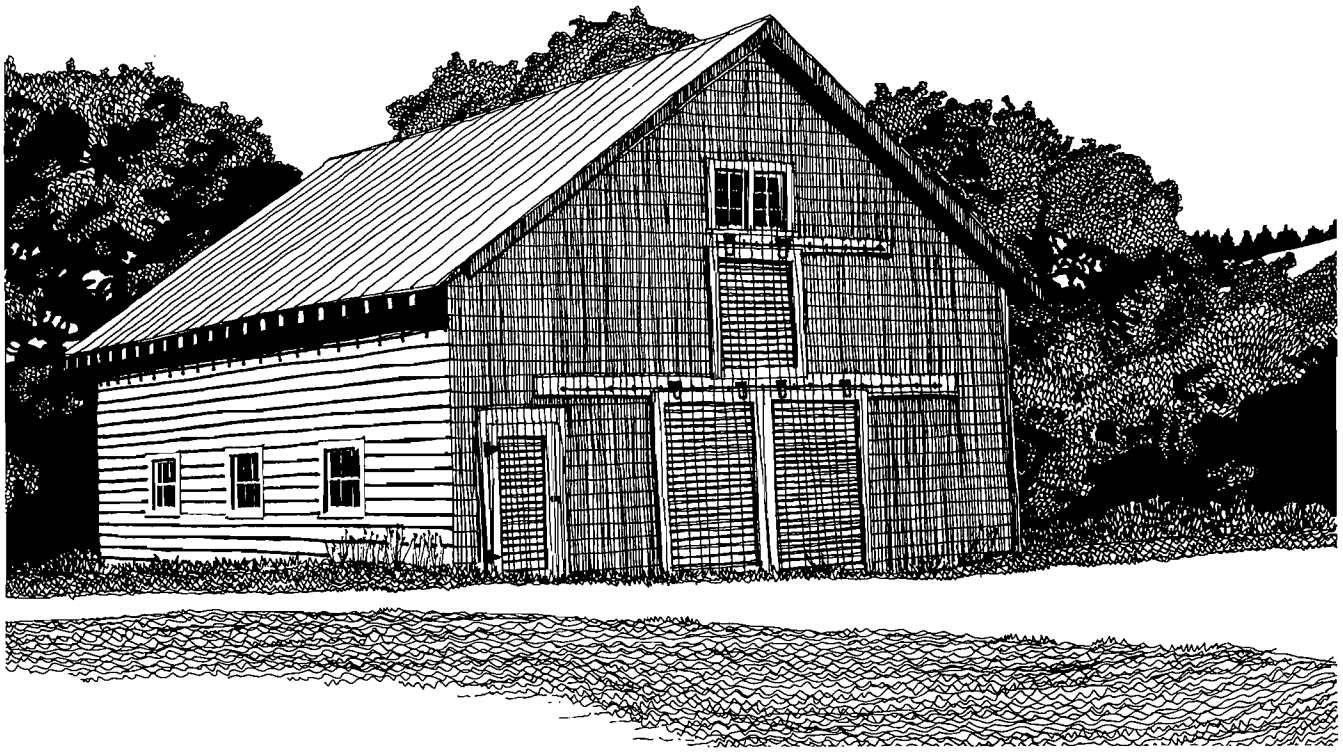
RECOMMENDATIONS

1. Trees should be planted along the eastern boundary of Dorris Ranch to create a natural edge, screening unsightly views of extracted areas. Plantings should be in masses and spaced randomly, as found in a natural planting.
2. The landscape integrity of Dorris Ranch is directly affected by the surrounding visual features. For this reason, the extent of future extraction and reclamation process should be monitored for its effect on the park.

INAPPROPRIATE SITE USES

The unauthorized recreational use of off-road vehicles on the site has created major scars on the fragile grassy hillside. Disturbed soil and vegetation in this area lead to erosion problems, increasing damage.

Because of the close proximity to Springfield and the relative isolation of the site, several areas at Dorris Ranch have been used as a congregating point for local youths, resulting in an accumu-



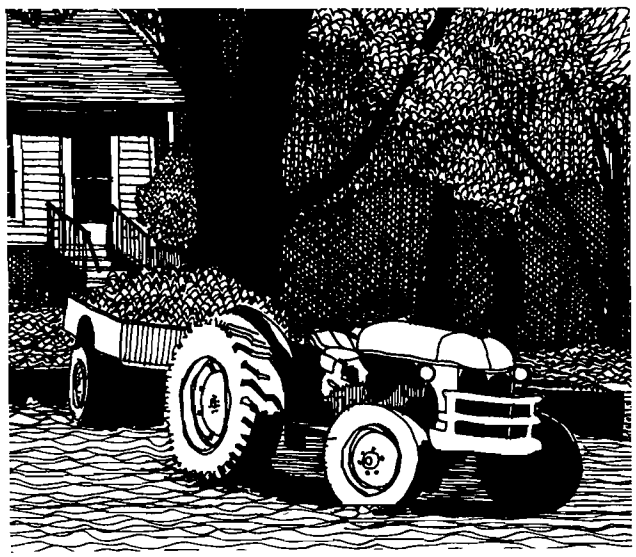
EXISTING BARN BUILT IN 1940.

lation of litter. The recent temporary closure of the park site has greatly curtailed this activity.

RECOMMENDATIONS

1. Park development must be designed for controlled access to the site.

2. Surveillance of the site is an important development criteria. Live-in personnel would be the best single solution.



MIXED CONIFER / DECIDUOUS WOODLANDS

PHYSIOGRAPHIC AREAS

Land characteristics were classified into general physiographic areas based on analysis and evaluation of the physical and biological elements of the site. Specific opportunities and constraints were then identified for visitor use and park development. A summary of the results follows. (See Physiographic Areas and Opportunities and Constraints Maps).

GRASSY HILLSIDE

AREA A is located in the northeast portion of the site and is characteristic of a grassland vegetation community. The hillside is composed of a grassy slope with tree and shrub masses that creates a large uninterrupted open space and valuable wildlife habitat.

OPPORTUNITIES:

1. Setting is very attractive with views of the entire site and surrounding upper Willamette Valley.
2. Space has spacious open feeling.
3. Habitat is important for a variety of wildlife species. Potential enhancement includes the construction of a shallow freshwater impoundment for recreation and wildlife purposes.
4. It provides a unique spatial character and wildlife habitat that could be enhanced by removing the existing unimproved access road.
5. Existing diversity and quantity of vegetation and wildlife would allow the development of a natural study area that connects to other areas of the site.

CONSTRAINTS:

1. Soils are very shallow and clayey with a medium to high erosion potential.
2. Slopes are moderate to steep with moderate to rapid runoff.
3. Construction activities or intensive use of soils could result in rapid environmental deterioration.
4. Vegetation community is fragile.
5. Wind protection is poor.
6. There are unsightly views of the adjacent basalt quarry.
7. Existing access road impairs the wildlife habitat and spatial character.
8. Area is subject to fire hazard.
9. Power intrudes the east boundary.
10. Residential development may occur to the north.

WOODLANDS

AREA B is the upper northwest corner of the site consisting of oaks with an understory of grasses which creates an open, dry character.

OPPORTUNITIES:

1. The best views of the Ranch and surrounding area are located in this area.
2. Existing road offers potential access alternative to site and to houses presently served by road through the meadow.
3. It has well-developed mature trees.
4. It provides cover for numerous wildlife species that forage in the adjacent grasslands.
5. It acts as a buffer to views and noise from the basalt quarry.

CONSTRAINTS:

1. Soils are very shallow with high shrink swell potential and high erosion hazard.
2. Slopes are excessively steep with high runoff potential.
3. Noises occasionally intrude from the adjacent rock quarry.
4. It has poor suitability for nearly all recreation uses.
5. Powerline intrudes on part of woodlands.

AREA C is located near the center of the site on a slope face covered by an oak woodland mix, with a rich, moist understory of plants.

OPPORTUNITIES:

1. This attractive setting of dense mature

vegetation provides a visual backdrop for the grasslands and filbert orchards.
2. As a valuable wildlife habitat, it provides a transition (ecotone) between three different vegetation zones.

CONSTRAINTS:

1. Soils are relatively shallow with a medium erosion hazard.
2. Slopes are excessively steep with rapid runoff potential.
3. Existing mine shaft is a potential safety hazard.
4. Recreational uses with intensive activity are not suitable in this area.

AREA D is located along the northern property line in isolated oak clumps with an understory of shrubs and grasses.

OPPORTUNITIES:

1. Soils are moderately deep and well-drained.
2. The slopes are moderate to relatively flat with medium runoff.
3. It has well developed trees.
4. It provides habitat for a number of wildlife species.
5. It acts as a screen to the adjacent residences to the north.

CONSTRAINTS:

1. Power transmission lines cut through the area.
2. Future urbanization may occur to the north.

AREA E is located at the south end of the site on lowlands composed of a Douglas - fir/maple woodland with a tall shrub and herbaceous understory. The woodlands have a semi-enclosed spatial character created by a closed canopy and verdure of understory vegetation.

OPPORTUNITIES:

1. Soils are deep and well drained. Runoff is slow and erosion hazard is slight except from flooding.
2. The slopes are relatively flat and can accommodate a wide variety of moderate impact recreational activities and support facilities.
3. Old growth Douglas-fir and diversity of vegetation types and wildlife habitats make this a very interesting scenic area.
4. Area is protected from wind.
5. Existing trails already provide access.
6. Bird populations can be increased by placing nesting boxes in the woodlands.
7. A natural area and nature study could be developed to increase the appreciation of wildlife, habitats, natural processes and history.
8. Bank side fishing could be accommodated.

CONSTRAINTS:

1. The area has a history of frequent flooding.
2. Intensive physical development could adversely affect the unique spatial character and wildlife habitats.
3. Sensitive areas of herbaceous understory plants could be damaged by unregulated foot traffic.

AREA F is composed of existing filbert orchards which extend through the center of the site on rich alluvial soils. They occupy nearly level to gently undulating bottom lands.

OPPORTUNITIES:

1. Soils are deep, runoff slow and suitable for most kinds of crops.
2. Slopes are relatively flat and can accommodate a variety of recreational uses.
3. The well developed filbert orchard is an economic asset in that it provides an annual income to the park.
4. Area is very attractive, with a unique spatial quality.
5. Existing unimproved access roads connect orchards.
6. Potential for an interpretive display of filbert farming.

DORRIS RANCH

WILLAMALANE PARK DISTRICT, SPRINGFIELD, OREGON

PHYSIO-GRAPHIC AREAS

LEGEND:

- GRASSLANDS
- WOODLANDS
- FILBERT ORCHARDS
- RIPARIAN
- CULTURAL
- B — SUB-ZONE - (WITHIN A PHYSIOGRAPHIC AREA)

WILLAMETTE RIVER

0 200 400 FT.

N

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OPPORTUNITIES / CONSTRAINTS

LEGEND:

- PHYSIOGRAPHIC BOUNDARIES
- EXISTING CIRCULATION
- CULTURAL AREA
- NODE

SUN BEARING & ATTITUDE
44°

0 200 400 FT.

N

VIEWS
RIPARIAN
POND
WINTER WINDS
FUTURE MOORING OF THIS PORTION OF THE RIVER WITH SPECIAL EMPHASIS BY THE STATE FISHERIES
BOAT LAUNCH & RECOVERY
VIEWS
POTENTIAL RIVER OVERLOOK
MILLRACE CORRIDOR
WOODLANDS
I-5
STREAM CHANNEL
MOBILE HOME COURT
FILBERT ORCHARDS
FRESHWATER IMPOUNDMENT
SCREEN PLANTING
SHEDS
HISTORIC 1900's HOUSE & OUTBUILDINGS
SWIMMING POOL
EXISTING POWER LINE
MINE SHAFT
POND IMPROVEMENT
WILLAMETTE RIVER
HARBOR DRIVE
WILDISH CO.
GRASSLANDS
BARN
REMOVE UNIMPROVED ROAD
VIEWS
ACCESS & EGRESS
SPRINGFIELD ROCK & QUARRY
OCCASIONAL SUMMER WINDS
SUMMER WINDS
MILLRACE CORRIDOR

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DORRIS RANCH

WILLAMALANE PARK DISTRICT, SPRINGFIELD, OREGON

7. Orchards provide food for wildlife.

CONSTRAINTS:

1. Soils are subject to occasional or frequent flooding.
2. Public use within the orchards could cause severe degradation.
3. Orchard operations may conflict with public use during specific times of the year.

RIPARIAN

AREA G occurs along the north bank of the Middle Fork of the Willamette River. This riparian community consists of a dense cover of water-loving vegetation on shallow bottomland soils.

OPPORTUNITIES:

1. This is the most important wildlife habitat on the site. It has extremely high potential for nature observation.
2. Entire south edge of this area abuts the Willamette River.

CONSTRAINTS:

1. Soils are shallow with some areas of steep slopes.
2. This area is subject to frequent flooding.
3. Spatial quality is difficult to experience due to impenetrable dense vegetation.
4. As a wildlife habitat, this area is fragile. Public access into the area must be carefully selected and controlled.

AREA H is a riparian area with an existing pond, located in an attractive setting along the old stream channel at the northwest corner of the site.

OPPORTUNITIES:

1. The area is a rich wildlife habitat and could be enhanced by increasing the water level in the existing pond.
2. It has high potential for wildlife observation.

CONSTRAINTS:

1. A mobile home park is adjacent to this area.
2. Seasonal fluctuations occur in water depth of the pond.

CULTURAL

AREA I extends north to south from Second Street to the center of the site. This area best exemplifies the man-made landscape of structures, lawns, gardens and waterways.

OPPORTUNITIES:

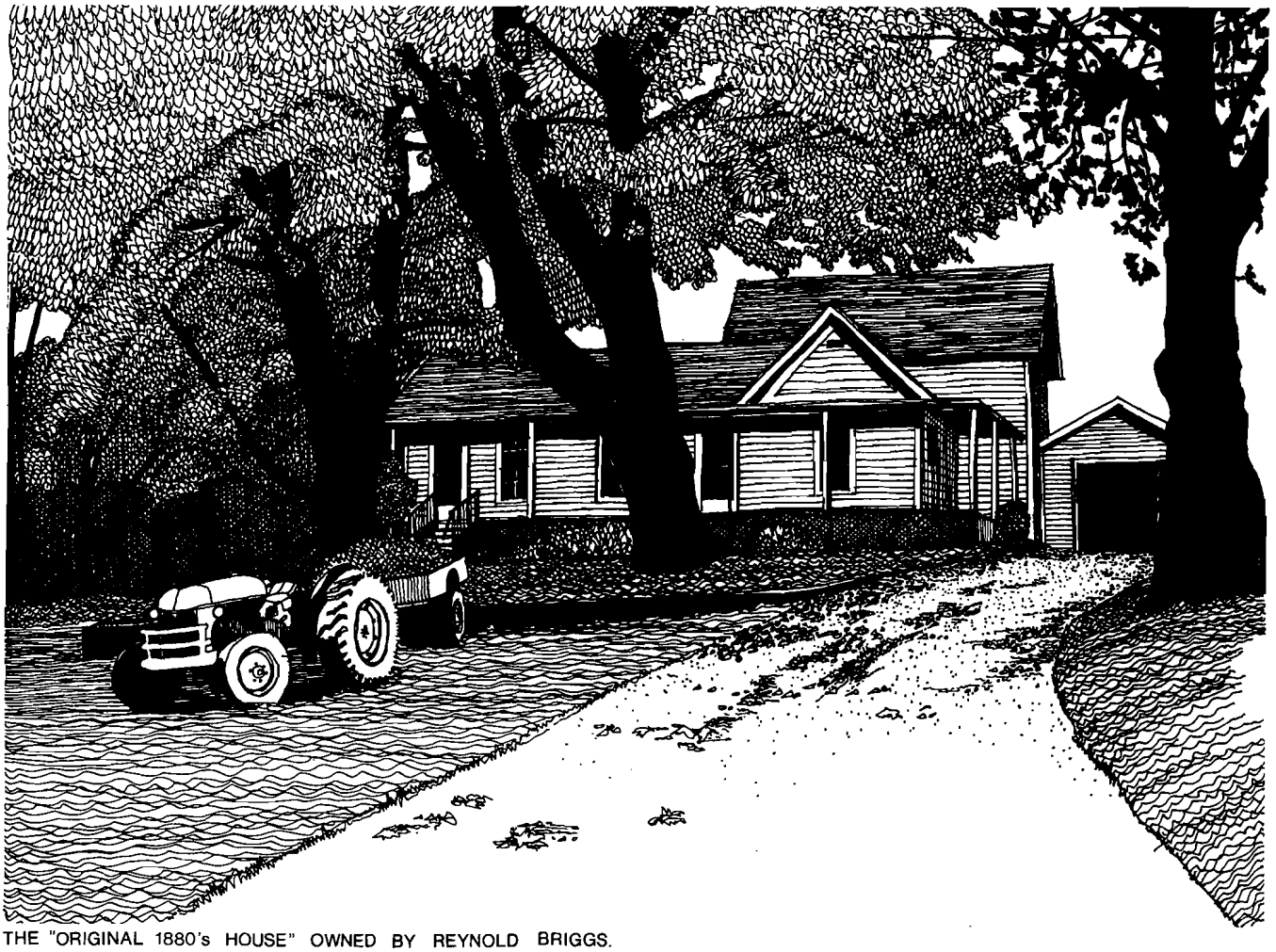
1. This area provides a very attractive agrarian landscape setting.
2. Excellent views occur in nearly all directions.
3. Area exhibits a number of structures and sites of historical significance that convey the cultural heritage of the site.
4. It contains a diversity of vegetation types.
5. It contains a number of important visual features that effectively emphasize the character and atmosphere of the Ranch.
6. This area has the potential of becoming the backbone of a living historical farm.
7. An existing road in this area links Dorris Ranch to Second Street.
8. The central location of this area allows easy access to most of the site and could easily be the pedestrian-utility and service corridor to the rest of the site.
9. This area can link with the millrace corridor connecting Dorris Ranch to other parks along the Willamette as part of an integrated bicycle/pedestrian system.
10. Sub-areas within this cultural area are suitable for visitor activities

which require large flat open areas.

11. The existing stream channel, if improved for increased water flow, can be used for a variety of recreational, wildlife and agricultural uses.
12. Soil has moderate depth and can possibly support some septic drain fields.
13. This area has best potential for well sites.

CONSTRAINTS:

1. Much of this area is subject to occasional flooding.
2. The character of this area can be easily destroyed if vehicular access is not carefully regulated.
3. This area has potential archaeological sites which should be identified before any development occurs.



