GOAL 5 - LAND NEEDED AND DESIRABLE FOR OPEN SPACE

A. Introduction:

"Effective"[1] open space and adequate recreational opportunities are key ingredients in Hood River's attractiveness as a place to live and work. Man-made park sites have been developed over the years. Natural landmarks, such as Mt. Hood, Mt. Adams and the Columbia River Gorge add spectacular quality to the beauty of our area. Views of these landmarks are important for the enrichment of area residents as well as for encouraging tourist visitation.

Open space can be thought of as a system, somewhat like a transportation system, although it provides a much different service. The open space system is made up of both man-made and natural elements. Man-made elements include developed parks, vacant city lots, parking lots, school fields, orchards, etc. Natural elements include woodlots, forests, river gorges and drainages. Several natural corridors which connect different types of open space are evident in the City/Westside area. These include the Columbia Gorge, the Indian Creek Gorge, Hood River Gorge, and the elongated hills to the east and west. For information on open space resources, see Goal 5, Background Report - A - Land Needed or Desirable for Open Space.

These natural corridors are very important in providing continuity between places and in providing an opportunity for a large part of our populace to come in visual contact because the perimeter (outer boundary) of a linear space is longer than the perimeter of a square space of the same area[2]. It is important to provide public access along or into these corridors of open space.

B. Definition: Open Space:

Open Space Areas are defined as lands used for agricultural and forest uses, and any land area that would, if preserved and continued in present use: conserve and enhance natural or scenic resources; protect air or streams or water supply; promote conservation of soils, wetlands, beaches or tidal a marshes; conserve landscaped areas, such as public or private golf courses, that reduce air pollution and enhance the value of abutting or neighboring property; enhance the value to the public of abutting or neighboring parks, forests, wildlife preserves, nature reservations or sanctuaries or other open space; or promote orderly urban development.

A substantial portion of the County's land base is utilized for agricultural and forest uses. For example:

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[1] Open space, as a recreation area, as a noise or sight buffer, as providing continuity between places, as having a positive effect on property values, or as providing aesthetic value.

[2] As an example, we can take an area of four square miles. As square, it would have a perimeter of eight miles. As a strip one-half mile wide its perimeter would be 18 miles. Thus, a long, narrow open space permits more visual contact than a large block of open space.

1. Approximately 114± square miles or 83% of the County's private land base (138± square miles) is planned and zoned either Forest or Farm. Of the total, 69± square miles or 50%± is planned and zoned Forest. Development (residential, commercial, industrial) will be highly restricted in 83% of the County's private land base due to resource zoning. Intensive development is restricted to only 1%± of the County's private land base.

2. Approximately 87% of the County's entire land base or 460 square miles is zoned Forest, and the majority of these lands are primarily for maintaining, growing, harvesting forest resources and other related forest uses.

C. Central Valley/Mt. Hood Areas:

1. Central Valley: Open space includes all farm and forest lands and floodplain areas and Tucker Park (County). These areas are protected by plan and zoning designations of Farm, Forest, and Floodplain. The designations of Farm and Forest dominate the area.

2. Mt. Hood Area: Major open space areas dominating this area include lands planned and zoned Farm and Forest. The remainder of the area is within the Mt. Hood National Forest. Open space dominates federal lands. Related activities on federal lands include Mt. Hood Meadows and Cooper Spur winter sports areas and the parks, trails and campgrounds associated with the forest. The Parkdale Lava Beds, also designated Forest and Farm, are considered an open space area. Tollbridge Park (County) is also located in the area and is designated Farm, Forest and Floodplain.

D. Golf Course:

The golf course is a recreational activity and the County's response is presented under Goal 8 - Recreational Needs.

E. Conclusions and Observations: Findings:

1. An inventory of existing open space areas needs to be made, along with identifying those open space areas that need to be maintained as open space for the public interest.

2. As a general rule, the erection of new outdoor advertising signs is inappropriate except in Commercial or Industrial zones.

3. See the County Policy Document, Goal 5.

GOAL 5 - MINERAL AND AGGREGATE RESOURCES

The County's inventory is presented in the three following attachments:

A. Inventoried sites are discussed in Mineral and Aggregate Resources Analysis Report, 1983, Attachment "A". This report discusses location, quantity, quality, etc., provides the Goal 5 evaluation and recommendations.