THE "ORIGINAL 1880's HOUSE" OWNED BY REYNOLD BRIGGS.

LAND USE

In order to maintain the landscape integrity of Dorris Ranch without immediate or long-term deterioration of the land's resources, specific classifications were given to physiographic areas. Recreational uses and activities were then assessed for the degree of impact they would have on the site's resources. Policy areas were established based on resource characteristics, degree of sensitivity and resiliency to use. Following is a description of the policy areas, guidelines and development criteria for future use.

POLICY AREA 1
CULTURAL

This area is most accessible, and is characterized as being suitable to accommodate high intensity use in short cycles with the capability to recover. These areas are of low to moderate sensitivity, capable of tolerating intensive use by concentrated, large scale groups. Representative uses include: living historical museum, animal contact farm, farm equipment displays, interpretive themes, demonstrations, exhibits (periodic and permanent), special interest events, picnicking, historical buildings, and potential interpretive center.

AREA 1A is the gateway; an initial visual reveal of the broad and interesting Ranch experience.

A. GENERAL USES
- This area is the main public entrance to the Ranch site.
- It will provide a sense of arrival which reveals the overall agrarian character of the Ranch, and direct visitors to their destination.

B. DEVELOPMENT AND SITE CHARACTER
- All improvements and development should be designed to add to the sense of entry and to transition into the agrarian character of the site.
- Develop a sequence of entrance views which has increased foreground interest and takes advantage of existing vistas.
- Keep signage to a minimum. Where needed, graphics should be designed to fit the existing character of the Ranch site.

C. ACCESS
- This area will be the main control point for all access into the site:
  Motorized vehicles will be directed to either drop-off points or parking.
  Buses and special modes of transportation (such as horse-drawn wagon shuttle from Island Park) will go to a special receiving area.
  Bicycles will either go to a bike rack area or continue through the site on a bicycle path connection to the Millrace Corridor system, when it is implemented.
  Pedestrians will have access to a pedestrian path system.

D. UTILITIES
- Existing and future utilities in this area will be buried and any transformers, vaults, etc. will be screened from view.

AREA 1B is a clearing once used as a hay meadow and is part of the foreground of views into the site from the entrance area.

A. GENERAL USES
- This area is an ideal field for demonstrating plowing and other farming practices and for the display of equipment.

B. DEVELOPMENT AND SITE CHARACTER
- No development should occur in this area which would eliminate use as a demonstration field.

C. ACCESS
- Vehicular access into or beyond

this area should be restricted with the exception of maintenance vehicles.
- Pedestrian circulation should occur only at the edge of this area and not cross through it.

D. UTILITIES
- All power and telephone lines should be placed underground and either border the field or be deep enough not to interfere with tilling.

AREA 1C is the westernmost tip of the grasslands area which abuts the cultural zone and the site entrance node.

A. GENERAL USES
- This area can serve as an interim and/or overflow parking area for visitors until the 1880s house and property can be obtained.

B. DEVELOPMENT AND SITE CHARACTER
- Parking surfaces should be considered temporary or on a long term basis, be an occasional use surface.
- Surface should be designed to allow all weather use, yet not create concentrated water runoff.
- Character of parking should have a low visual impact, particularly when not in use. Reinforced lawn parking surface would be appropriate.

C. ACCESS
- Vehicular access from entrance node should be clear and directional.

D. UTILITIES
- All utilities should be underground.
- Lighting for parking should be minimal with low visual impact.

AREA 1D is an open, park like corridor that extends into the interior of the site and consists of buildings and historical structures.

A. GENERAL USES
- Uses should promote interpretation of the history of Dorris Ranch, early Springfield and the upper Willamette Valley.
- Appropriate uses would include demonstrations, picnicking, exhibits, contact farm and special interest events.

B. DEVELOPMENT AND SITE CHARACTER
- Preserve and restore both the original house built in 1880 (if obtained) and the second house built by George Dorris in 1900. These are good examples of architecture prevalent in the valley during its early agricultural history.
- All man-made structures should be compatible with the existing character with traditional details and materials.
- Preserve the existing character of this area established by the existing lawns, trees and flowing green park-like spaces.
- Develop views and vistas that protect and enhance the site's unique visual quality.

C. ACCESS
- Preserve the landscape integrity by restricting all vehicular access with the exception of park service vehicles from entering this portion of the site.
- Encourage pedestrian circulation through the interior of the site which connects to the overall park circulation system.

D. UTILITIES
- Provide all necessary utilities to service the area.
- Existing power and telephone lines are to be buried underground.

AREA 1E extends along the old stream channel and consists of man-made water

LAND USE PLAN

LEGEND:

POLICY AREA 1
CULTURAL
THIS AREA IS MOST ACCESSIBLE, AND IS CHARACTERIZED AS BEING SUITABLE TO ACCOMMODATE HIGH INTENSITY USE IN SHORT CYCLES WITH THE CAPABILITY TO RECOVER. THESE AREAS ARE OF LOW TO MODERATE SENSITIVITY, CAPABLE OF TOLERATING INTENSIVE USE BY CONCENTRATED, LARGE SCALE GROUPS. REPRESENTATIVE USES INCLUDE LIVING HISTORICAL MUSEUM, ANIMAL CONTACT FARM, FARM EQUIPMENT DISPLAYS, INTERPRETIVE THEMES, DEMONSTRATIONS, EXHIBITS (PERIODIC AND PERMANENT), SPECIAL INTEREST EVENTS, PICNICKING, HISTORICAL BUILDINGS, AND POTENTIAL INTERPRETIVE CENTER.

POLICY AREA 2
ORCHARDS
CHARACTERIZED AS BEING SUITABLE TO ACCOMMODATE LOW INTENSITY RECREATIONAL USE IN DESIGNATED AREAS. EXISTING AGRICULTURAL LAND USE SHOULD BE RETAINED.

POLICY AREA 3
RIPARIAN
CHARACTERIZED AS BEING SUITABLE TO ACCOMMODATE A LIMITED NUMBER OF VISITORS IN LOW CONCENTRATIONS. THIS AREA POSSESSES BOTH FRAGILE AND UNIQUE RESOURCES THAT MUST BE PRESERVED TO INSURE THAT THE NATURAL PROCESSES PREDOMINATE. REPRESENTATIVE USES INCLUDE NATURE INTERPRETATION, WILDLIFE OBSERVATION AND PHOTOGRAPHY.

POLICY AREA 4
WOODLAND
CHARACTERIZED AS BEING SUITABLE TO ACCOMMODATE RECREATIONAL USES OF MEDIUM INTENSITY. THESE AREAS HAVE FRAGILE, MODERATELY SENSITIVE NATURAL RESOURCES THAT ARE RESILIENT ENOUGH TO TOLERATE DISPERSED (NON-CONCENTRATED) VISITOR USE WITH MINIMAL DISRUPTION TO THE NATURAL PROCESSES. REPRESENTATIVE USES INCLUDE: PRIMITIVE PICNIC AREAS, NATURE STUDY AND INTERPRETATION, A TRAIL NETWORK, BOARDWALKS AND OVERLOOKS.

POLICY AREA 5
GRASSLAND
CHARACTERIZED AS BEING SUITABLE TO ACCOMMODATE A LIMITED NUMBER OF VISITORS IN LOW CONCENTRATION. THIS IMPORTANT WILDLIFE HABITAT HAS SHALLOW, FRAGILE SOIL CONDITIONS AND SHOULD BE PRESERVED WITH MINIMAL DISTURBANCE. REPRESENTATIVE USES INCLUDE NATURE INTERPRETATION, HIKING TRAILS AND WILDLIFE OBSERVATION. THIS AREA IS LOCATED ON THE NORTHEAST PORTION OF THE SITE.

POLICY SUB-AREA
SEE TEXT FOR WRITTEN DESCRIPTION.

0 200 400 FT.

N

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DORRIS RANCH

WILLAMALANE PARK DISTRICT, SPRINGFIELD, OREGON

features including a swimming pool, ponds, dams and weirs.

A. GENERAL USES
- This area should be used as an aesthetic, recreational and wildlife habitat resource.
- Stream waters should be utilized for irrigation and fire protection.

B. DEVELOPMENT AND SITE CHARACTER
- Restore the old stream channel by cleaning out debris and repairing the water features as well as excavating areas filled in with silt.
- Protect existing vegetation for its unique recreational, aesthetic and wildlife habitat value.

C. ACCESS
- Provide pedestrian access along the stream channel by utilizing bridges, boardwalks and paths.

D. UTILITIES
- Underground power may be necessary in areas.

AREA 1F is an open meandering corridor that extends from the stream channel, along the edge of the filbert orchards to where it meets the woodlands.

A. GENERAL USES
- Promote recreational uses that require open space to accommodate large group gatherings including displays, exhibits and special events.
- Restrict indiscriminate use of the adjacent filbert orchards.

B. DEVELOPMENT AND SITE CHARACTER
- Limited permanent development should occur.
- Any man-made structures should be inconspicuous and blend in with the surrounding character.

C. ACCESS
- Provide paths and trails that interconnect with the overall pedestrian circulation of the park.
- Allow no vehicular access except park maintenance.

D. UTILITIES
- Underground utilites would be allowed in this area.

AREA 1G is a space containing a mature stand of incense cedars and is surrounded by existing filbert orchards.

A. GENERAL USES
- This area is a node within the orchards which is capable of accommodating fairly concentrated recreational activities, such as group interpretation and picnicking.

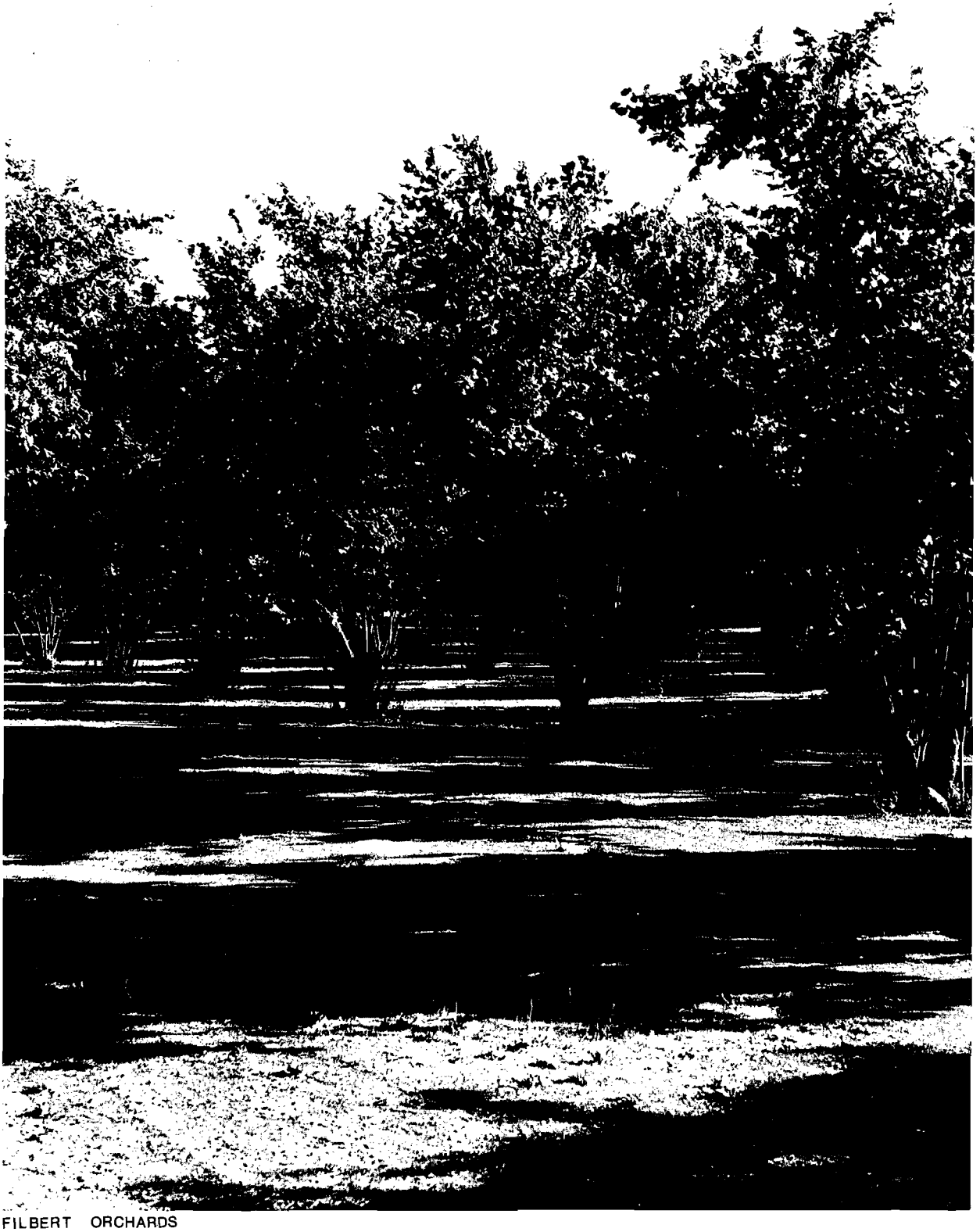
B. DEVELOPMENT AND SITE CHARACTER
- All man-made structures should be inconspicuous and blend in with the surrounding character.
- Filbert orchards adjacent to the area need to be restricted from public use.
- The historic significance of the asparagus cannery should be recognized as part of the site's history.
- The existing stand of incense cedar should be preserved.

C. ACCESS
- Limit access to pedestrian use only with the exception of park service vehicles, and equipment used for orchard maintenance.

D. UTILITIES
- Provide necessary underground utilities to adequately service this area.

POLICY AREA 2
ORCHARDS

This area is characterized as being suitable to accommodate low intensity recre-



FILBERT ORCHARDS

ational use in designated areas. Existing agricultural land use should be retained.

AREA 2A consists of filbert orchards that extend throughout the center of the site.

A. GENERAL USES
- Maintain the filbert orchards in agricultural production for their unique historic,aesthetic,economic and wildlife value.
- Recognize the historical significance of the filbert planting names.

B. DEVELOPMENT AND SITE CHARACTER
- No development should occur in this area.
- Preserve the unique spatial quality created by the orchards.

C. ACCESS
- Limit access within the orchards to operational and maintenance uses only.
- Restrict public use to well defined trails around the periphery of the orchards.

D. UTILITIES
- No utilities should be allowed except irrigation from the stream in area 1D.

AREA 2B consists of existing filbert orchards that abut the cultural area.

A. GENERAL USES
- Develop interpretive displays of filbert orchard operations (i.e., maintenance and harvesting).
- Rotate display orchards to prevent deterioration and assure the continued health of the trees.

B. DEVELOPMENT AND SITE CHARACTER
- No development should occur except interpretive displays.

C. ACCESS
- Public access should be restricted to well defined paths.

D. UTILITIES
- No utilities should be allowed in this area except irrigation.

AREA 2C is a young orchard and is part of the 1800s house property which is not currently part of the Dorris Ranch property. This area is contiguous to the entrance node.

A. GENERAL USES
- This area is ideally located to accommodate permanent parking for Dorris Ranch, while preserving a portion of the orchard's use.

B. DEVELOPMENT AND SITE CHARACTER
- The parking area must be very sensitively designed to create a low visual impact, permanent facility.
- A buffer strip of the orchard should be retained to maintain the foreground view of the 1800s house.
- Islands of filbert trees wide enough to prevent maintenance problems should divide up the lot.

C. ACCESS
- Access from the entrance node should be directional and take advantage of the potential sequence of entry views and vistas.

D. UTILITIES
- Provide underground power for lighting.

POLICY AREA 3
RIPARIAN

This area is characterized as being suitable to accommodate a limited number of visitors in low concentrations. The area possesses both fragile and unique resources that must be preserved to insure that the natural processes predominate. Representative uses include nature interpretation, wildlife observation and photography.

AREA 3A is the least accessible of all

portions of the Ranch and occurs along the north bank of the Middle Fork. This is a fragile and important wildlife habitat.

A. GENERAL USES
- Provide controlled areas for nature interpretation and wildlife observation.

B. DEVELOPMENT AND SITE CHARACTER
- Development should be restricted in this area.
- Enhance views and vistas of the river where appropriate.
- Protect and preserve existing vegetation and water resources that have unique scenic and wildlife habitat value.

C. ACCESS
- Control public use by limiting access to boardwalks.
- Indiscriminate wandering should be prevented.

D. UTILITIES
- No utilities should be allowed in this area.

AREA 3B includes a pond on the old stream channel and is accessible from the cultural area and Harbor Drive.

A. GENERAL USES
- Provide opportunities for wildlife observation and water access.

B. DEVELOPMENT AND SITE CHARACTER
- Restore the pond by increasing the water depth and stream channel flow.
- Limit development to observation platforms and overlooks.
- Protect and enhance the existing character of this area created by vegetation, water and wildlife.

POLICY AREA 4
WOODLANDS

This area is characterized as being suitable to accommodate recreational uses of medium intensity. It has fragile, moderately sensitive natural resources that are resilient enough to tolerate dispersed (non-concentrated) visitor use with minimal disruption to the natural processes. Representative uses include: primitive picnic areas, nature study and interpretation, a trail network, boardwalks and overlooks.

AREA 4A extends from the second house south through filbert orchards to the banks of the Middle Fork.

A. GENERAL USES
- Provide nature study areas that will aid in increasing the appreciation of wildlife, habitats, and natural processes.
- Provide an interpretation theme that would familiarize the casual visitor with the area.

B. DEVELOPMENT AND SITE CHARACTER
- Locate nature study support facilities, interpretation displays, and primitive picnic areas on or adjacent to the existing trails.
- All support facilities should be compatible with the character of the natural environment.
- Allow water access for a boat launch at the southwest corner of the site. Restrict direct access to the remainder of the site. Access to the launch area should occur off of Harbor Drive.

C. ACCESS
- Provide pedestrian access along the existing trail systems.
- Restrict all vehicular traffic from entering this area.
- Provide access to the river where feasible.
- Provide connection in the southeast corner to the proposed Millrace Corridor.

D. UTILITIES
- Restrict all utilities from this area.

INCENSE CEDARS

AREA 4B is located in the center of the site and is surrounded by grasslands, filbert orchards and cultural areas.

A. GENERAL USES
- Promote hiking and wildlife observation.

B. DEVELOPMENT AND SITE CHARACTER
- Restrict development from this area with the exception of trails.
- This area is a visual backdrop to the grasslands and cultural area and its character should be preserved.

C. ACCESS
- Provide pedestrian access along the well defined trails that exist in this area.
- Allow no vehicular access except park maintenance vehicles.

D. UTILITIES
- Utilities should be restricted from this area.

AREA 4C is an area of oak woodlands in the upper northwest corner of the site and is the highest elevation on the site.

A. GENERAL USES
- Provide facilities that take advantage of an overview of the Ranch and surrounding valley.

B. DEVELOPMENT AND SITE CHARACTER
- Restrict development in this area except for a trail and viewpoint.
- The existing vegetation screens undesirable views and noise from the rock quarry and should be preserved.

C. ACCESS
- Provide pedestrian access to this area of the site.
- Limit vehicular use of the unimproved road to the two residents who live east of the site.

D. UTILITIES
- Restrict utilities from this area except for the existing P.P.G. transmission lines.

AREA 4D is a woodland area located along the northern property line.

A. GENERAL USES
- Provides a natural buffer from the adjoining road and residences.

B. DEVELOPMENT AND SITE CHARACTER
- Restrict development from occuring in this area.
- Increase screen plantings along the power line corridor.

C. ACCESS
- All access should be restricted.

D. UTILITIES
- Power line corridor exists in this area.

POLICY AREA 5
GRASSLAND

This area is characterized as being suitable to accommodate a limited number of visitors in low concentration. This important wildlife habitat has shallow fragile soil conditions and should be preserved with minimal disturbance. Representative uses include nature interpretation, hiking trails and wildlife observation. This area is located on the northeast portion of the site.

A. GENERAL USES
- Provide areas for nature observation, bird watching, interpretation displays and nature trails.

B. DEVELOPMENT AND SITE CHARACTER
- This area should be considered as visual open space and no structures should intrude into it.
- Restrict bicycles to a pathway which should be located along the southern edge at the grass-

GRASSLANDS WITH OAK WOODLANDS IN THE BACKGROUND

lands.

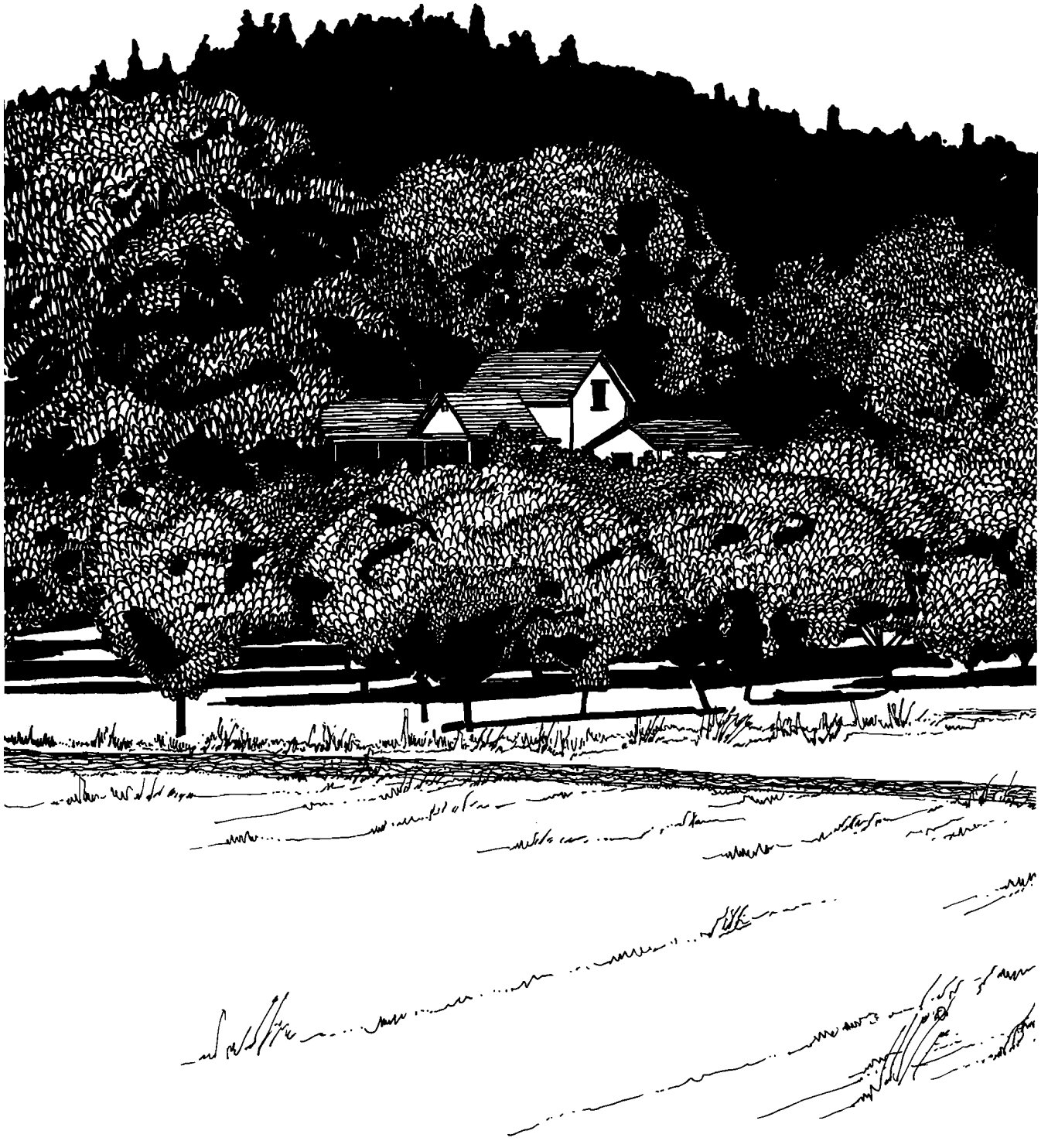
- Enhance the site's visual quality by planting a screen along the eastern property boundary.
- Enhance the wildlife habitat by developing a water impoundment for wildlife.
- Preserve the scenic open quality and wildlife habitats.

C. ACCESS

- Control public use by limiting access to designated paths.
- Remove the unimproved access road that bisects the site and replant with native grasses.
- Due to dry summer grass conditions, fire lanes should be designed and their layout coordinated with pedestrian paths.
- Vehicular access will be restricted except if provisions are made for an interim parking facility.

D. UTILITIES

- Screen the existing P.P.L. power-line corridors on the east and northern property boundary.
- Power will be required along the bicycle corridor for lighting.



VIEW OF THE "ORIGINAL 1880's HOUSE."

PREDOMINANT THEME:
A LIVING HISTORICAL FARM

Dorris Ranch is a farm setting typical of the upper Willamette Valley in the late 1800s to early 1900s. Portions of the natural and historically significant cultural resources prevail throughout the site. The Ranch maintains a rich agricultural heritage that has the potential to be enjoyed and experienced by children and adults.

Willamalane Park and Recreation District possesses a unique opportunity to develop Dorris Ranch as a Living Historical Farm, an exciting and vivid picture of the region's early farming era. The Ranch has all the desirable factors needed to develop and operate a successful Living Historical Farm facility. Its location is in close proximity to downtown Springfield and is easily accessible from Second Street. Opportunities exist for alternative means of access including horsedrawn vehicles from Island Park and a pedestrian/bicycle connection via the proposed Millrace Corridor. The site is adequate in size for the development and future expansion of an indoor-outdoor museum. In addition, the Living History Farm would be compatible with the existing wildlife habitats and work well with nature interpretation activities and other appropriate supplemental uses.

Dorris Ranch could be developed as a place of discovery, an educational facility that collects, preserves and exhibits materials pertaining to the early farming era. Visitors would be encouraged to become involved in the activities, sights and sounds which would take place in the extensive filbert orchards, woodlands, grasslands, historical sites and structures, farm buildings and gardens. As part of the historical theme visitors could be transported by a horsedrawn wagon to the site and various interest areas within it. Horse powered demonstrations of tilling and plowing could be seen on a demonstration basis. Various types of crops could be grown and harvested using late 1800s to early 1900s methods.

To attract visitors to the Ranch on a regular basis would require development of programs that include exhibits, demonstrations, special events, functions and project areas that the public can participate in on a regular basis. Exhibits could be rotated seasonally or yearly to insure a new and different farm experience. Living interpretive demonstrations could be scheduled to occur on the weekends or special event days. Specific farming demonstrations may include daily activities of milking the cow to horse teams plowing the demonstration fields and hauling wagon loads of crops. Seasonal activities may include the preparation, planting, cultivating, and harvesting of crops, cooking and food preservation methods. Craft-oriented demonstrations might include weaving, quilt making and many other domestic handcrafts.

Exhibits would play a major role in displaying the farm character and historical significance of the Ranch. A main interest exhibit could include an interpretive display area of the filbert orchards and methods of maintenance, harvesting and processing. An annual filbert harvest festival could occur in the early fall. Another exhibit area might include a contact farm made especially for children with horses, cows, goats, sheep, pigs, geese, ducks, chickens and rabbits. Also a collection of antique large farm machinery, smaller hand implements and artifacts could be displayed as part of the historical theme character. Donations of implements and artifacts from state, county and local residents could be exhibited on both a permanent and changing basis.

The Ranch would require a number of personnel with abilities to make the park function effectively. A live-in Ranch caretaker could carry on the daily chores including gardening, tending the animals and performing various household tasks.

Additional personnel would be needed to meet the public as educators, and would require the scheduling of demonstrations, exhibit designs and special events. A naturalist could be employed to lead walks through the various physiographic areas of the site, interpreting wildlife habitats and natural history.

In summary, Dorris Ranch could provide an unique opportunity to experience an authenic early farm setting. Living examples, exhibits, demonstrations, special events and support facilities would all be a part of the total experience available to a visitor at the Ranch.

APPENDIXES

APPENDIX 1
FLORA OF DORRIS RANCH

DOUGLAS FIR / MAPLE WOODLANDS

Area # 1	Shady Eastwoods
Trees:	Pseudotsuga menziesii
	Acer macrophyllum
Tall Shrub:	Acer circinatum
	Osmaronia cerasiformis
	Corylus cornuta californica
	Physocarpus capitatus
	Sambucus racemosa
+ occasional	Prunus avium
	Rhamnus purshiana
	Fraxinus oregona
	Cornus nuttalli
Low Shrub:	Symphoricarpos albus
	Rubus ursinus
	Rubus parviflorus
	Mahonia aquifolium
Herbs:	Polystichum munitum
	Smilacina stellata
	Smilacina racemosa
	Dicentra formosa
	Montia siberica
	Thalictrum occidentale
	Viola spp.
	Disporum hookeri
	Osmorhiza chilensis
	Vancouveria hexandra
	Urtica dioica
Area # 2	Partly Shady Eastwoods
Trees:	Pseudotsuga menziesii
	Acer macrophyllum
Tall Shrub:	Osmaronia cerasiformis
	Philadelphus lewisii
	Corylus cornuta californica
	Prunus avium
	Sambucus racemosa
Low Shrub:	Symphoricarpos albus
	Rubus ursinus
	Rubus discolor
	Rubus parviflorus
Herbs:	Polystichum munitum
	Pterdium aquilinum
	Montia siberica
	Osmorhiza chilensis
	Montia siberica
	Smilacina stellata
	Galium spp.
	Hypericum perforatum
	Senecio jacobaea
Area # 3	Maple Swale in East End of Area #4
Trees:	Pseudotsuga menziesii
	Acer macrophyllum
Tall Shrub:	Acer circinatum
	Sambucus racemosa
	Alnus rubra
	Osmaronia cerasiformis
Low Shrub:	Symphoricarpos albus
Herbs:	Dicentra formosa
	Delphinium menziesii
	Thalictrum occidentale
Area # 4	Shady woods. (Varying ratios of different understory species in different areas, but no major internal sub-areas).
Trees:	Pseudotsuga menziesii
	Acer macrophyllum
	Abies grandis
	Libocedrus decurrens
	Fraxinus oregona
	Pinus ponderosa
+ 1	Tsuga heterophylla
2	Thuja plicata
Tall Shrub:	Osmaronia cerasiformis
	Corylus cornuta californica
	Acer circinatum
	Philadelphus lewisii
	Physocarpus capitatus
	Sambucus racemosa
	Sambucus cerulea
	Cornus nuttalli
Low Shrub:	Symphoricarpos albus
	Rubus ursinus
	Mahonia aquifolium
Herbs:	Polystichum munitum
	Dicentra formosa
	Smilacina stellata
	Montia siberica
	Thalictrum occidentale
	Viola spp.
	Galium spp.
	Pteridium aquifolium
+ 2 clumps	Asarum caudatum
1 clump	Trientalis latifolia
Area # 5	Open Understory Northwest Quadrant
Trees:	Pseudotsuga menziesii
	Acer macrophyllum
	Libocedrus decurrens
+ occasional	Fraxinus oregona
	Pinus ponderosa
	Abies grandis
	Quercus garryana
	Rhamuus purshiana
Tall Shrub:	Osmaronia cerasiformis
	Corylus cornuta californica
	Holodiscus discolor
	Philadelphus lewisii
Low Shrub:	Rubus ursinus
	Symphoricarpos albus
	Rhus diversiloba
Herbs:	Montia siberica
	Osmorhiza chilensis
	Pteridium aquilinum
	Polystichum munitum
Area # 6	Open Understory West Quadrant, Some Sunny Patches
Trees:	Pseudotsuga menziesii
	Acer macrophyllum
	Libocedrus decurrens
	Abies grandis
Tall Shrub:	Corylus cornuta californica
	Osmaronia cerasiformis
	Philadelphus lewisii
	Physocarpus capitatus
Low Shrub:	Rubus ursinus
	Rubus discolor
	Symphoricarpos albus
Herbs:	Pteridium aquilinum
	Grasses
	Smilacina stellata
	Polystichum munitum
	Osmorhiza chilensis
	Marah oreganus
	Galium spp.
	Senecio jacobaea
	Urtica dioica
	Cirsium spp.

Area # 7 — Maple-Dominant Woodland, West End

Trees:	Acer macrophyllum
	Pseudotsuga menziesii
	Fraxinus oregona
	Abies grandis
+ 1	Quercus garryana
Tall Shrub:	Acer macrophyllum
	Fraxinus oregona
	Osmaronia cerasiformis
	Philadelphus lewisii
	Acer circinatum
	Corylus cornuta californica
	Holodiscus discolor
	Sambucus spp.
Low Shrub:	Symphoricarpos albus
	Rubus ursinus
	Rubus discolor
Herbs:	Pteridium aquilinum
	Urtica dioica
	Marah oreganus
	Montia siberica
	Dicentra formosa
	Smilacina spp.
	Polystichum munitum
	Thalictrum occidentale
	Heracleum lanatum

Area # 8 — Dense Understory

Trees:	Acer macrophyllum
	Pseudotsuga menziesii
Low Shrub:	Symphoricarpos albus - dense
Herb:	Equisetum spp. - dense

Area # 9

Trees:	Pseudotsuga menziesii
	Acer macrophyllum
Tall Shrub:	Acer circinatum
	Corylus cornuta californica
	Sambucus spp.
	Osmaronia cerasiformis
	Philadelphus lewisii
	Prunus avium
Low Shrub:	Symphoricarpos albus
	Rubus ursinus
	Rubus discolor
	Ribes lacustre
Herbs:	Polystichum munitum
	Montia siberica
	Thalictrum occidentale
	Smilacina stellata
	Smilacina racemosa
	Galium spp.
	Cirsium spp.
	Grasses

Area # 10

Trees:	Pseudotsuga menziesii
	Acer macrophyllum
Tall Shrub:	Acer circinatum
	Osmaronia cerasiformis
	Fraxinus oregonus
	Philadelphus lewisii
	Sambucus spp.
Low Shrub:	Symphoricarpos albus
	Rubus ursinus
	Rubus discolor
Herbs:	Hydrophyllum tenuipes
	Polystichum munitum
	Marah oreganus
	Urtica dioica
	Smilacina spp.
	Galium spp.

MAPLE WOODLANDS

1. Maple/ash becomes shadier/lusher/wetter as move west.

Trees:	Acer macrophyllum
	Fraxinus oregona
	Prunus spp (feral plum)
	Prunus avium
Tall Shrubs:	Rhamnus purshiana
	Philadelphus lewisii
	Sambucus racemosa
	Acer circinatum
	Osmaronia cerasiformis
Low Shrubs:	Symphoricarpos albus
Herbs:	Urtica spp
	Marah oreganus
	Heracleum lanatum
	Dicentra formosa
	Trillium spp
	Rubus ursinus
	Smilacina racemosa
	Pteridium aquifolium
	Equisetum spp
	Hydrophyllum spp.

2. Vine tangle within maple area

Trees:	Acer macrophyllum
	Crataegus douglasi
Tall Shrubs:	Sambucus racemosa
	Corylus cornuta californica
Low Shrubs:	Rubus ursinus
	Rubus lacinatus
Herbs:	Clematis liqusticifolia
	Marah oreganus

3. Maple/ash

Trees:	Acer macrophyllum (mature)
	Fraxinus oregona
Tall Shrubs:	Cornus stolonifera (dense & lanky)
	Symphoricarpos albus
	Osmaronia cerasiformis
	Philadelphus lewisii
Low Shrub:	Mahonia aquifolium
Herbs:	Heracleum lanatum
	Hydrophyllum spp.
	Galium spp.
	Polystichum munitum (Occasional)
	Marah oreganus
	Carex spp.

4. Maple/ash-mature maples with dense understory

Trees:	Acer macrophyllum (mature)
	Fraxinus oregona (young)
	Pseudotsuga menziesii (1)
Tall Shrubs:	Cornus stolonifera
	Philadelphus lewisii
	Corylus cornuta californica
	Physocarpus malvaceus
Low Shrub:	Symphoricarpos alba
Herbs:	Urtica spp.
	Heracleum lanatum
	Cirium spp
	Galium spp
	Verbascum blattaria
	Rumex spp
	Marah oreganus
	Solanum dulcemara
	Melissa officinalus

5. Maple/ash-large maples, smaller ash

Trees:	Acer macrophyllum
	Fraxinus oregona
	Salix spp.
	Juglans nigra seedlings
Tall Shrubs:	Physocarpus malvaceus
	Cornus stolonifera
	Corylus cornuta californica
	Sambucus racemosa
	Acer circinatum
	Philadelphus lewisii
	Osmaronia cerasiformis
Herbs:	Urtica dioica
	Galium spp
	Heracleum lanatum
	Cirium spp.
	Carex spp.
	Grasses
	Stachys cooleyae
	Rubus lacinatus
	Melissa officinalis
	Verbascum blattaria
	Daucus carota

6. Young Maples lining the southern edge of the field

Trees:	Acer macrophyllum
	Fraxinus oregona
	Populus trichocarpa
Tall Shrub:	Sambucus racemosa
Low Shrub:	Symphoricarpos albus
Herbs:	Urtica diocia
	Marah oreganus
	Rubus ursinus
	Grasses

7. Maple/ash-mature maples

Trees:	Acer macrophyllum
	Fraxinus oregona
Tall Shrub:	Philadelphus lewisii
Low Shrub:	Symphoricarpos albus
Herbs:	Urtica dioica
	Heracleum lanatum
	Hydrophyllum spp.
	Corium maculatum
	Dicentra formosa
	Galium spp.