B. A map entitled "Mineral and Aggregate Sites, Hood River County, 1983, shows the general location of all the sites included in the inventory (Attachment "B"). This is an index map; specific site location maps are included in the Goal 5 Analysis.

C. The inventory was completed using information found in the Comprehensive Plan and Background Reports (all four plans) and new information obtained from: (a) the Oregon State Highway Department, (b) United States Forest Service, (c) Hood River County Department of Public Works. See "Inventory of Hood River County Mineral and Aggregate Sites, 1983" (Attachment C).

D. Overall, Hood River County has few mineral and aggregate resource sites that can provide adequate rock to meet road construction specifications. Quality and quantity of resources have been stated for each site inventoried, however this information has been provided by the property owner or determined through a permit application. A fair assumption is made that in most situations individuals will have a bias and state that they have good to very good rock quality, however experience has shown that in most cases the rock is not adequate for road purposes.

ATTACHMENT "A"

MINERAL AND AGGREGATE SITE ANALYSIS REPORT, 1983

[*]Seventy sites were inventoried and they were classified as follows: 43, USFS; 7, Hood River County; 17, private; 2, other public; and 1 joint ownership, Hood River County and the Oregon State Highway Department.

Inventoried sites are discussed under the following categories: (A) Delay Goal 5 Process; (B) Sites Zoned Forest; (C) Sites Zoned Forest/Columbia Gorge Combining; (D) Sites Zoned EFU; (E) Sites in Environmental Protection Designation; (F) Sites Zoned Industrial (M-1); (G) Sites Zoned M-2 (Light Industrial) and CG (Columbia Gorge); and (H) USFS Sites. A separate report will be prepared regarding the Green Pit (Site 27).

Site numbers are the same as listed in Attachment "C".

A. Delay Goal 5 Process:

l. Location: (1) Hood River County Dukes Prospect; (13) Hood River Sand & Gravel Prospect; (16) Bohemia, Inc.; (17) Bohemia Sand Pit; (19) Champion; (20) Champion Green Point; (24) Drake Pit; (25) Mitchell Point; and (26) Kirby Talus (see Attachment "B" and "C").

[**]2. Quantity and Quality: See Attachment "C".

3. Discussion: There is a need for additional information regarding the exact location, quality and quantity of each site. Two are prospect sites; six are inactive, and four are within the Columbia Gorge.

Owners of sites (16) and (17) stated they currently have no interest in utilizing them for aggregate, etc.

Sites in the Columbia Gorge are subject to existing County policies which limit quarrying operations.

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[*] The list is not exclusive.

[**] Rating for "quantity and quality" based on the following factors:

A. Owner or operator of pit was asked to rate the site based on: (1) Comparison with similar rock sources in the County (i.e., basalt compared to basalt, sand to sand); (2) Marketability; (3) Clear or dirty; (4) Other information, such as any lab tests by OSHD to check compliance with OSHD specifications for particular uses.

B. Private source ratings were "bounced off" Public Works and OSHD (Dave Brooks). Some discrepancies were noted (i.e., final rating given a poor to good quality. Sometimes depends on what type of job it is used for.)

C. Ratings were compared with lab tests when available (generally only on OSHD sources and County sources).

D. Other source comments by DOGAMI on annual site inspections, etc.

A Surface Mining Combining Zone was approved by the Planning Commission for (24) Drake Pit, however it was appealed to the Board and then withdrawn. It is possible that a portion of the Drake Pit is in the Environmental Protection Plan designation which does not allow extraction

Overall, include in Plan Inventory as 1B Sites (Delay Goal 5 Process) and address when actual application is made for development. County policy ensures that the Goal 5 process will be addressed at the time development is requested.

4. Recommendation:

   a. Add the above information into the Background Document.

   b. Include the following sites in the Plan Inventory and designate them 1B (Delay the Goal 5 Process) and address them when actual application is made for development: (1), (13), (16), (17), (19), (20), (24), (25), and (26).

B. Sites Zoned Forest:

1. Location: (2) West Fork Neal Creek; (3) Dee Pit; (7) Old Dalles-Sandy Wagon Road Pit; (8) Ash Creek; (12) Duke's Valley Quarry; (21) Settje Sons Paving; and (22) Winans Dee Quarry (see Attachment "C").

2. Quantity and Quality: See Attachment "C", Hood River Inventory Mineral Aggregate Sites.

3. Conflicting Uses and Consequences: Overall conflicting uses within the Forest Zone include: areas for conservation of wildlife, soil, water, etc.; and recreation areas and facilities.