8. Maple/ash

Trees:	Acer macrophyllum
	Fraxinus oregona
	(Juglans nigra seedlings)
Tall Shrubs:	Corylus cornuta californica
	Philadelphus lewisii
Low Shrub:	Symphoricarpos albus
Herbs:	Urtica dioica
	Rubus ursinus
	Heracleum lanatum
	Galium spp.
	Marah oreganus

9. Maple/hazel

Trees:	Acer macrophyllum
	Prunus avium
	Salix spp.
	Fraxinus oregona
	Aenus rubra
	Juglans nigra seedlings
Tall Shrubs:	Cornus stolonifera
	Physocarpus malvaceus
Herbs:	Marah oreganus
	Solanum dulcemara
	Rubus ursinus
	Rubus lacenatus
	Polystichum munitum
	Urtica dioica
	Clematis

10. Maple - between house and main creek

Trees:	Acer macrophyllum
	Libocedrus decurrens (1)
	Corylus avellana
	Juglans nigra seedlings
Tall Shrubs:	Philadelphus lewisii
	Cornus stolonifera
Low Shrubs:	Symphoricarpos albus (lots)
	Rubus lacinatus
Herbs:	Urtica dioica
	Equisetum spp.
	Galium spp.
	Heracleum lanatum

11. Maple/horsetail

Trees:	Acer macrophyllum
	Juglans nigra seedlings
Tall Shrub:	Kolkwitzia amabilis
Herb:	Equisetum spp.

12. Entrance to house

Trees:	Acer macrophyllum
	Abies grandis
	Salix spp.

13. Maple/Oak/Ash

Trees:	Acer macrophyllum
	Quercus garryana
	Fraxinus oregona (+ seedlings)
	Prunus avium
	Prunus virginiana
	Pseudotsuga menziesii (1)
Tall Shrubs:	Holodiscus discolor
	Philadelphus lewisii
	Osmaronia cerasiformis
Low Shrubs:	Rubus ursinus
	Mahonia aquifolium
	Symphoricarpos albus
	Rubus lacinatus
Herbs:	Vicia spp.
	Galium spp.
	Montia spp.
	Osmorhiza chilensis
	Rhus diversiloba (a little)
	Smilacina stellata
	Saxifraga spp.

14. Maple/Ash

Trees:	Acer macrophyllum
	Fraxinus oregona
	Abies grandis (1 large)
Tall Shrubs:	Corylus cornuta californica
	Acer circinatum
	Mahonia aquifolium

Low Shrubs:	Rubus ursinus Rubus lacenatus Rubus discolor Urtica dioica Pteridium aquilinum Cirsium spp. Rumex spp. Grasses

15. Maple plus cultivated plants near the house

16. Lots of large Maple

Trees:	Acer macrophyllum Prunus virginiana
Tall Shrub:	Philadelphus lewisii
Low Shrub:	Symphoricarpos albus
Herbs:	Marah oreganus Equisetum spp (lots)

17. Maple/Incense Cedar

Trees:	Acer macrophyllum Libocedrus decurrens Pseudotsuga menziesii
Tall Shrubs:	Corylus cornuta californica Philadelphus lewisii
Low Shrub:	Symphoricarpos albus
Herbs:	Urtica dioica Montia spp.

18. Maple/Ash/Vine Maple

Trees:	Acer macrophyllum Fraxinus oregona
Tall Shrubs:	Acer circinatum Osmaronia cerasiformis
Herbs:	Hydrophyllum spp. Dicentra formosa Urtica dioica Polystichum munitum

19. Maple

Trees:	Acer macrophyllum Fraxinus oregona (occasional)
Tall Shrub:	Corylus cornuta californica
Low Shrubs:	Symphoricarpos albus Rubus ursinus Mahonia aquifolium
Herbs:	Urtica dioica Galium spp. Montia spp. Equisetum spp. (some)

20. Maple/Ash

Trees:	Acer macrophyllum Fraxinus oregona Crataegus douglasi
Tall Shrubs:	Osmaronia cerasiformis Sambucus racemosa Philadelphus lewisii
Low Shrubs:	Symphoricarpos albus Rubus ursinus Rubus discolor Rosa spp Ribes lacustre
Herbs:	Solanum dulcemara Urtica dioica Dicentra formosa Heracleum lanatum Smilacina racemosa Smilacina stellata Pteridium aquilinum

21. Ash/Maple

Trees:	Fraxinus oregona Acer macrophyllum Prunus emarginata
Tall Shrubs:	Acer circinatum Philadelphus lewisii Osmaronia cerasiformis Ribes lacustre Cornus stolonifera Sambucus racemosa Physocarpus malvaceum
Low Shrubs:	Symphoricarpos albus Rubus ursinus
Herbs:	Galium spp. Urtica dioica Marah oreganus Equisetum spp Montia spp Polystichum munitum Dicentra formosa Heracleum lanatum Thalictrum occidentale Smilacina stellata Conium maculatum Hydrophyllum spp Saxifraga spp

22. Maple/Vine Maple

Tree:	Acer macrophyllum
Tall Shrubs:	Osmaronia cerasiformis Cornus stolonifera Sambucus racemosa Rubus spectabilis
Herbs:	Galium spp. Solanum dulcemara Urtica dioica Equisetum spp Marah oreganus

23. Maple/Hazel edge; dense understory

Tree:	Acer macrophyllum
Tall Shrub:	Corylus cornuta californica
Low Shrubs:	Symphoricarpos albus Rubus discolor Rubus ursinus
Herbs:	Heracleum lanatum Urtica dioica Cirsium spp.

24. Maple/Currant with mixed edges

Trees:	Acer macrophyllum Fraxinus oregona Prunus avium Prunus virginiana Populus trichocarpa Pseudotsuga menziesii Rhamnus purshiana Juglans regia Juglans nigra Sambucus spp.
Tall Shrubs:	Acer circinatum Philadelphus lewisii Osmaronia cerasformis Corylus cornuta californica Physocarpus capitatus Amelanchier alnifolia

Low Shrubs:	Ribes lacustre
	Symphoricarpos albus
	Rubus ursinus
	Rubus parviflorum
	Mahonia aquifolium
Herbs:	Smilacina stellata
	Heracleum lanatum
	Montia siberica
	Polystichum munitum
	Hydrophyllum tenuipes
	Marah oreganus
	Dicentra formosa
	Equisetum spp
	Tellimia grandiflora
	Tiarella unifoliata
	Stachys cooleyae

25. Open brushy swale

Trees:	Acer macrophyllum
	Fraxinus oregona
	Prunus avium
	Prunus virginiana
	Populus trichocarpa
	Pseudotsuga menziesii
	Rhamnus purshiana
Tall Shrubs:	Corylus cornuta californica
	Osmaronia cerasiformis
	Physocarpus capitatus
	Amelanchier alnifolia
	Holodiscus discolor
Low Shrubs:	Symphoricarpos albus
	Rubus spp.
Herbs:	Urtica dioica
	Cirsium spp.
	Pteridium aquilinum
	Polystichum munitum
	Montia siberica
	Galium spp
	Dicentra formosa
	Thalictrum occidentale
	Equisetum spp
	Osmorhiza chilensis

26. Maple/Mixed understory

Trees:	Acer macrophyllum
	Fraxinus oregona
	Prunus avium
Tall Shrubs:	Corylus cornuta californica
	Osmaronia cerasiformis
	Physocarpos capitatus
Low Shrubs:	Ribes lacustre
	Symphoricarpos albus
	Rubus spp.
Herbs:	Montia siberica
	Galium spp
	Urtica dioica
	Osmorhiza chilensis
	Heracleum lanatum

27. Maple slough

Trees:	Acer macrophyllum
	Fraxinus oregona
	Populus trichocarpa
	Alnus rubra
	Salix spp
Tall Shrubs:	Corylus cornuta californica
	Philadelphus lewisii
	Amelanchier alnifolia
Low Shrubs:	Symphoricarpos albus
	Rubus parviflorum
Herbs:	Saxifraga spp.
	Polystichum munitum
	Thalictrum occidentale
	Maianthemum dilata

28. Maple Revetment area

Trees:	Acer macrophyllum
	Quercus garryana
	Abies grandis
	Fraxinus oregona
	Populus trichocarpa
Tall Shrubs:	Holodiscus discolor
	Philadelphus lewisii
	Corylus cornuta californica
Low Shrubs:	Symphoricarpos albus
	Rubus discolor
	Rubus parviflorum
	Rubus ursinus
Herbs:	Heracleum lanatum
	Galium spp
	Polystichum munitum
	Dicentra formosa
	Pteridium aquilinum
	Hypericum perforatum
	Juncus spp
	Chrysanthemum leucanthemum
	Grasses

29. Maple and Maple/Poplar

Trees:	Acer macrophyllum
	Populus trichocarpa
	Pseudotsuga menziesii(1)
Tall Shrubs:	Sambucus cerulea
	Physocarpos capitatus
	Philadelphus lewisii
	Acer circinatum
	Corylus cornuta californica
	Osmaronia cerasiformis
Low Shrubs:	Symphoricarpos albus
	Rubus ursinus
	Rubus discolor (pink)
	Ribes lacustre
Herbs:	Dicentra formosa
	Polystichum munitum
	Smilacina stellata
	Heracleum lanatum
	Urtica dioica
	Pteridium aquilinum

30. Rip-Rap Maple

Tree:	Acer macrophyllum
Shrubs:	Cytissus praecox
	Rubus parviflorium
	Rubus discolor
Herbs:	Pteridium aquilinum
	Hypericum perforatum
	Daucus carota
	Eschscholtzia californica
	Verbascum blattaria
	Artemesia spp

31. Orchard Edge Maple

Trees:	Acer macrophyllum
	Libocedrus decurrens
	Prunus avium
Tall Shrubs:	Corylus cornuta californica
	Sambucus racemosa
Low Shrubs:	Symphoricarpos albus
	Rubus parviflorium
	Rubus discolor
Herbs:	Urtica spp
	Galium spp
	Cirsium spp
	Equisetum spp

32. Sunny trailer park Maple edge

Tree:	Acer macrophyllum
Tall Shrub:	Corylus cornuta californica
Low Shrubs:	Rubus ursinus Rubus discolor
Herbs:	Vicia spp Rumex spp Grasses

33. Maple/Ash (plus Orchard edge)

Trees:	Acer macrophyllum (all ages) Fraxinus oregona Salex spp Prunus avium Juglans regia
Tall Shrubs:	Philadelphus lewisii Corylus cornuta californica
Low Shrubs:	Mahonia aquifolium Symphoricarpos albus Rubus parviflorium Rubus ursinus
Herbs:	Pteridium aquilinum Hypericum perforatum Cirsium spp Marah oreganus

34. Maple/Broom and Bracken Fern clearing

Tree:	Acer macrophyllum
Tall Shrubs:	Holodiscus discolor Corylus cornuta californica Philadelphus lewisii Cytissus praecox
Low Shrubs:	Symphoricarpos alba Rubus parviflorium
Herbs:	Urtica dioica Cirsium spp

35. Maple/Ash

Trees:	Acer macrophyllum Fraxinus oregona
Tall Shrub:	Corylus cornuta californica
Low Shrubs:	Symphoricarpos albus Rubus discolor
Herb:	Cirsium spp

36. "Island" Maple/Elderberry

Trees:	Acer macrophyllum Sambucus cerulea
Tall Shrub:	Rubus discolor
Herbs:	Cirsium spp Galium spp Marah oreganus Orchard grass

37. Maple

Trees:	Acer macrophyllum Fraxinus oregona Populus trichocarpa Prunus avium Juglans regia
Tall Shrub:	Philadelphus lewisii
Low Shrub:	Symphoricarpos albus Rubus discolor
Herbs:	Cirsium spp Urtica dioica

INCENSE CEDAR

1. Young Incense Cedar

Trees:	Libocedrus decurrens (spindly) Acer macrophyllum (seedlings as ground cover)
Low Shrub:	Symphoricarpos albus
Herbs:	Osmorhiza chilensis Hydrophyllum spp Heracleum lanatum

2. Mature Incense Cedar

Trees:	Libocedrus decurrens Acer macrophyllum Fraxinus oregona (1)
Tall Shrubs:	Osmaronia cerasiformis Philadelphus lewisii
Low Shrubs:	Symphoricarpos albus Rubus discolor
Herbs:	Conium maculatum Heracleum lanatum Rumex spp Galium spp Taraxacum officinale Geranium spp Cirsium spp Urtica dioica Marah oreganus Grasses

GRASSY HILLSIDE

Trees:	Libocedrus decurrens Fraxinus oregona Quercus garryana Pyrus spp (Feral Fruit Trees) Malus spp (Feral Fruit Trees) Prunus avium(Feral Fruit Trees) Crataegus douglasi Amelanchier alnifolia
Shrubs:	Rosa pisocarpa Rosa nutkana Rosa eglanteria Rubus discolor Rhus diversiloba Symphoricarpos albus
Herbs:	Vicia cracca Achillea millefolium Daucus carota Depsacus sylvestris Trifolium spp Verbascum blattaria Hypericum perforatum Microsteris gracilis Parentucellia vicosa Potentilla gracilis Tauschia stricklandii Tragopoga parrifolius Taraxacum officinale Cirsium (2 spp) Chrysantheumum leucanthemum Epilobium spp Convolvulus arvensis Linum angustifolium Leguminosae family pea
Bulbs:	Camassia quamash Triteleia hyacinthina Brodiaca coronaria
By road add:	Centaurea jacea Collomea linearis Juncus spp Carex spp Anthemis cotula Tauchia strichlandii

* plus many species of Grasses

OAK WOODLANDS

1. Open Oak Woodland/Grassy/Shrubs in clumps

Trees:	Quercus garryana
	Quercus kelloggii
Tall Shrubs:	Osmaronia cerasiformis
	Amelanchier alnifolia
	Fraxinus oregona
	Acer macrophyllum (seedlings)
	Prunus avium (seedling)
	Malus pumila (seedling)
	Crataegis monogyna
Low Shrubs:	Rosa spp
	Symphoricarpos alba
	Rhus diversiloba
	Mahonia aquifolium
Herbs:	Galium spp
	Grasses
	Vicia
	Hypericum perforatum
	Lonicera hispidula
	Montia spp
	Brodeia spp
	Camassia spp

2. Mature Oak, Young Ash/denser understory

Trees:	Quercus garryana
	Quercus kelloggii
	Pseudotsuga menziesii
	Acer macrophyllum
Tall Shrubs:	Fraxinus oregona
	Prunus avium
	Osmaronia cerasiformis
	Corylus cornuta californica
	Crataegus douglasii
	Philadelphus lewisii
	Holodiscus discolor
	Libocedrus decurrens
	Prunus virginiana
Low Shrubs:	Symphoricarpos alba
	Rosa spp
	Rubus ursinus
	Rhus diversiloba
	Mahonia aquifolium
Herbs:	Osmorhiza chilensis
	Galium spp
	Grasses
	Vicia spp
	Smilacina spp
	Polystichum munitum
	Montia spp
	Marah oregana

3. Oak-Maple-Douglas Fir/Mixed understory

Trees:	Quercus garryana
	Acer macrophyllum
	Pseudotsuga menziesii
	Libocedrus decurrens
	Fraxinus oregona
	Abies grandis
	Prunus avium
Tall Shrubs:	Corylus cornuta californica
	Prunus avium
	Osmaronia cerasiformis
	Philadelphus lewisii
	Holodiscus discolor
Low Shrubs:	Symphoricarpos alba
	Rubus ursinus
	Mahonia aquifolium
Herbs:	Osmorhiza chilensis
	Galium spp
	Smilacina spp
	Polystichum munitum
	Disporum hookeri
	Adenocaulon bicolor

4. Maple-Ash-Oak/Moist understory

Trees:	Acer macrophyllum
	Fraxinus oregona
	Quercus garryana
	Abies grandis
	Pseudotsuga menziesii
	Prunus avium
	Libocedrus decurrens
Tall Shrubs:	Corylus cornuta californica
	Prunus avium
	Osmaronia cerasiformis
	Philadelphus lewisii
	Prunus virginiana
	Physocarpus capitatus
	Acer circinatum
	Sambucus spp
	Rhamnus purshiana
	Salix spp
Low Shrubs:	Symphoricarpos alba
	Rubus ursinus
	Rubus discolor
	Rubus laciniata
	Rubus parviflorus
	Rhus diversiloba
Herbs:	Smilacina stellata
	Galium spp
	Smilacina racemosa
	Disporum hookeri
	Heracleum lanatum
	Osmorhiza chilensis
	Polystichum munitum
	Marah oreganus
	Melissa officinalis
	Thalictrum occidentale
	Hydrophyllum tenuipes
	Carex spp
	Lilium columbianum
	Cirsium spp
	Senecio spp
	Grasses

5. Oak-Douglas Fir/Cherry-Hazel

Trees:	Quercus garryana
	Pseudotsuga menziesii
	Acer macrophyllum
	Libocedrus decurrens
	Abies grandis
Tall Shrubs:	Prunus avium
	Corylus cornuta californica
	Holodiscus discolor
	Philadelphus lewisii
Low Shrubs:	Symphoricarpos alba
	Rubus ursinus
	Rhus diversiloba
Herbs:	Osmorhiza chilensis
	Galium spp
	Grasses
	Vicia spp
	Adenocaulon bicolor
	Smilacina racemosa
	Polystichum munitum

6. Douglas Fir-Maple-Oak/Mixed Understory

Trees:	Pseudotsuga menziesii
	Acer macrophyllum
	Quercus garryana
	Libocedrus decurrens
	Prunus avium
	Abies grandis
Tall Shrubs:	Prunus avium
	Corylus cornuta californica
	Osmaronia cerasiformis
	Holodiscus discolor
	Philadelphus lewisii

Low Shrubs: Symphoricarpos alba
Rubus ursinus
Rhus diversiloba

Herbs: Osmorhiza chilensis
Galium spp
Grasses
Vicia spp
Adenocaulon bicolor
Smilacina racemosa
Polystichum munitum

7. Oak openings, poison oak + grasses

Trees: Quercus garryana
Pseudotsuga menziesii
Fraxinus oregona
Pinus avium

Tall Shrubs: Prunus avium
Amelanchier alnifolia
Crataegus douglasii

Low Shrubs: Rhus diversiloba
Rosa spp
Symphoricarpos alba
Rubus spp.

Herbs: Grasses
Vicia spp
Galium spp
Dipsacus sylvestris
Potentilla spp
Camassia spp
Heracleum lanatum
Cirsium spp
Achillea millefolium

8. Open Oak Woodland/Grassy/Clumps of Shrubs

Tree: Quercus garryana

Tall Shrubs: Amelanchier alnifolia
Osmaronia cerasiformis
Crataegus douglasi
Prunus avium
Crataegus monogyna
Fraxinus oregona
Prunus virginiana

Low Shrubs: Rosa spp
Rubus discolor
Rubus laciniatus
Symphoricarpos alba
Rhus diversiloba
Mahonia aquifolium

Herbs: Grasses
Dipsacus sylvestris
Vicia spp
Lathyrus nevadensis
Rumex spp
Anthemis cotula
Camassia spp
Vinca major
Galium spp
Hypericum perforatum
Sidalcea spp
Trago pogan porrifolius
Daucus carota
Achillea millefolium
Prunella vulgaris
Cirsium spp
Tanacetum vulgare

9. Tall Oaks/Rose & grass understory

Tree: Quercus garryana

Tall Shrubs: Osmaronia cerasiformis
Amelanchier alnifolia
Prunus avium (seedling)
Pyrus communis (seedling)
Fraxinus oregona (seedling)
Acer macrophyllum (seedling)

Low Shrubs: Rosa spp
Symphoricarpos alba
Mahonia aquifolium

Herbs: Grasses
Galium spp
Camassia spp
Osmorhiza chilensis
Rumex spp
(small yellow flower Legiminosae

10.

Tree: Quercus garryana

Tall Shrubs: Crataegus douglasii
Osmaronia cerasiformis
Fraxinus oregona (seedling)

Low Shrubs: Rosa spp
Symphoricarpos alba

Herbs: Grasses
Caucalis microcarpa
Cirsium spp
Daucus carota
Tragopogan porrifolius
Achillea millefolium
Vicia
(small yellow flowered Leguminosae)

11. Oak overstory/more poison oak understory

Trees: Quercus garryana
Prunus avium
Crataegis monogyna
Arbutus menziesii
Acer macrophyllum

Shrubs: Rhus diversiloba
Osmaronia cerasiformis
Rubus discolor
Rosa spp

Herbs: Grasses
Vicia
Cirsium
Dipsacus sylvestris
Convulvus sepium
Potentilla spp
Helianthus spp
Mycosteris spp

12. Oak overstory with thicker understory/poison oak

Trees: Quercus garryana
Prunus avium

Tall Shrubs: Crataegis douglasii
Osmaronia cerasiformis

Shrubs: Rubus discolor
Rosa spp

Herbs: Dipsacus sylvestris
Cirsium spp
Grasses

13.

Trees: Quercus garryana
Prunus avium
Acer macrophyllum
Pinus ponderosa
Arbitus menziesii

Tall Shrubs: Crataegis douglasii
Osmaronia cerasiformis

RIPARIAN

1. Low water edge, summer. Open, low growth. Moist ground. No overstory.

Salix spp. (low growing)
Populus trichocarpa (seedlings)
Equisetum spp.
Juncus spp.
Grasses

2. Willow thickets

Tall Shrubs: Salix spp.
Fraxinus oregona (seedling)
Populus trichocarpa (young)
Corylus cornuta

Herbs: Grasses
Chrysanthemum leucanthemum
Lotus corniculatus
Rubus ursinus
Verbascum blattaria

3. Open Brushland - Dry grassy area: higher ground
Parts devoid of canopy

Trees: Populus trichocarpa
Fraxinus oregona
Pseudotsuga menziesii
Acer macrophyllum
Libocedrus decurrens
Salix spp
Arbutus menziesii
Pinus ponderosa
Alnus spp

Shrubs: Cytisus scoparius
Rubus discolor
Rubus ursinus
Rubus laciniata
Symphoricarpos alba

Herbs: Grasses
Chrysanthemum leucanthemum
Taraxacum officinale
Hypochoeris radicata
Artemisia spp
Senecia jacobaeca
Plantago spp
Verbasium spp
Hypericum perforatum
Vicia spp
Lotus corniculata
Lotus purshiana
Melilotus alba
Trifolium spp
Escholtzia californica
Pteridium aquilinum

4. Poplar/Maple Woodlands - This is a mixed area characterized by narrow linear bands running parallel to the river. Some areas are dominated by a poplar overstory - which grades into a maple overstory. Below are typical areas within this zone. The area changes often respond to topography.

A. Poplar Woodlands

Trees: Populus trichocarpa
Fraxinus oregona

Tall Shrubs: Fraxinus oregona
Salix spp
Pseudotsuga menziesii
Acer macrophyllum
Cornus stolonifera
Physocarpus capitatus

Low Shrubs: Lytisus scoparius
Symphoricarpos alba
Rubus discolor
Rhus diversiloba
Rosa spp

Herbs: Chrysanthemum leucanthemum
Lotus corniculatus
Grasses
Equisetum spp
Osmorhiza chilensis

B. Slough thickets & woodland

Trees: Populus trichocarpa
Alnus spp
Fraxinus oregona
Salix spp

Tall Shrubs: Cornus stolonifera
Physocarpus capitatus
Crataegus douglasi

Low Shrubs: Rubus discolor
Rubus ursinus
Rubus laciniata
Rubus spectabilis
Spiraea douglasi

Herbs: Urtica dioica
Pteridium aquilinum
Solarium dulcamara
Grasses

C. Poplar Woodland

Trees: Populus trichocarpa
Fraxinus oregona (seedling)
Acer macrophyllum (seedling)

Tall Shrubs: Cornus stolonifera
Physocarpus capitatus
Corylus cornuta

Low Shrubs: Rubus ursinus
Echinocystis lobata

Herbs: Grasses
Mentha arvensis
Polystichum munitum
Galium spp
Prunella vulgaris
Daucus pusillus
Erigeron spp
(small yellow flowered composite)
Cicuta douglasi
Melissa officinalis
Stachys cooleyae

D. Maple woods

Trees: Acer macrophyllum
Fraxinus oregona (seedlings)
Corylus cornuta

Shrubs: Symphoricarpus alba
Physocarpos capitatis
Ribes spp

Low Shrubs: Rubus ursinus
Rubus discolor
Polystichum munitum
Cytisus scoparius

Herbs: Thalictrum spp
Erigeron spp
Grasses
Artemisia spp
Osmorhiza chilensis
Vicia

E. Open/dry: Openings of brown grass flanked by Himalayan Blackberry and Poplar, largely.No overstory.

Trees: Acer macrophyllum
Populus trichocarpa
Fraxinus oregona

Shrubs: Cytisis scoparius
Corylus cornuta
Symphoricarpos alba
Rubus discolor

Herbs: Grasses
Leucanthemum chrysanthemum
Hypericum perforatum

Ash/Maple

Trees: Fraxinus oregona
Acer macrophyllum

Shrubs: Corylus cornuta
Symphoricarpos alba
Physocarpus capitata
Osmaronia cerasiformis
Heracleum lanatum

Herbs: Thalictrum spp
Polystichum munitum
Rubus ursinus
Stachys cooleyae

G. Poplar/Blackberry-Impenetrable areas

Tree: Populus trichocarpa

Shrub: Rubus discolor

5. Slough - (driest part) - gravelly/sparse

Trees: Libocedrus decurrens
Acer macrophyllum
Pinus ponderosa

Shrub: Rubus discolor

Herb: Hypericum perforatum

6. Wide part of slough (dry)

Tree: Alnus spp

Tall Shrub: Acer macrophyllum

Shrub: Rubus discolor

Herbs: Osmorhiza chilensis
Grasses

7. Slough - sandy soil, dense

Trees: Acer macrophyllum
Salix spp

Shrubs: Rubus discolor
Cytisus scoparius

Herbs: Equisetum spp
Digitalis purpurea
Marah oregana

8. Slough- still water

Trees: Populus trichocarpa
Libocedrus decurrens
Acer macrophyllum
Salix spp

Shrubs: Cytisus scoparius
Rubus parvifolius
Rubus ursinus

Herbs: Grasses
Lotus corniculatus

9. Trees: Populus trichocarpa
Pseudotsuga menziesii
Fraxinus oregona

Shrubs: Symphoricarpos alba
Corylus cornuta californica
Cytisis scoparius
Rubus discolor

Herb: Grasses

10. Gravel Bar - Low growth, no overstory

Shrubs: Salix spp
Populus trichocarpa (seedlings)
Cytisus scoparius
Rubus discolor

Herbs: Equisetum spp
Hypericum perforatum
Plantago spp
Grasses
Melissa officinalis
Chrysanthemum leucanthemum
Lotus purshiana
Tanacetum vulgare
Trifolium pratense
Trifolium repens
Dispsacus sylvestris
Anthemis cotula
Prunella vulgaris
Rumex spp
Cirsium spp
Artemisia spp
Mentha arvensis
Verbascum thapsus
Hydrophyllum spp

11. Juncus spp
Typha latifolia
Scirpus spp
Equisetum
Grasses

12. Gravel Bar. No overstory

Shrubs: Salix spp
Populus trichocarpa (seedling)
Fraxinus oregona (seedling)

Herbs: Collomia grandiflora
Gilia capitata
Verbascum thapsis
Daucus carota

13. Slough at Gravel Bar - Alder and herbs predominate

Trees: Alnus rubra
Populus trichocarpa
Salix spp

Shrub: Rubus discolor

Herbs: Juncus spp
Grasses
Lotus corniculatis
Rumex spp
Mimulus spp

14. Alder slough

Trees: Alnus rubra
Salix spp

Shrubs: Cornus stolonifera
Corylus cornuta
Physocarpus capitata
Rubus ursinus
Sambucus spp

Herbs: Juncus spp
Daucus pusillus
Chrysanthemum leucanthemum
Tanacetum vulgare
Grasses
Lotus purshiana
Melissa officinales
Digitalis purpurea
Mentha arvensis
Equisetum spp
Cirsium spp
Conium maculatum + (Cicuta douglasi)
Rumex spp
Erigeron philadelphicus
Galium spp
Polystichum munitum
Stachys cooleyae
Prunella vulgare
Daucus pusillus
Marah oregana
(Small yellow flowered composite)

15. Tree: Populus trichocarpa (tall)

16. Tree: Salix spp
Acer macrophyllum
Fraxinus oregona

Shrub: Cornus stolonifera

Herb: Thalictrum spp

17. Low growth area dominated by Salix spp thickets, Willows surround the pond.

Trees: Salix spp
Fraxinus oregona (seedlings)
Acer macrophyllum (seedlings)

Herbs & Shrubs: Rubus discolor
Hypochaeris spp
Cytisus scoparius

18. Conium macylatum
Urtica dioica
Rumex spp.

19. Cornus stolonifera

20. Salix spp
Cornus stolonifera

Pond: Road to trailer park essentially dams up the drainage which results in a pond in the NW.
Pond is filled with:
Polygonum
Nuphor polysepalum

APPENDIX 2
FAUNA OF DORRIS RANCH

The list of Fish and Wildlife species is based primarily on existing studies conducted by the Oregon Fish and Wildlife Department and Lane Council of Governments of the Willamette River Greenway along the Middle Fork and general metro area. A more precise bird census is being conducted currently and will be included in the appendix upon completion.

KEY

Use Season

Sp = Spring (March, April, May)
S = Summer (June, July, August)
F = Fall (September, October, November)
W = Winter (December, January, February)

Population Level

C = Common — Very numerous, species which are certain to be observed by an experienced wildlife expert.

U = Uncommon — Species present but not certain to be observed

O = Occasional — Observed only a few times during a season or may be irregular in its occurence

Type Use

W = Wintering
F = Feeding
R = Rearing
C = Cover
Rt= Resting

Source: Yon, R. Donald, Lane Council of Governments, "Vegetation and Wildlife Species by Habitat Type".

MIXED CONIFER / DECIDUOUS WOODLANDS

MAMMALS

Name	Population Level	Use Season	Type Use
Black-tailed Deer (Odocoileus hemionus columbianus)	C	Sp,S,F,W	W,F,R,C
Bushy-tailed Woodrat (Neotoma cinerea)	O	Sp,S,F,W	F,R,C
Bushy-footed Woodrat (Neotoma fuscipes)	O	Sp,S,F,W	F,R,C
Bobcat (Lynx rufus)	U	Sp,S,F,W	F,C
Coyote (Canis latrans)	U	Sp,S,F,W	F,R,C
Red Fox (Vulpes fulva)	O	Sp,S,F,W	F,R,C
Gray Fox (Urocyon cinereo argenteus)	O	Sp,S,F,W	F,R,C
Beaver (Castor canadensis)	O	Sp,S,F,W	F
Common Opossum (Didelphis marsupialis)	O	Sp,S,F,W	F,R,C
Racoon (Procyon lotor)	U	Sp,S,F,W,	F,R,C
Mink (Mustela vison)	U	Sp,S,F,W,	F,R,C
Short-tailed Weasel (Mustela erminea)	O	Sp,S,F,W,	F,R,C
Long-tailed Weasel (Mustela frenata)	O	Sp,S,F,W	F,R,C
Spotted Skunk (Spilogale putorius)	U	Sp,S,F,W	F,R,C
Striped Skunk (Mephitis mephitis)	U	Sp,S,F,W	F,R,C
Northern Flying Squirrel (Glancomys sabrinus)	O	Sp,S,F,W	F,R,C
Western Gray Squirrel (Sciurus griseus)	O	Sp,S,F,W	F,R,C
Brush Rabbit (Sylvilagus bachmani)	U	Sp,S,F,W	F,R,C
California Ground Squirrel (Spermophilus beechei)	U	Sp,S,F,W	F,R,C
Black-tailed Jackrabbit (Lepus californius)	O	Sp,S,F,W	F,R,C
Deer Mouse (Peromyscus maniculatus)	C		W,F,C,Rt
Townsend Chipmunk (Entamias townsendi)	U	Sp,S,F,W	F,R,C
Oregon Vole (Microtus oregoni)	U		W,F,R,C,Rt
Trowbridge Shrew (Sorex trowbridgei)	U		W,F,R,C,Rt
Dusky Shrew (Sorex obscurus)	U		W,F,R,C,Rt
Townsend Mole (Scapanus townsendii)	U		W,F,R,C,Rt
Pacific (Coast) Mole (Scapanus orarius)	U		W,F,R,C,Rt
Shrew Mole (Neurotriclus gibbsi)	U		W,F,R,C,Rt
Little Brown Myotis (Myotis lucifugus)	U		R
Long-eared Myotis (Myotis erotis)	U		R
Californis Myotis (Myotis californicus)	U		R
Big Brown Bat (Eptesicus fuscus)	U		R
Silver-haired Bat (Lasionyctens noctivagans)	U		R
Hoary Bat (Lasiurus cinereus)	U		R
Western Big-eared Bat (Plecotus townsendi)	U		R
Pallid Bat (Antrozous pallidus)	U		R
Yuma Myotis (Myotis yumanensis)	U		R
Fringed Myotis (Myotis thysanodes)	U		R
Long-legged Myotis (Myotis volans)	U		R
Feral Dog (Canis familians)			
Feral Cat (Felis domestica)			