   A site specific water problem was noted at the Dukes Valley Quarry (site 12), however this conflict was addressed through the conditional use process.

   The Old Dalles-Sandy Wagon Road (site 7) is located in an area designated Big Game Winter Range and Turkey Habitat by the State Fish and Wildlife Department. Further expansion of this site will require review and comment by the Department of Fish and Wildlife.

   Sites (22) and (2) (Winans Dee Quarry and West Fork Neal Creek) are inactive and neither have an operating permit from DOGAMI or Hood River County. The appropriate time to review the consequences and complete a site specific analysis is when a need is established and the use is requested.

   Site (8) (Ash Creek) was utilized for Highway 35 construction and has a limited amount of material remaining. Surface Mining Combining Zone was applied by

the County and a Surface Mining Permit was issued by DOGAMI. A limited amount of material remains which could be removed. Termination date of the site was December 31, 1982. After final inspection for reclamation, etc., the site will be closed.

The County's Surface Mining Combining Zone, accepted by the LCDC, regulates uses, limitations, dimensional standards, rehabilitation and termination dates of sites. Proposed Mineral and Aggregate Resource Strategies require Goal 5 evaluation and application for the Surface Mining Combining Zone prior to creation of new sites or expansion of existing sites. In addition, other strategies are intended to mitigate potential problems when application is made for the Surface Mining (SM) Combining Zone. When applications are made, referrals are sent to the following applicable agencies: DOGAMI, State Water Resources Board; Nature Conservancy; Public Works; etc. Continuation of the Forest Zone in the interim will also assist in mitigating conflicts.

Sites (12) and (21) are private, commercial operations; sites (3), (7) and (8) are County, however only (3) and (7) are currently active; site (8) is non-active; site (22) is non-active and under public ownership. Sites (12), (21), and (3) have County and DOGAMI permits, while site (7) has a Limited Exemption Permit from DOGAMI. Sites (3), (7), (12), and (21) are in active use and found to be important. Existing and proposed plan policies, strategies, etc., support continued operation of existing sites.

The following is an ESEE analysis:

Economic: Somewhat of an economic hardship to those who have obtained appropriate permits and spent funds to develop sites; underutilization of existing and potential future sites where substantial investments are already noted. Indirect loss of recreational-associated revenues in some areas. Possibly additional funding required to assist in mitigating conflicting uses.

Social: Somewhat more acceptance by the public of sites already in existence that have permits through the public hearing process or other accepted processes commensurate with the state of the art when application was made. Development of new sites could generate complaints regarding noise, dust, blasting, etc.

Environmental: Possible limited disruption of fish and wildlife habitat, and air and water quality. Forest lands are natural areas where mineral and aggregate are found, consequently impacts on resources of allowing noted conflicting uses are limited.

Energy: Exploration and development of alternative sites would require additional energy. Recreationists, hunters, etc., would consume energy seeking alternative areas. Additional energy consumed regarding any reclamation project.

4. Recommendations:

a. Add the above in the County Background Document.

b. Include the following Mineral and Aggregate sites in the Plan Inventory: (2), (3), (7), (8), (12), (21), and (22).

c. Designate the following 3A sites (Protect the Resource): (12) Dukes Valley Quarry; (21) Settje Sons Paving; (3) Dee Pit; and (7) Old Dalles-Sandy Wagon Road Pit. Apply the Surface Mining Combining Zone to the above sites based upon compliance with the following criteria:

(1) Compliance with all prior conditions of approval noted in previous permits; and

(2) Any further expansion of the activities, uses, or extraction areas beyond that allowed through previous permits, etc., shall be subject to compliance with the provisions and requirements in the Surface Mining Combining Zone.

d. Designate the following Mineral and Aggregate Sites 3B (Allow Conflicting Uses Fully): (22) Winans Dee Quarry; (2) West Fork Neal Creek; and (8) Ash Creek.

C. Sites Zoned Forest/Columbia Gorge Combining:

1. Location: Site (11), Koberg Quarry; site (6), East Pit; site (9), George Quarry; and-site (10), Hanel Quarry; see Attachment "C".