BIRDS

Name	Population Level	Use Season	Type Use
Turkey Vulture (Cathartes aura)	C	Sp,S,F,W	R,Rt
Goshawk (Accipter gentilis)	R	W	F,Rt
Sharp-skinned Hawk (Accipter striatus)	U	Sp,S,F,W	F,R,Rt
Cooper's Hawk (Accipter cooperii)	U	Sp,S,F,W	F,R,Rt
Red-tailed Hawk (Buteo jamaicensis)	C	Sp,S,F,W	F,R,Rt
Rough-legged Hawk (Buteo lagopus)	U	F,W	Rt
American Kestrel (Falco sparverius)	C	Sp,S,F,W	R,Rt
Blue Grouse (Dendragapus obscurus)	U	Sp,S,F,W	F,R,C,Rt
Ruffed Grouse (Bonasa umbellus)	U	Sp,S,F,W	F,R,C,Rt
California Quail (Lophortyx californicus)	C	Sp,S,F,W	F,C,Rt
Mountain Quail (Oreortyx pictus)	U	Sp,S,F,W	F,C,Rt
Band-tailed Pigeon (Columba fasciata)	U	Sp,S,F,W	F,R,C,Rt
Mourning Dove (Zenaidura macroura)	C	Sp,S,F,W	R,C,Rt
Screech Owl (Otus asio)	U	Sp,S,F,W	F,R,C,Rt
Great Horned Owl (Bubo virginanus)	U	Sp,S,F,W	F,R,C,Rt
Pygmy Owl (Glaucidium gnoma)	U	Sp,S,F,W	F,R,C,Rt
Great Gray Owl (Strix nebulosa)	U	Sp,S	F,Rt
Long-eared Owl (Asio otus)	R	Sp	F,R,C,Rt
Saw-whet Owl (Aegolius acadicus)	U	Sp,S,F,W	F,R,C,Rt
Common Nighthawk (Chordeiles minor)	U	Sp,S,F	F,Rt
Vaux's Swift (Chaetura vauxi)	U	Sp,S,F	F,Rt
Anna's Hummingbird (Calypte anna)	O	F,W	F,Rt
Rufous Hummingbird (Selasphorus rufus)	C	Sp,S,F	R
Calliope Hummingbird (Stellula calliope)	O	Sp	F,Rt
Common Flicker (Colaptes auratus)	C	Sp,S,F,W	R
Pileated Woodpecker (Dryocopus pileatus)	U	Sp,S,F,W	F,R,C,Rt
Lewis' Woodpecker (Asyndesmus lewis)	U	Sp,S,F,W	F,Rt
Yellow-bellied Sapsucker (Sphyrapicus varius)	U	Sp,S,F,W	F,R,C,Rt
Hairy Woodpecker (Dendrocopos villosus)	U	Sp,S,F,W	F,R,C,Rt
Downy Woodpecker (Dendrocopos pubescens)	U	Sp,S,F,W	F,R,C,Rt
Ash-throated Flycatcher (Myiarchus cinerascens)	O	So,F	F,Rt
Willow Flycatcher (Empidonax traillii)	U	Sp,S	F,Rt
Hammond's Flycatcher (Empidonax hammondii)	O	So,S	F,Rt
Dusky Flycatcher (Empidonax oberholseri)	O	So,S	F,Rt
Western Flycatcher (Empidonax difficilis)	U	Sp,S	F,R,Rt
Western Wood Pewee (Contopus sordidulus)	C	Sp,S,F	F,R,Rt
Olive-sided Flycatcher (Nuttallornis borealis)	U	Sp,S,F	F,R,Rt
Tree Swallow (Iridoprocne bicolor)	C	Sp,S,F	F,R
Steller's Jay (Cyanocitta stelleri)	C	Sp,S,F,W	F,R,C,Rt
Scrub Jay (Aphelocoma coerulescens)	C	Sp,S,F,W	F,R,C,Rt
Black-billed Magpie (Pica pica)	O	W	F,Rt
Common Raven (Corvus corax)	U	Sp,S,F,W	R,Rt
Common Crow (Corvus brachyrhynchos)	C	Sp,S,F,W	F,R,Rt
Black-capped Chickadee (Parus atricapillus)	C	Sp,S,F,W	F,R,Rt
Chestnut-backed Chickadee (Parus rufescens)	C	Sp,S,F,W	F,Rt
Common Bushtit (Psaltriparus minimus)	C	Sp,S,F,W	F,R,Rt
White-breasted Nuthatch (Sitta carolinensis)	C	Sp,S,F,W	F,R,Rt
Red-breasted Nuthatch (Sitta canadensis)	C	Sp,S,F,W	F,R,Rt
Brown Creeper (Certhia familiaris)	C	Sp,S,F,W	F,R,Rt
Wrentit (Chamaea fasciata)	U	Sp,S,F,W	F,R,Rt
House Wren (Troglodytes aedon)	C	Sp,S,F	F,Rt
Winter Wren (Troglodytes troglodytes)	C	Sp,S,F,W	F,R,Rt
Bewick's Wren (Thryomanes bewickii)	C	Sp,S,F,W	F,R,Rt
American Robin (Turdus migratorius)	C	Sp,S,F,W	F,R,C,Rt
Varied Thrush (Ixoreus naevius)	C	Sp,F,W	F,R,C,Rt
Hermit Thrush (Hylocichla guttata)	U	Sp,S,F,W	F,R,C,Rt
Swainson's Thrush (Hylocichla ustulata)	U	Sp,S,F	F,R,C,Rt
Western Bluebird (Sialia mexicana)	U	Sp,S,F,W	F,R
Mountain Bluebird (Siala currucoides)			
Townsend's Solitaire (Myadestes townsendi)	O	Sp,W	F,Rt,W
Golden-crowned Kinglet (Regulus satrapa)	C	Sp,S,F,W	F,C,Rt
Ruby-crowned Kinglet (Regulus calendula)	C	Sp,F,W	F,Rt,W
Bohemina Waxwing (Bombycilla garrulus)	O	W	F,Rt,W
Cedar Waxwing (Bombycilla cedrorum)	C	Sp,S,F,W	F,R,Rt
Northern Shrike (Lanius excubitor)	U	Sp,F,W	F,Rt,W
Common Starling (Sturnus vulgaris)	C	Sp,S,F,W	F,R,C,Rt
Hutton's Vireo (Vireo huttoni)	U	Sp,S,F,W	F,Rt,W
Solitary Vireo (Vireo solitarius)	U	Sp,S,F	F,R,Rt
Red-eyed Vireo (Vireo Olivaceus)	U	Sp,S	F,R,C,Rt
Warbling Vireo (Vireo gilvus)	U	Sp,S,F	F,R,C,Rt
Orange-crowned Warbler (Vermivora celata)	U	Sp,S,F,W	F,R,C,Rt
Nashville Warbler (Vermivora ruticapilla)	U	Sp,S,F	F,R,C,Rt
Yellow Warbler (Dendroica petechia)	U	Sp,S,F	R,Rt
Yellow-rumped Warbler (Dendroica coronata)	C	Sp,S,F,W	F,R,Rt
Black-throated Gray Warbler (Dendroica nigrescens)	U	Sp,S,F	F,R,Rt
Townsend's Warbler (Dendroica townsendi)	U	Sp,S,F,W	F,R,Rt
Hermit Warbler (Dendroica occidentalis)	U	Sp,S,F	F,R,Rt
MacGillivray's Warbler (Oporornis tolmiei)	U	Sp,S,F,W	F,R,Rt
Wilson's Warbler (Wilsonia pusilla)	C	Sp,S,F	F,R,Rt
Northern Oriole (Icterus galbula)	U	Sp,S,F	F,R,Rt
Western Tanager (Piranga ludoriciana)	U	Sp,S,F	F,R,C,Rt
Black-headed Grosbeak (Pheucticus melanocephalus)	U	Sp,S,F	F,R,C,Rt
Luzuli Bunting (Passerina amoena)	U	Sp,S,F	F,R,C,Rt
Evening Grosbeak (Hesperiphona vespertina)	U	Sp,S,F,W	F,R,C,Rt

Name	Population Level	Use Season	Type Use
Purple Finch (Carpodacus purpureus)	C	Sp,S,F,W	F,R,C,Rt
House Finch (Carpodacus mexicanus)	C	Sp,S,F,W	F,R,C,Rt
Pine Siskin (Carduelis pirus)	U	Sp,S,F,W	F,Rt
American Goldfinch (Carduelis tristis)	C	Sp,S,F,W	F,Rt
Lesser Goldfinch (Spinus psaltria)	U	Sp,S,F,W	F,Rt
Red Crossbill (Loxia curvirostra)	O	Sp,F	F,Rt
Rufous-sided Towhee (Pipilo erythrophthalmus)	C	Sp,S,F,W	F,C,Rt
Oregon Junco (Junco hyemalis)	C	Sp,S,F,W	F,R,C,Rt
Chipping Sparrow (Spizella passerina)	U	Sp,S,F,W	F,R,C,Rt
Harris' Sparrow (Zonotrichia querula)	O	W	F,C,Rt,W
White-crowned Sparrow (Zonotrichia leucophrys)	C	Sp,F,W	F,C,Rt,W
Golden-crowned Sparrow (Zonotrichia atricapilla)	C	Sp,F,W	F,C,Rt,W
White-throated Sparrow (Zonotrichia albicollis)	O	W	F,C,Rt,W
Fox Sparrow (Passerella iliaca)	U	Sp,F,W	F,C,Rt,W
Lincoln's Sparrow (Melospiza lincolnii)	U	Sp,F,W	F,C,Rt,W
Song Sparrow (Melospiza melodia)	C	Sp,S,F,W	F,C,Rt

AMPHIBIANS AND REPTILES

Common Garter Snake (Thamnophis sirtalis)	U	Sp,S,F,W	W,F,R,C,Rt
Rubber Boa Snake (Charina bottae)	O	Sp,S,F,W	W,F,R,C,Rt
Ring-necked Snake (Diadophis punctatus)	O	Sp,S,F,W	W,F,R,C,Rt
Northwestern Garter Snake (Thamnophis ordinoides)	U	Sp,S,F,W	W,F,R,C,Rt
Racer Snake (Cobiber constrictor)	O	Sp.S,F,W	W,F,R,C,Rt
Gopher Snake (Pituophis melanoleucus)	U	Sp,S,F,W	W,F,R,C,Rt
Western Skink (Eumeces skiltonianus)	O	Sp,S,F,W	W,F,R,C,Rt
Southern Alligator Lizard (Gerrhonotus multicarinatus)	O	Sp,S,F,W	W,F,R,C,Rt
Western Fence Lizard (Sceloporus occidentalis)	C	Sp,S,F,W	W,F,R,C,Rt
Northern Alligator Lizard (Gerrhonotus coeruleus)	O	Sp,S,F,W	W,F,R,C,Rt
Rough-skinned Newt (Taricha granulosa)	U	Sp,S,F,W	W,F,R,C,Rt
Northwestern Salamander (Ambystoma gracile)	O	Sp,S,F,W	F,C
Long-toed Salamander (Ambystoma macrodactylum)	O	Sp,S,F,W	F,C
Clouded Salamander (Aneides ferreus)	O	Sp,S,F,W	W,F,C,Rt
Dunn's Salamander (Plethodon dunni)	O	Sp,S,F,W	W,F,C,Rt
Oregon Red Salamander (Ensatina eschscholtzi oregonensis)	O	Sp,S,F,W	W,F,C,Rt
California Yellow-lgged Frog (Rana boylei)	O	Sp,S,F,W	W,F,C,Rt
Pacific Tree Frog (Hyla regilla)	U	Sp,S,F,W	W,F,C,Rt
Oregon Red-legged Frog (Rana aurora)	O	Sp,S,F,W	W,F,C,Rt

RIPARIAN VEGETATION

MAMMALS

Name	Population Level	Use Season	Type Use
Beaver (Castor canadensis)	C	Sp,S,F,W	F,R,C
Racoon (Procyon lotor)	U	Sp,S,F,W	F,R,C
Eastern Cottontail (Sylvilagus floridanus)	O	Sp,S,F,W	F,R,C
Nutria (Myocastro copyus)	U	Sp,S,F,W	F,R,C
Black-tailed Deer (Odocoileus hemionus columbianus)	C	Sp,S,F,W	W,F,R,C
California Ground Squirrel (Spermophilus beecheI)	O	Sp,S,F,W	F,R,C
Muskrat (Ondatra zibethica)	O	Sp,S,F,W	F,C
River Otter (Lutas canadensis)	O	Sp,S,F,W	F,C
Coyote (Canis latrans)	O	Sp,S,F,W	F,C
Red Fox (Vulpes fulva)	U	Sp,S,F,W	F,C
Spotted Skunk (Spilogale putorius)	O	Sp,S,F,W	F,R,C
Common Opossum (Didelphis marsupialis)	O	Sp,S,F,W	F,R,C
Trowbridge Shrew (Sorex trowbridgei)	O		F,R,C,Rt
Vagrant Shrew (Sorex vagrans)	O		F,R,C,Rt
Dusky Shrew (Sorex obscurus)	O		F,R,C,Rt
Pacific Water Shrew (Sorex bendirei)	O		F,R,C,Rt
Shrew Mole (Neurotrichus gibbsi)	U		F,R,C,Rt
Townsend Mole (Scapanus townsendii)	U		F,R,C,Rt
Bushytail Woodrat (Neotoma cinerea)	O		F
Longtail Weasel (Mustela frenata)	U	Sp,S,F,W	F,C
Shorttail Weasel (Mustela erminea)	O	Sp,S,F,W	F,C
Mink (Mustela vison)	O	Sp,S,F,W	F,R,C
Striped Skunk (Mephitis mephitis)	U	Sp,S,F,W	F,C
Gray Fox (Urocyon cinereo argenteus)	O	Sp,S,F,W	F,C
Bobcat (Lynx rufus)	U	Sp,S,F,W	F,C
Pacific Jumping Mouse (Zapus trinotatus)	O		F,R,C
Porcupine (Erethizon dorsatum)	O	Sp,S,F,W	F
Brush Rabbit (Sylvilagus bachmani)	C	Sp,S,F,W	F,R,C
Little Brown Myotis (Myotis lucifugus)	O		R,Rt
Long-eared Myotis (Myotis evotis)	O		R,Rt
California Myotis (Myotis californicus)	O		R,Rt
Big Brown Bat (Eptesicus fuscus)	O		R,Rt
Hoary Bat (Lasiurus cinereus)	O		R,Rt
Dusky-footed Woodrat (Neotoma fuscipes)	O	Sp,S,F,W	F,R,C
Western Redback Vole (Clethrionomys occidentalis)	O		F,R,C
Oregon Vole (Micotus oregoni)	O		F,R,C
Long-tailed Vole (Microtus longicandus)	O		F,R,C
Black-tailed Jackrabbit (Lepus californicus)	O	Sp,S,F,W	F,R,C
Western Gray Squirrel (Sciurus griseus)	O	Sp,S,F,W	W,F,R,C
Townsend Chipmunk (Eutamias townsendi)	O	Sp,S,F,W	F,R,C
Northern Flying Squirrel (Glaucomys sabrinus)	O	Sp,S,F,W	F,R,C

BIRDS

Name	Population Level	Use Season	Type Use
Great Blue Heron (Ardea herodias)	C	Sp,S,F,W	R
Green Heron (Butorides virescens)	U	Sp,S,F,W	R
Wood Duck(Aix sponsa)	U	Sp,S,F,W	R,Rt
Turkey Vulture (Cathartes aura)	C	Sp,S,F,W	R,Rt
Goshawk (Accipiter gentilis)	R	W	F,Rt
Sharp-skinned Hawk (Accipter striatus)	U	Sp,S,F,W	F,Rt
Cooper's Hawk (Accipiter cooperii)	U	Sp,S,F,W	F,Rt
Red-tailed Hawk (Buteo jamaicensis)	C	Sp,S,F,W	F,Rt
Swainson's Hawk (Buteo swainsoni)	R	W	Rt
Rough-legged Hawk (Buteo lagopus)	U	F,W	Rt
Ferruginous Hawk (Buteo regalis)	O	W	Rt
Bald Eagle (Haliaeetus lencocephalus)	O	W	Rt
Merlin (Falco columbarius)	R	Sp,F,W	Rt
American Kestrel (Falco sparverius)	C	Sp,S,F,W	R,Rt
Ruffed Grouse (Bonasa umbellus)	U	Sp,S,F,W	F,R,C,Rt
California Quail (Lophortyx californicus)	C	Sp,S,F,W	F,C,Rt
Mourning Dove (Zenaidura macroura)	C	Sp,S,F,W	R,C,Rt
Screech Owl (Otus asio)	U	Sp,S,F,W	F,R,C,Rt
Great Horned Owl (Bubo virginianus)	U	Sp,S,F,W	F,R,C,Rt
Pygmy Owl (Glaucidium gnoma)	U	Sp,S,F,W	F,R,C,Rt
Long-eared Owl (Asio otus)	R	Sp	F,R,C,Rt
Common Nighthawk (Chordeiles minor)	U	Sp,S,F	Rt
Vaux's Swift (Chaetura vauxi)	U	Sp,S,F,W	F
Belted Kingfisher (Megaceryle alcyon)	U	Sp,S,F,W	R,Rt
Common Flicker (Colaptes auratus)	C	Sp,S,F,W	R
Pileated Woodpecker (Dryocopus pileatus)	U	Sp,S,F,W	F,R,C,Rt
Yellow-bellied Sapsucker (Sphyrapicus varius)	U	Sp,S,F,W	F,R,C,Rt
Hairy Woodpecker (Dendrocopos villosus)	U	Sp,S,F,W	F,R,C,Rt
Downy Woodpecker (Dendrocopos pubescens)	U	Sp,S,F,W	F,R,C,Rt
Willow Flycatcher (Empidonax traillii)	U	Sp,S	R
Hammond's Flycatcher (Empidonax hammondii)	O	Sp,S	F,Rt
Dusky Flycatcher (Empidonax oberholseri)	O	Sp,S	F,Rt
Western Flycatcher (Empidonax difficilis)	U	Sp,S	F,Rt
Western Wood Pewee (Contopus sordidulus)	C	Sp,S,F	F,R,Rt
Violet-green Swallow (Tachycineta thalassina)	C	Sp,S,F	F,R
Tree Swallow (Iridoprocne bicolor)	C	Sp,S,F	F,R
Rough-winged Swallow (Stelgidopteryx riticollis)	U	Sp,S,F	F
Barn Swallow (Hirundo rustica)	C	Sp,S,F	F,Rt
Cliff Swallow (Petrochelidon pyrrhonota)	C	Sp,S,F	F
Purple Martin (Progne subis)	O	Sp,S,F,W	F,R
Scrub Jay (Aphelocoma coerulescens)	C	Sp,S,F,W	F,R,C,Rt
Black-billed Magpie (Pica pica)	O	W	F,Rt
Common Crow (Corvus brachgrhynchos)	C	Sp,S,F,W	F,R,Rt
Black-capped Chickadee (Parus atricapillus)	C	Sp,S,F,W	R
Chestnut-backed Chickadee (Parus rufescens)	C	Sp,S,F,W	F,Rt
Common Bushtit (Psaltriparus minimus)	C	Sp,S,F,W	F,R,Rt
White-breasted Nuthatch (Sitta carolinensis)	C	Sp,S,F,W	F,Rt
Brown Creeper (Certhia familiaris)	C	Sp,S,F,W	F,Rt
Dipper (Cinchus mexicanus)	O	F,W	F,Rt
House Wren (Trogodytes aedon)	C	Sp,S,F	F,Rt
Winter Wren (Trogodytes troglodytes)	C	Sp,S,F,W	F,R,Rt
Bewick's Wren (Thryomanes bewickii)	C	Sp,S,F,W	F, R,Rt
American Robin (Turdus migratorius)	C	Sp,S,F,W	F,R,C,Rt
Varied Thrush (Ixoreus naevius)	C	Sp,F,W	F,R,C,Rt
Hermit Thrush (Hylocichla guttata)	U	Sp,S,F,W	F,R,C,Rt
Swainson's Thrush (Hylocichla ustulata)	U	Sp,S,F	F,R,C,Rt
Western Bluebird (Sialia mexicana)	U	Sp,S,F,W	F,R
Townsend's Solitaire (Myadestes townsendi)	O	Sp,W	F,Rt,W
Golden-crowned Kinglet(Regulus satrapa)	C	Sp,S,F,W	F,C,Rt
Ruby-crowned Kinglet(Regulus calendula)	C	Sp,F,W	F,Rt,W
Bohemian Waxwing (Bombycilla garrulus)	O	W	F,Rt,W
Cedar Waxwing (Bombycilla cedrorum)	C	Sp,S,F,W	F,R,Rt
Northern Shrike (Lanius excubitor)	U	Sp,F,W	F,Rt,W
Common Starling (Sturnus vulgaris)	C	Sp,S,F,W	F,R,C,Rt
Hutton's Vireo (Vireo huttoni)	U	Sp,S,F,W	F,Rt,W
Solitary Vireo (Vireo solitarius)	U	Sp,S,F	F,Rt
Red-eyed Vireo (Vireo olivaceus)	O	Sp,S	F,R,C,Rt
Warbling Vireo (Vireo gilvus)	U	Sp,S,F	F,R,C,Rt
Orange-crowned Warbler (Vermivora celata)	U	Sp,S,F,W	F,R,C,Rt
Nashville Warbler (Vermivora ruticapilla)	U	Sp,S,F	F,R,C,Rt
Yellow Warbler (Dendroica petechia)	U	Sp,S,F	R
Yellow-rumped Warbler (Dendrocia coronata)	C	Sp,S,F,W	F,R,Rt
Black-throated Gray Warbler (Dendroica nigrescens)	U	Sp,S,F	F,Rt
Townsend's Warbler (Dendroica townsendi)	U	Sp,S,F,W	F,Rt
Hermit Warbler (Dendroica occidentalis)	U	Sp,S,F	F,Rt
MacGillivray's Warbler (Oporornis tolmiei)	U	Sp,S,F,W	F,R,Rt
Yellow Throat(Geothlypis trichas)	C	Sp,S,F,W	F,Rt
Yellow-breasted Chat (Icteria virens)	U	Sp,S,F	F,Rt
Wilson's Warbler (Wilsonia pusilla)	C	Sp,S,F	F,Rt
Yellow-headed Blackbird (Xanthocephalus xanthocephalus)	U	Sp,S	F
Red-winged Blackbird (Agelaius phoeniceus)	C	Sp,S,F,W	F
Northern Oriole (Icterus galbula)	U	Sp,S,F	F,C,Rt