2. Quantity and Quality: See Attachment "C".

3. Conflicting Uses and Consequences: Sites (9), (10), and (11) are commercial sources. Sites (9) and (10) have permits from DOGAMI. Site (6) is a County-source and has a permit from DOGAMI and is located a considerable distance from major use areas and the County is seeking alternative sites. All are active sites.

County-Goals, Policies, and Strategies support protection of the scenic qualities of the Gorge. The County has existing Policies, Strategies, etc., which allow existing operations to continue while limiting future development of aggregate sites that will impact the Gorge.

Reclamation will be required when existing operations cease and no expansion will be allowed beyond original permit limits unless it meets the limitations for new sites. Consideration is given to the need for public agencies to remove rock for road alignment and public safety. In summary, conflicts exist: expansion is

limited, new development is limited to specific standards, Surface Mining Combining Zone will not be applied to existing sites, existing sites will be regulated by conditional use and DOGAMI permits.

Economic: Eventual loss of commercial and County rock sources. Indirect negative impacts to scenic and tourism value and revenues.

Social: Eventual phasing out of sites will cause dislocation of uses, people, etc., to alternative sites which could generate complaints. Increasing numbers of conflicting uses may result in loss of "local focus" (scenic gorge) and recreation opportunities may be limited.

Environment: Those complaining about existence of aggregate sites will continue and those seeking to protect the environmental quality of the Gorge will undoubtedly continue. Those who desire to retain aggregate resource sites in the Gorge will continue to have their opinions. Continual negative impacts on visual resources in the Gorge.

Energy: If source were discontinued, alternative sites would have to be developed. Loss of nearby source of aggregate for users.

4. Recommendations:

   a. Add above to County Background Document.

   b. Designate sites (6), (9), (10), and (11) 3B (Allow Conflicting Uses Fully).

   c. Allow public agencies to remove rock for road alignment and public safety.

   d. As determined by the County, compliance with applicable Surface Mining Guidelines listed in the Oregon and Washington Columbia River Gorge Commission's Resource Management Plan, Columbia River Gorge, 1982.

D. Site Zoned EFU:

1. Location: Site (5), Alameda Pit (Hood River County); see Attachment "C", Inventory of Hood River County Mineral and Aggregate Sites, 1983.

2. Quantity and Quality: See Attachment “C”.

3. Conflicting Uses and Consequences: Although the site has been inactive for at least five years, the Department of Public Works has requested that the site be included in the Inventory. In 1977, the County made application for a Conditional Use Permit to reactivate the site, but after a public hearing at which

concerns were raised by neighbors, the application was withdrawn. The County, however, has a Limited Exemption Permit from DOGAMI.

Public and private conservation areas, churches, and schools are uses permitted outright in the EFU Zone. The high school is presently located within walking distance of the site, but Indian Creek is an effective natural barrier.

In addition other potential conflicts exist with uses which are permitted conditionally, however these would be addressed at public hearings when application is made for either the conflicting use (Conditional Use Permit) or the resource (Surface Mining Combining Zone) and will not be discussed here.

Sand pit is inactive. Predominant uses of the surrounding area are farm and rural residential. Hood River Valley High School is within 1/2 mile of the site. In addition to the general conflicts noted above, a known site specific conflict exists (spring) which should be addressed prior to the County resuming operation of the site.

Plan policies support the continuation of existing sites. As this site has been inactive, a zone change would be required to apply the Surface Mining Combining Zone (SM).

Economic: Operation may be limited, capital expenditure may be necessary to protect public from dangers (i.e., fencing, etc.). If the site is discontinued, loss of resource to the County. Require additional funds for County to pursue another site. Expenditures to buffer resource site from school, etc.

Social: Neighbors have concerns about activities at the site, however attitudes can change. Safety concern if more intensive uses such as churches, schools, residential, etc., occur in the area. Provide a source in close proximity to the County's population base.

Environmental: Force the County to seek other sites and if occupied could cause negative impacts regarding the environment especially if site is new. Noise, dust, etc., from quarry operations.

Energy: If source is discontinued, alternative sites may have to be explored at additional cost and consumption of energy. Additional energy and costs consumed in providing mitigating measures for protection of surrounding uses.

4. Recommendations:

   a. Add the above information to the County Background Document.

   b. Designate site (5), Alameda Pit 3B (Allow Conflicting Uses).