Name	Population Level	Use Season	Type Use
Brewer's Blackbird (Euphagus cyanocephalus)	C	Sp,S,F,W	F,Rt
Brown-headed Cowbird (molothrus ater)	C	Sp,S,F,W	F
Western Tanager (Piranga ludoviciana)	U	Sp,S,F	F,C,Rt
Black-headed Grosbeak (Pheucticus melanocephalus)	U	Sp,S,F	F,C,Rt
Lazuli Bunting (Passerina amoena)	U	Sp,S,F	F,C,Rt
Evening Grosbeak (Hesperiphona vespertina)	U	Sp,S,F,W	F,C,Rt
Purple Finch (Carpodacus purpureus)	C	Sp,S,F,W	F,C,Rt
House Finch (Carpodacus mexicanus)	C	Sp,S,F,W	F,C,Rt
Pine Siskin(Carduelis pinus)	U	Sp,S,F,W	F,Rt
American Goldfinch (Carduelis tristis)	C	Sp,S,F,W	F,Rt
Lesser Goldfinch (Spinus psaltria)	U	Sp,S,F,W	F,Rt
Rufous-sided Towhee (Pipilo erythrophthalmus)	C	Sp,S,F,W	F,C,Rt
Orange Junco (Junco hyemalis)	C	Sp,S,F,W	F,Rt,W
Chipping Sparrow (Spizella passerina)	U	Sp,S,F,W	F,Rt,W
Harris' Sparrow (Zonotrichia querula)	O	W	F,C,Rt,W
White-throated Sparrow (Zonotrichia albicollis)	O	W	F,C,Rt,W
Fox Sparrow(Passerella iliaca)	U	Sp,F,W	F,C,Rt,W
Lincoln's Sparrow (Melospiza lincolnii)	U	Sp,F,W	F,C,Rt,W
Song Sparrow (Melospiza melodia)	C	Sp,S,F,W	F,C,Rt
White-crowned Sparrow (Zonotrichia leucophrys)	C	Sp,F,W	F,C,Rt,W
Golden-crowned Sparrow (Zonotrichia atricapilla)	C	Sp,F,W	F,C,Rt,W

AMPHIBIANS AND REPTILES

Common Garter Snake (Thamnophis sirtalis)	C	Sp,S,F	F
Rubber Boa Snake (Charina bottae)	U	Sp,S,F	F
Racer Snake (Coluber constrictor)	U	Sp,S,F	F
Northwestern Garter Snake (Thamnophis ordinoides)	C	Sp,S,F	F
Northwestern Salamander(Ambystoma gracile)	C	Sp,S,F,W	W,F,R,C,Rt
Long-toed Salamander(Ambystoma macrodactylum)	U	Sp,S,F,W	W,F,R
Olympic Salamander(Rhyacotriton olymicus)	O	Sp,S,F,W	W,F,R,C,Rt
Oregon Red Salamander (Ensatina eschscholtzi oregonensis)	U	Sp,S,F,W	W,F,R,C,Rt
Gopher Snake (Pituophis melanoleucus)	U	Sp,S,F	F
Rough-skinned Newt (Taricha granulosa)	C	Sp,S,F,W	W,F,R,C,Rt
Bullfrog (Rana catesbeiana)	C	Sp,S,F,W	W,F,R
Oregon Red-legged Frog (Rana aurora)	U	Sp,S,F,W	F,R,C,Rt
California Yellow-legged Frog (Rana boylei)	O	Sp,S,F,W	F,R,C,Rt
Tailed Frog (Ascaphus truei)	U	Sp,S,F,W	F,R,C,Rt
Pacific Tree Frog (Hyla regilla)	C	Sp,S	F,R,C,Rt
Pacific Pond Turtle (Clemmys marmorata)	U	Sp,S,F,W	W,F,R,C,Rt

ANNUAL & PERNNIAL GRASSLANDS

MAMMALS

Name	Population Level	Use Seasonal	Type Use
Black-tailed Deer (Odocoileus hemionus columbianus)	U	Sp,S,F,W	F,R,C
Mink (Mustela vison)	O	Sp,S,F,W	F,R,C
Red Fox (Vulpes fulva)	U	Sp,S,F,W	F,R,C
Coyote (Canis latrans)	U	Sp,S,F,W	F,R,C
Gray Fox (Urocyon cinereo argenteus)	U	Sp,S,F,W	F,R,C
Bobcat (Lynx rufus)	O	Sp,S,F,W	F
Racoon (Procyon lotor)	U	Sp,S,F,W	F,R,C
Common Opossum (Didelphis marsupialis)	O	Sp,S,F,W	F,R,C
Porcupine (Erethizon dorsatum)	O	Sp,S,F,W	F
Brush Rabbit (Sylvilagus bachmani)	U	Sp,S,F,W	F,C
California Ground Squirrel (Spermophilus beechei)	U	Sp,S,F,W	F,R,C
Western Gray Squirrel (Sciurus griseus)	O	S,F	F,C
Eastern Fox Squirrel (Sciurus niger)	O	S,F	F,C
Golden-mantled Squirrel (Citellus lateralis)	O	S,F	F,C
Short-tailed Weasel (Mustela erminea)	O	Sp,S,F,W	F,R,C
Long-tailed Weasel(Mustela frenata)	U	Sp,S,F,W	F,R,C
Spotted Skunk (Spilogale putorius)	O	Sp,S,F,W	F,R,C
Striped Skunk (Mephitis mephitis)	C	Sp,S,F,W	F,R,C
Blacktailed Jackrabbit (Lepus californicus)	U	Sp,S,F,W	F,R,C
Townsend Chipmunk (Entamias townsendi)	O	Sp,S,F,W	F,R,C
Giant Pocket Gopher (Thomomys balbivorous)	U	Sp,S,F,W	W,F,R,C,Rt
Deer Mouse (Peromyscus maniculatus)	C	Sp,S,F,W	W,F,R,C,Rt
House Mouse (Mus musculus)	C	Sp,S,F,W	W,F,R,C,Rt
Mazama Pocket Gopher (Thomomys mazama)	O	Sp,S,F,W	W,F,R,C,Rt
Camas Pocket Gopher	O	Sp,S,F,W	W,F,R,C,Rt
Shrew Mole(Neurotriculus gibbsi)	O	Sp,S,F,W	W,F,R,C,Rt
Townsend Mole (Scapanus townsendii)	O	Sp,S,F,W	W,F,R,C,Rt
Pacific (Coast) Mole (Scapanus orarius)	O	Sp,S,F,W	W,F,R,C,Rt
Trowbridge Shrew (Sorex trowbridgei)	O	Sp,S,F,W	W,F,R,C,Rt
Dusky-footed Woodrat (Neotoma fuscipes)	O	Sp,S,F,W	F,R,C
Bushy-tailed Woodrat (Neotoma cinerea)	O	Sp,S,F,W	F,R,C
California Vole (Microtus californicus)	O	Sp,S,F,W	F,R,C
Townsend Vole (Microtus townsendi)	O	Sp,S,F,W	F,R,C
Longtail Vole (Microtus longicaudus)	O	Sp,S,F,W	F,R,C
Mountain Vole (Microtus montanus)	O	Sp,S,F,W	F,R,C
Oregon Vole (Microtus oregoni)	O	Sp,S,F,W	F,R,C
Gray-tailed Vole (Microtus canicaudus)	O	Sp,S,F,W	F,R,C

Name	Population Level	Use Season	Type Use
Dusky Shrew (Sorex obscurus)	O	Sp,S,F,W	F,R,C
Little Brown Myotis (Myotis lucifugus)	O	Sp,S,F,W	R
California Myotis (Myotis californicus)	O	Sp,S,F,W	R
Yuma Myotis (Myotis yumanensis)	O	Sp,S,F,W	R
Western Big-eared Bat (Pleotus townsendi)	O	Sp,S,F,W	R
Pallid Bat (Antrozous pallidus)	O	Sp,S,F,W	R
Pacific Jumping Mouse (Zapus trinotatus)	O	Sp,S,F,W	W,F,R,C,Rt
Eastern Cottontail Rabbit (Sylvilagus floridanus)	O	Sp,S,F,W	F,R,C
Northern Flying Squirrel (Glaucomys sabrinus)	O	Sp,S,F,W	F
Nutria (Myocastor coypus)	U	Sp,S,F,W	F
Feral Dog (Canis familians)			
Feral Cat (Felis domestica)			
BIRDS			
Sharp-shinned Hawk (Accipter striatus)	U	Sp,S,F,W	F,Rt
Cooper's Hawk (Accipter cooperii)	U	Sp,S,F,W	F,Rt
California Quail (Lophortyx californicus)	C	Sp,S,F,W	R,C
Mountain Quail (Oreotyx pictus)	U	Sp,S,F,W	R,C
Ring-necked Pheasant (Phasianus colchicus)	C	Sp,S,F,W	F,R,C,Rt
Anna's Hummingbird (Calypte anna)	O	F,W	F,C,Rt
Rufous Hummingbird (Selasphorus rufus)	C	Sp,S,F	F,C,Rt
Common Flicker (Colaptes auratus)	C	Sp,S,F,W	F,Rt
Scrub Jay (Aphelocoma coerulescens)	C	Sp,S,F,W	F,R,C,Rt
Black-capped Chickadee (Parus atricapillus)	C	Sp,S,F,W	F,Rt
Common Bushtit (Psaltriparus minimus)	C	Sp,S,F,W	F,R,Rt
Wrentit (Chamaea fasciata)	U	Sp,S,F,W	F,R,Rt
House Wren (Troglodytes aedon)	C	Sp,S,F	F,Rt
Winter Wren (Troglodytes troglodytes)	C	Sp,S,F,W	F,R,Rt
Benwick's Wren (Thryomanes bewickii)	C	Sp,S,F,W	F,R,Rt
American Robin (Turdus migratorius)	C	Sp,S,F,W	F,R,C,Rt
Hermit Thrush (Hylocichla guttata)	U	Sp,S,F,W	F,R,C,Rt
Swainson's Thrush (Hylcichla ustulata)	U	Sp,S,F	F,R,C,Rt
Ruby-crowned Kinglet (Regulus calendula)	C	Sp,F,W	F,Rt,W
Hutton's Vireo (Vireo huttoni)	U	Sp,S,F,W	F,R,C,Rt,W
Yellow Throat (Geothlypis trichas)	C	Sp,S,F,W	F,Rt
Yellow-breasted Chat (Icteria virens)	U	Sp,F,W	F,Rt
Wilson's Warbler (Wilsonia pusilla)	C	Sp,F,W	F,Rt
Brown-headed Cowbird (Molothrus ater)	C	Sp,S,F,W	F
Lazuli Bunting (Passerina amoena)	U	Sp,S,F	F,C,Rt
House Finch (Carpodacus mexicanus)	C	Sp,S,F,W	F,C,Rt
American Goldfinch (Carduelis tristis)	C	Sp,S,F,W	F,Rt
Lesser Goldfinch (Spinus psaltria)	U	Sp,S,F,W	F,Rt
Rufous-sided Towhee (Pipilo erythrophthalmus)	C	Sp,S,F,W	F,C,Rt
Oregon Junco (Junco hyemalis)	C	Sp,S,F,W	F,C,Rt
Tree Sparrow (Spizella arborea)	R	W	F,Rt,W
Clay-colored Sparrow (Spizella pallida)	R	W	F,Rt,W
White-crowned Sparrow (Zonotrichia leucophrys)	C	Sp,F,W	F,C,Rt,W
Golden-crowned Sparrow (Zonotrichia atricapilla)	C	Sp,F,W	F,C,Rt,W
White-throated Sparrow (Zonotrichia albicollis)	O	W	F,C,Rt,W
Fox Sparrow (Passerella iliaca)	U	Sp,F,W	F,C,Rt,W
Song Sparrow (Melospiza melodia)	C	Sp,S,F,W	F,C,Rt
AMPHIBIANS AND REPTILES			
Common Garter Snake (Thamnophis sirtalis)	U	Sp,S,F,W	W,F,R,C,Rt
Northwestern Garter Snake (Thamnophis ordinoides)	U	Sp,S,F,W	W,F,R,C,Rt
Rubber Boa Snake (Charina bottae)	U	Sp,S,F,W	W,F,R,C,Rt
Ring-necked Snake (Diadophis punctatus)	O	Sp,S,F,W	W,F,R,C,Rt
Racer Snake (Coluber constrictor)	O	Sp,S,F,W	W,F,R,C,Rt
Gopher Snake (Pituophis melanoleucus)	U	Sp,S,F,W	W,F,R,C,Rt
Western Terrestrial Garter Snake (Thamnophis elegans)	U	Sp,S,F,W	W,F,R,C,Rt
Western Fence Lizard (Sceloporus occidentalis)	O	Sp,S,F,W	W,F,R,C,Rt
Southern Alligator Lizard (Gerrhonotus multicarinatus)	O	Sp,S,F,W	W,F,R,C,Rt
Western Skink (Eumeces skiltonianus)	O	Sp,S,F,W	W,F,R,C,Rt
Rough-skinned Newt (Taricha granulosa)	O	Sp,S,F,W	W,F,R,C,Rt
Northwestern Salamander (Ambystoma gracile)	O	Sp,S,F,W	F,C
Long-toed Salamander (Ambystoma macrodactylum)	O	Sp,S,F,W	F,C
Oregon Red Salamander (Ensatina eschscholtzi oregonensis)	O	Sp,S,F,W	W,F,C,Rt
Western Red-backed Salamander (Plethodon vehiculum)	O	Sp,S,F,W	W,F,C,Rt
Oregon Red-legged Frog (Rana aurora)	O	Sp,S,F,W	W,F,C,Rt
Bullfrog (Rana catesbeiana)	O	Sp,S,F,W	W,F,C,Rt
Pacific Tree Frog (Hyla regilla)	O	Sp,S,F,W,	W,F,C,Rt

FRESHWATER MARSH

MAMMALS			
Vagrant Shrew (Sorex vagrans)	O		F,R,C
Dusky Shrew (Sorex obscurus)	O		F,R,C
Pacific Shrew (Sorex pacificus)	O		
Little Brown Myotis (Myotis lucifugus)	O		R,Rt
Pacific Water Shrew (Sorex bendirei)	O		F,R,C

Name	Population Level	Use Season	Type Use
California Myotis (Myotis californicus)	O		R,Pr
Racoon (Procyon lotor)	O	Sp,S,F,W	F,C
River Otter (Lutra canadensis)	O	Sp,S,F,W	F,R,C
Mink(Mustela vison)	O	Sp,S,F,W	F,R,C
Bobcat (Lynx rufus)	O		
Beaver (Castor canadensis)	U	Sp,S,F,W	F,R,C
Muskrat (Ondatra zibethica)	U	Sp,S,F,W	F,R,C
House Mouse (Mus musculus)			
Nutria (Myocastro copyus)	O	Sp,S,F,W	F,R,C
Pacific Jumping Mouse (Zapus trinotatus)	O		F,R,C
Coyote (Canis latrans)	O		
Black-tailed Deer (Odocoileus hemionus columbianus)	O	Sp,S,F,W	F,C
Striped Skunk (Mephitis mephitis)	O	Sp,S,F,W	F
Long-tailed Weasel (Mustela frenata)	O	Sp,S,F,W	F
Red Fox (Vulpes fulva)	U		F,C
Common Opossum (Didelphis marsupialis)	U		F,C
BIRDS			
Horned Grebe (Podiceps auritus)	R	Sp,F,W	
Eared Grebe (Podiceps nigricollis)	R	Sp,F,W	
Western Grebe (Aechmophorus occidentalis)	R	Sp,S,F,W	
Pied-billed Grebe (Podilymbus podiceps)	C	Sp,S,F,W	R
Great Blue Heron (Ardea herodias)	C	Sp,S,F,W	R
Green Heron (Butorides virescens)	U	Sp,S,F,W	R
Great Egret (Casmerodius albus)	O	Sp,F,W	
Snowy Egret (Egretta thula)			
American Bittern (Botaurus lentiginosus)	C	Sp,S,F,W	R
Whistling Swan (Olor columbianus)	U	Sp,F,W	
Canada Goose (Branta canadensis)	C	Sp,S,F,W	R
White-fronted Goose (Anser albifrons)	U	Sp,F,W	
Mallard (Anas platyrhynchos)	C	Sp,S,F,W	R
Gadwall (Anas strepera)	O	Sp,F,W	
Northern Pintail (Anas acuta)	C	Sp,F,W	
Green-winged Teal (Anas crecca)	C	Sp,F,W	R
Blue-winged Teal (Anas discors)	U	Sp,S	R
Cinnamon Teal (Anas cyanoptera)	C	Sp,S,F,W	R
European Wigeon (Anas penelope)	O	F,W	
American Wigeon (Anas americana)	C	Sp,F,W	
Northern Shoveler (Anas clypeata)	C	Sp,F,W	
Marsh Hawk (Circus cyaneus)	U	Sp,S,F,W	R
Osprey (Pandion haliaetus)	U	Sp,S	R
Sandhill Crane (Grus canadensis)	O	Sp,F,W	
Virgina Rail (Rallus limicola)	U	Sp,S,F,W	R
Sora (Porzana carolina)	U	Sp,S	R
American Coot (Fulica americana)	C	Sp,S,F,W	R
Common Snipe (Copella gallinago)	C	Sp,S,F,W	R
Greater Yellow-legs (Totamus melanoleucus)	U	Sp,F,W	R
Forester's Tern (Sterna forsteri)	U	S,F	
Caspian Tern (Sterna caspia)	O	S	
Black Tern (Chilidonias niger)	U	S	
Short-eared Owl (Asio flammeus)	U	Sp,S,F,W	R
Common Nighthawk (Chordeiles minor)	U	Sp,S,F	R
Vaux's Swift (Chaetura vauxi)	U	Sp,S,F	R
Violet-green Swallow (Tachycineta thalassina)	C	Sp,S,F	R
Tree Swallow (Iridoprocne bicolor)	C	Sp,S,F	R
Bank Swallow(Riparia riparia)	O	Sp,F	
Rough-winged Swallow(Stelgidopteryx ruticollis)	U	Sp,S,F	R
Barn Swallow (Hirundo rustica)	C	Sp,S,F	R
Cliff Swallow (Petrochelidon pyrrhonota)	C	Sp,S,F	R
Purple Martin (Progne subis)	O	Sp,S,F	R
Long-billed Marsh Wren (Telmatodytes palustris)	C	Sp,S,F,W	R
Yellow Throat (Geothlypis trichas)	C	Sp,S,F,W	R
Yellow-breasted Chat (Icteria virens)	U	Sp,S,F	R
Yellow-headed Blackbird (Xanthocephalus xanthocephalus)	U	Sp,S	R
Red-winged Blackbird (Agelaius phoeniceus)	C	Sp,S,F,W	R
Swamp Sparrow (Melospiza georgiana)	R	W	
Song Sparrow (Melospiza melodia)	C	Sp,S,F,W	R
AMPHIBIANS AND REPTILES			
Common Garter Snake (Thomnophis sirtalis)	C	Sp,S,F	F
Rough-skinned Newt (Taricha granulosa)	C	Sp,S,F,W	W,R,C,Rt
Northwestern Salamander (Ambystoma gracile)	C	Sp,S,F,W	W,F,R,C,Rt
Long-toed Salamander (Ambystoma macrodactylum)	U	Sp,S,F,W	W,F,R
Oregon Red-legged Frog (Rana aurora)	U	Sp,S,F,W	F,R,C,Rt
Pacific Tree Frog (Hyla regilla)	C	Sp,S	F,R,C,Rt
Bullfrog (Rana catesbciana)	C	Sp,S,F,W	W,F,R
Pacific Pond Turtle (Clemmys marmorata)	U	Sp,S,F,W	W,F,R,C,Rt