E. Site in Environmental Protection Designation:

1. Location: (23) Smullen, see Attachment "C".

2. Quantity and Quality: See Attachment "C".

3. Conflicting Uses and Consequences: Quarry is in an area designated in the Plan as "Environmental Protection". Mineral extraction is not permitted. The environmental impacts are the greatest. Conflicts relate to public health and safety or are resource vs. resource (i.e., rock source vs. water source, etc.). Xerofluvents are prevalent at the site. The river in this area is designated as a special flood hazard area by HUD (U.S. Department of Housing and Urban Development) and was the site of a wash-out and consequent flood damage in December, 1980. The quarry was partially inundated by flood waters at this time.

   An analysis below of ESEE consequences and consideration of other Goal 5 resources indicates the maintenance of the Environmental Protection designation should be foremost. The Planning Commission determined in November, 1982, that this site was an existing non-conforming use and approved a Conditional Use Permit which allowed the use to be reinstated. Purpose of the reinstatement was to assist in completion of Highway 35. Conditions were attached which were intended to mitigate specific conflicts resulting from close association with an environmentally fragile area, and include the applicant complying with any further requirements of any agencies having jurisdictional control (i.e., Fish and Wildlife, Department of Environmental Quality, Natural Heritage Program, and others). Use of the site is limited to the prior mined area. The applicant is required to comply with the reclamation plan which was submitted August 24, 1982. The Surface Mining Combining Zone has not been applied.

   Considering the input of the varied public agencies and the conditional nature of the permit, the above mentioned measures should be adequate to allow the resource site while allowing conflicting uses. The burden of ensuring the Environmental Protection area is maintained is upon the quarry operator (Oregon State Highway Division).

   The Planning commission decision was appealed to the Board and was dismissed. The decision was also appealed to LUBA (File 82-090), however it was either withdrawn or no action was taken. The Circuit Court, Hood River County in Case No. 9234 stipulated that the Planning Commission's prior order is modified to reflect additional stipulations.

   Economic: Underutilization of an existing resource site. Reclamation and costs to maintain fragile environment. Additional cost involved in seeking and developing other sites. Substantial cost in preparing site to protect surrounding natural environment.

Social: Negative visual impacts to those driving along the scenic Mt. Hood Highway. In developing alternative sites complaints regarding dust, noise, impacts on environment noted.

Environmental: See comments discussed above.

Energy: Energy consumed in identifying alternative sites, however this site is in close proximity to Highway 35, therefore a long distance and further consumption of energy would not be noted.

4. Recommendations:

a. Include the above in the County Background Document.

b. Designate site (23), Smullin, 3B (Allow Conflicting Uses).

F. Sites Zoned Industrial (M-1):

1. Location: (14) Cascade Locks Pit and (18) Government Cove.

2. Quantity and Quality: See Attachment "C".

3. Conflicting Uses and Consequences: None. Sites are in areas zoned for industrial use (M-1) and are within the Cascade Locks Urban Growth Boundary. Sites are not subject to the Columbia Gorge Combining Zone. Site (14) does have a Limited Exemption Permit from DOGAMI and is a pre-existing use (prior to zoning).

The sites are in the UGB of the City of Cascade Locks/ This Plan was acknowledged by the LCDC October 6, 1978. It seems appropriate to preserve the site because of its past history, DOGAMI permits and the Cascade Locks Plan recognized the sites.

The following comments relate to the Government Cove site: (1) Cascade Locks Plan supports use of the site as a Natural Resource Area to be utilized for open space uses (after appropriate reshaping and rehabilitation); (2) The U.S.F.S. Plan supports use of rock sources for the construction of the proposed navigational lock at Bonneville Dam and utilizing the excess excavation from locks construction to reshape and rehabilitate the remaining pit (U.S.F.S. Report; Rock Pit Reclamation Government Cove, Columbia River Gorge, Oregon; Proposal to utilize Excess Material from Proposed Navigational Lock Project at Bonneville Dam.); (3) the majority of the site is located within the Cascade Locks Urban Growth Boundary and is zoned M-1, Industrial; (4) a land exchange is currently under way between the Port of Cascade Locks U.S.F.S. and Bohemia; the Port to receive the actual rock site while the U.S.F.S. to receive lands south of the freeway; (5) the County Commissioners have approved the land trade; (6)

removing rock, rehabilitation, etc., from the site will require the property owners to obtain a Surface Mining Combining Overlay Zone; and (7) the site is jointly owned by the Port and Bohemia.