OPEN WATER

FISHES

Name	Population Level	Use Season	Type Use
Westernbrook Lamprey (Lampetra planeri)	U		
Pacific Lamprey (Lampetra tridentata)	C		
White Sturgeon (Acipenser transmontanus)	U		
Spring Chinook Salmon (Oncorhynchus tshawytscha)	U to C		
Fall Chinook Salmon (Oncorhynchus tshawytscha)	U		
Cutthroat Trout (Salmo clarki)	C		
Rainbow Trout (Salmo gairdneri)	U		
Summer-run Steelhead (Salmo gairdneri)	O		
Winter-run Steelhead (Salmo gairdneri)	C		
Dolly Varden (Salvelinus malma)	O		
Chiselmonth (Acrocheilus alutaceus)	C		
Carp (Cyprinus carpio)	C		
Oregon Chub (Hybopsis crameri)	O		
Peamouth (Mylocheilus caurinus)	U		
Northern Squawfish (Ptychocheilus oregonensis)	C		
Dace (Rhinichthus)	C		
Redside Shiner (Richardsonius balteatus)	C		
Largescale Sucker (Catostomus macrocheilus)	C		
Brown Bullhead (Ictalunis nebulosus)	O		
Channel Catfish (Ictalunis punctatus)	O		
Mosquito Fish (Gambusia affinis)	O to U		
Sand Roller (Percopsis transmartana)	O		
Warmmouth (Chaenobryttus gulosus)	U		
Bluegill (Lepomis Macrochirus)	C		
Smallmouth Bass (Micropterus domomieui)	U		
Largemouth Bass (Micropterus salmoides)	C		
White Crappie (Promoxis annularis)	C		
Black Crappie (Promoxis nigromaculatus)	C		
Sculpins ("Several Species")	C		
White Fish (Prosopium williamsoni)	C		
MAMMALS			
Nutria (Myocastor coypus)	O	Sp,S,F,W	F,R,C
Mink (Mustela vison)	O	Sp,S,F,W	F,R,C
Vagrant Shrew (Sorex vagrans)	O		
Racoon (Procyon lotor)	O	Sp,S,F,W	F
River Otter (Lutra canadensis)	O	Sp,S,F,W	F,R,C
Beaver (Castor canadensis)	O	Sp,S,F,W	F,R,C
Muskrat (Ondatra zibethica)	O	Sp,S,F,W	F,R,C
Little Brown Myotis (Myotis lucifugus)	O	Sp,S,F,W	
California Myotis (Myotis californicus)	O	Sp,S,F,W	
BIRDS			
Common Loon (Gavia immer)	O	Sp,F,W	
Artic Loon (Gavia arctica)	R	W	
Red-throated Loon (Gavia stellata)	R	W	
Horned Grebe (Podiceps auritus)	R	Sp,F,W	
Eared Grebe (Podiceps nigricollis)	R	Sp,F,W	
Western Grebe (Aechmophorus occidentalis)	R	Sp.S.F.W	
Pied-billed Grebe (Podilymbus podiceps)	C	Sp,S,F,W	R
White Pelican (Pelecanus erythororynchos)	R	Sp,F	
Double-crested Cormorant (Phalacrocorax auritus)	R	Sp,F,W	
Great Blue Heron (Ardea herodias)	C	Sp,F,W	R
Great Egret (Camerodius albus)	O	Sp,F,W	
Snowy Egret (Egretta thula)			
Whistling Swan (Olor columbianus)	U	Sp,F,W	
Canada Goose (Branta canadensis)	C	Sp,S,F,W	R
White-fronted Goose (Anser albifrons)	U	Sp,F,W	
Mallard (Anas platyrhynchos)	C	Sp,S,F,W	R
Gadwall (Anas strepera)	O	Sp,F,W	
Northern Pintail (Anas acuta)	C	Sp,F,W	
Green-winged Teal (Anas crecca)	C	Sp,F,W	R
Blue-winged Teal (Anas discors)	U	Sp,S	R
Cinnamon Teal (Anas cyanoptera)	C	Sp,S,F,W	R
European Wigeon (Anas penelope)	O	F,W	
American Wigeon (Anas americana)	C	Sp,F,W	
Northern Shoveler (Anas clypeata)	C	Sp,F,W	
Wood Duck (Aix sponsa)	U	Sp,S,F,W	R
Redhead Duck (Aythya americana)	U	Sp,F,W	
Ring-necked Duck (Aythya collaris)	O	Sp,F,W	
Canvasback (Aythya valisineria)	U	Sp,F,W	
Greater Scaup (Aythya marila)	O	F,W	
Lesser Scaup (Aythya affinis)	U	Sp,F,W	
Common Goldeneye (Bucephala clangula)	O	W	
Buttlehead (Bucephala albeola)	U	Sp,F,W	
Surf Scoter (Melanitta perspicillata)			
Ruddy Duck (Oxyura jamaicensis)	U	Sp,F,W	
Hooded Merganser (Lophodytes cucullatus)	U	Sp,F,W	R
Common Merganser (Mergus merganser)	U	Sp,S,F,W	R

Name	Population Level	Use Season	Type Use
Bald Eagle (Haliaectus leucocephalus)	O	W	R
Osprey (Pandion haliaetus)	U	Sp,S	R
American Coot (Fulica americana)	C	Sp,S,F,W	R
Red Phalarope (Phalaropus fulicarius)			
Wilson's Phalarope (Steganopus tricolor)	O	Sp,S,F	
Northern Phalarope (Phalaropus lobatus)			
Glaucous-winged Gull (Larus glaucescens)	C	F,W	
Western Gull (Larus occidentalis)	O	W	
Herring Gull (Larus argentatus)	U	F,W	
Thayer's Gull (Larus thayeri)	U	W	
California Gull (Larus californicus)	U	F,W	
Ring-billed Gull (Larus delawarensis)	C	Sp,S,F,W	R
Mew Gull (Larus canus)	O	W	
Bonaparte's Gull (Larus philadelphia)	U	F,W	
Forster's Tern (Sterna forsteri)	U	S,F	
Common Tern (Sterna hirundo)	U	F	
Caspian Tern (Sterna caspia)	O	S	
Black Tern (Childonias niger)	U	S	
Common Nighthawk (Chordeiles minor)	U	Sp,S,F	R
Vaux's Swift (Chaetura vauxi)	U	Sp,S,F	R
Belted Kingfisher (Megaceryle alcyon)	U	Sp,S,F,W	R
Violet-green Swallow (Tachycineta thalassina)	C	Sp,S,F	R
Tree Swallow (Iridoprocne bicolor)	C	Sp,S,F	R
Bank Swallow (Riparian riparia)	O	Sp,S,F	R
Rough-winged Swallow (Stelgidopteryx ruticollis)	O	Sp,S,F	R
Barn Swallow (Hirundo rustica)	C	Sp,S,F	R
Cliff Swallow (Petrochelidon pyrrhonota)	C	Sp,S,F	R
Purple Martin (Progne subis)	O	Sp,S,F	R
Dipper (Cinclus mexicanus)	O	F,W	
AMPHIBIANS AND REPTILES			
Common Garter Snake (Thamnophis sirtalis)	O	Sp,S,F	F
Gopher Snake (Pituophis melanoleucus)	U	Sp,S,F	F
Bullfrog (Rana catesbeiana)	C	Sp,S,F,W	W,F,R
Oregon Red-legged Frog (Rana aurora)	U	Sp,S,F,W	F,R,C,Rt
California Yellow-legged Frog (Rana boylei)	O	Sp,S,F,W	F,R,C,Rt
Pacific Tree Frog (Hyla regilla)	C	Sp	R
Tailed Frog (Ascaphus truei)	U	Sp,S,F,W	F,R,C,Rt
Rough-skinned Newt (Taricha granulosa)	C	Sp,S,F,W	W,F,R,C,Rt
Northwestern Salamander (Ambystoma gracile)	C	Sp,S,F,W	W,F,R,C,Rt
Long-toed Salamander (Ambystoma macrodactylum)	U	Sp,S,F,W	W,F,R

DEVELOPED / CULTURAL

MAMMALS

Black-tailed Deer (Odocoileus hemionus columbianus)	U	Sp,S,F,W	F
Red Fox (Vulpes fulva)	U	Sp,S,F,W	F,R,C
Beaver (Castor canadensis)	U	Sp,S,F,W	F,R,C
Common Opossum (Didelphis marsupialis)	O	Sp,S,F,W	F,R,C
Racoon (Procyon lotor)	U	Sp,S,F,W	F,R,C
Chicaree (Red Squirrel) (Tamiasciurus douglasi)	U	Sp,S,F,W	F,R,C
Spotted Skunk (Spiloqale putorius)	U	Sp,S,F,W	F,R,C
Striped Skunk (Mephitis mephitis)	U	Sp,S,F,W	F,R,C
Brush Rabbit (Sylviagus bachmani)	U	Sp,S,F,W	F,R,C
Eastern Fox Squirrel (Sciurus niger)	U	Sp,S,F,W	F,R,C
California Ground Squirrel (Spermophilus beechei)	U	Sp,S,F,W	F,R,C
Western Gray Squirrel (Sciurus griseus)	U	Sp,S,F,W	F,R,C
Moles (Scapanus spp)	U	Sp,S,F,W	W,F,R,C,Rt
Shrews (Sorex spp)	U	Sp,S,F,W	W,F,R,C,Rt
Thamomys (Thamomys spp)	U	Sp,S,F,W	W,F,R,C,Rt
House Mouse (Mus musculus)	C	Sp,S,F,W	W,F,R,C,Rt
Norway Rat (Rattus norvegicus)	C	Sp,S,F,W	W,F,R,C,Rt
Feral Dog (Canis familians)	C	Sp,S,F,W	W,F,R,C,Rt
Feral Cat (Felis domestica)	C	Sp,S,F,W	W,F,R,C,Rt
BIRDS			
Killdeer (Charadrius vociferus)	C	Sp,S,F,W	F
Ring-billed Gull (Larus delawarensis)	C	Sp,S,F,W	F,Rt
Rock Dove (Columba livia)	C	Sp,S,F,W	F,R,C,Rt
Barn Owl (Tyto alba)	U	Sp,S,F,W	R
Screech Owl (Otus asio)	U	Sp,S,F,W	F,R,C,Rt
Common Nighthawk (Chordeiles minor)	U	Sp,S,F	F,R,Rt
Vaux's Swift (Chaetura vauxi)	U	Sp,S,F	F,Rt
Anna's Hummingbird (Calypte anna)	O	F,W	F,Rt
Rufous Hummingbird (Selasphorus rufus)	C	Sp,S,F	R
Calliope Hummingbird (Stellula calliope)	O	Sp	F,Rt
Common Flicker (Colaptes auratus)	C	Sp,S,F,W	F,Rt
Yellow-bellied Sapsucker (Sphyrapicus varius)	U	Sp,S,F,W	F,R,C,Rt
Downy Woodpecker (Dendrocopos pubescens)	U	Sp,S,F,W	F,R,C,Rt
Violet-green Swallow (Tachycineta thalassina)	C	Sp,S,F	F,R
Tree Swallow (Iridoprocne bicolor)	C	Sp,S,F	F,R
Barn Swallow (Hirundo rustica)	C	Sp,S,F	F,R,Rt
Cliff Swallow (Petrochelidon pyrrhonota)	C	Sp,S,F	F,R

Name	Population Level	Use Season	Type Use
Purple Martin (Progne subis)	O	Sp,S,F	F
Scrub Jay (Aphelocoma coerulescens)	C	Sp,S,F,W	F,R,C,Rt
Common Crow (Corvus brachyrhynchos)	C	Sp,S,F,W	F,R,Rt
Common Bushtit (Psaltriparus minimus)	C	Sp,S,F,W	F,R,Rt
House Wren (Troglodytes aedon)	C	Sp,S,F	F,R,Rt
Northern Mockingbird (Mimus polyglottos)	O	W	F,C,Rt,W
Sage Thrasher (Oreoscoptes montanus)	O	Sp	F,Rt
American Robin (Turdus migratorius)	C	Sp,S,F,W	F,R,C,Rt
Varied Thrush (Ixoreus naevius)	C	Sp,F,W	F,R,C,Rt
Ruby-crowned Kinglet (Regulus calendula)	C	Sp,F,W	F,Rt,W
Cedar Waxwing (Bombycilla cedrorum)	O	W	F,Rt,W
Common Starling (Sturnus vulgaris)	C	Sp,S,F,W	F,R,Rt
Orange-crowned Warbler (Vermivora celata)	C	Sp,S,F,W	F,R,C,Rt
Yellow-rumped Warbler (Dendroica coronata)	C	Sp,S,F,W	F,R,C,Rt
Black-throated Gray Warbler (Dendroica nigrescens)	U	Sp,S,F	F,Rt
Townsend's Warbler (Dendroica townsendi)	U	Sp,S,F,W	F,Rt
Wilson's Warbler (Wilsonia pusilla)	C	Sp,S,F	F,Rt
House Sparrow (Passer domesticus)	C	Sp,S,F,W	R,Rt
Brewer's Blackbird (Euphagus cyanocephalus)	C	Sp,S,F,W	F,R,Rt
Evening Grosbeak (Hesperiphona vespertina)	U	Sp,S,F,W	F,C,Rt
Purple Finch (Carpodacus purpureus)	C	Sp,S,F,W	F,C,Rt
House Finch (Carpodacus mexicanus)	C	Sp,S,F,W	F,C,Rt
Gray-crowned Rosy Finch (Leucosticte tephrocotis)	O	W	F,Rt
Pine Siskin (Carduelis pinus)	U	Sp,S,F,W	F,Rt
American Goldfinch (Carduelis tristis)	C	Sp,S,F,W	F,Rt
Lesser Goldfinch (Spinus psaltria)	U	Sp,S,F,W	F,Rt
Rufous-sided Towhee (Pipilo erythrophthalmus)	C	Sp,S,F,W	F,C,Rt
Oregon Junco (Junco hyemalis)	C	Sp,S,F,W	F,R,C,Rt,W
Chipping Sparrow (Spizella passerina)	U	Sp,S,F,W	F,Rt,W
Harris' Sparrow (Zonotrichia querula)	O	W	F,C,Rt,W
White-crowned Sparrow (Zonotrichia leucophrys)	C	Sp,F,W	F,C,Rt,W
Golden-crowned Sparrow (Zonotrichia atricapilla)	C	Sp,F,W	F,C,Rt,W
White-throated Sparrow (Zonotrichia albicollis)	O	W	F,C,Rt,W
Fox Sparrow (Passerella iliaca)	U	Sp,F,W	F,C,Rt,W
AMPHIBIANS AND REPTILES			
Rubber Boa Snake (Charina bottae)	O	Sp,S,F,W	W,F,C,R,Rt
Ring-necked Snake (Diadophis punctatus)	O	Sp,S,F,W	W,F,C,R,Rt
Racer Snake (Coluber constrictor)	O	Sp,S,F,W	W,F,C,R,Rt
Gopher Snake (Pituophis melanoleucus)	O	Sp,S,F,W	W,F,C,R,Rt
Northwestern Garter Snake (Thamnophis ordinoides)	O	Sp,S,F,W	W,F,C,R,Rt
Common Garter Snake (Thamnophis sirtalis)	O	Sp,S,F,W	W,F,C,R,Rt
Rough-skinned Newt (Taricha granulosa)	U	Sp,S,F,W	W,F,C,R,Rt
Western Fence Lizard (Sceloporus occidentalis)	O	Sp,S,F,W	W,F,C,R,Rt
Pacific Tree Frog (Hyla regilla)	O	Sp,S,F,W	W,F,C,Rt
Clouded Salamander (Aneides ferreus oregonesis)	O	Sp,S,F,W	W,F,C,Rt
Long-toed Salamander (Ambystoma macrodactylum)	O	Sp,S,F,W	F,C
Oregon Red-legged Frog (Rana aurora)	O	Sp,S,F,W	W,F,C,Rt

APPENDIX 3
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The following listed publications are either in the library of RUFF,CAMERON, LACOSS AND ASSOCIATES or are located at one of the following:

Eugene Register Guard, Eugene, Oregon
Lane County Pioneer Museum, Eugene, OR.
The Springfield News, Springfield, OR.
University of Oregon Library, Eugene, OR.

Sources of maps, aerial photographs and other base data are from:

Army Corps. of Engineers, Portland, OR.
CH2M Hill, Portland, Oregon
Chickering-Green Empire, Inc. Eugene, OR.
City of Springfield Planning Department
City of Springfield Public Works Dept.
Department of Transportation, Salem, OR.
Genealogical Forum of Portland, Oregon
Lane Council of Governments (L.C.O.G.)
Lane County Parks and Open Spaces
Lane County Planning Department
Lane County Soils and Conservation Dept.
Oregon Filbert Control Board, Portland, OR.
Oregon State Dept. of Geology, Salem, OR.
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APPENDIX 4
INDEX

MAPS

DIAGRAMS & CHARTS