4. Recommendations:

a. Include the above in the County Background Report.

b. Designate site (14), Cascade Locks Pit and (18) Government Cove 2A (No Conflicting Uses Identified). Support the Surface Mining Combining Zone subject to compliance with the following criteria:

(1) Application to County for SM Zone; recommend fees waived.

(2) Compliance with all prior conditions of approval noted in previous permits.

(3) Approval by the City of Cascade Locks subject to applicable provision in the Cascade Locks Plan;

(4) Any further expansion of the activity, work or extraction area beyond that allowed through previous permits, etc., shall be subject to compliance with the provisions and requirements of the Surface Mining Combining Zone.

G. Site Zoned M-2 (Light Industrial) and CG (Columbia Gorge Zone):

1. Location: Site (15), Hood River Sand & Gravel Co. (Tawn Mar, Inc.); see Attachment "C".

2. Quantity and Quality: See Attachment "C".

3. Conflicting Uses and Consequences: Quarry property is zoned M-2 (Light Industrial). Surrounding land use commercial to the west, quarry sites to the east, industrial, site (9) George Quarry) and site (10) (Hanel Quarry), and rural residential to the south. As the site is highly visible from both the Oregon and Washington State Highways, the impact area is greater than the limits of the subject property.

As the quarry site is the only land zoned for industrial use in the immediate area and the operation dominates the site, any conflicts would most likely be with the surrounding uses. (Note: Hood River Sand and Gravel requested the Comprehensive Plan and Zone Change from Forest/Columbia Gorge to Light Industrial/Columbia Gorge in 1981.) The source is nearly exhausted and it is proposed that the quarrying operation will be phased out and light industrial uses

developed consistent with the zone. No reclamation has been required by the State and the County regulates the operation through a Conditional Use Permit.

County goals and policies support protection of the scenic quality of the Gorge. Strategies have been proposed which will limit expansion and development of future sites in the Gorge. County policy is to not zone any sites within the Columbia Gorge boundary as Surface Mining, however, the current use will be allowed to continue subject to the terms and conditions of the Conditional Use Permit. Any future use of the land must meet the requirements of the M-2 and Columbia Gorge Combining Zones.

The M-2 Zone permits "light industrial" uses. The zone description describes these uses as having characteristics which allow them to be permitted in relatively close proximity to residential, commercial, and farm zones. The Ordinance states that permitted uses shall not be obnoxious for reasons of smoke, fumes, noise, sewage, air pollution, etc. When the property is redeveloped the County will be able to regulate landscaping, site drainage, buffering, etc. through the M-2 and Columbia Gorge Combining Zones. These will minimize conflicts with the scenic character of the Gorge and surrounding properties.

Hood River Sand and Gravel Quarry has a Grant of Exemption Permit from DOGAMI. They are not obligated to any reclamation when current quarrying operations cease. They are obliged to limited reclamation as per the County Conditional Use Permit issued to them in 1974. A county Strategy mandates rehabilitation.

Economic: Expense necessary to adequately buffer quarry site from surrounding commercial and residential uses and future light industrial uses and to reduce visual impact on Gorge and transportation routes. Expense to reclaim site. Threat to scenic and tourism values and associated revenues.

Social: Relocate those employed in mineral and aggregate, however new uses will provide new job opportunities. Through phasing out of site, alternatives will be sought and common complaints against noise, dust, etc., will be noted. Increasing number of conflicting uses may result in loss of "local focus" (Scenic Gorge). Visual impact on neighboring uses. Phasing out of site acceptable to those concerned about the visual qualities of the site.

Environmental: Reclamation of the site would be a positive impact. Continuation of mineral activity could negatively impact air quality, noise, arouse complaints as to whether the site is being developed within its approved parameters.

Energy: If source were discontinued, alternative sites would have to be developed resulting in energy consumption. Alternative sites indicate longer hauling routes which relate to additional consumption of energy. Additional energy consumed in reclaiming site.

4. Recommendations:

a. Include the above information in the County's Background Document.

b. Designate site (15), Hood River Sand & Gravel Co. (Tawn Mar, Inc.) 3B (Allow Fully Conflicting Uses).

H. USFS Sites:

1. Location: See Attachment "C", Hood River County Inventory, Mineral and Aggregate Sites, sites (28) through (70).

2. Quantity and Quality: See Attachment "C".

3. Discussion: The U.S. Forest Service has provided the County with an inventory of 43 resource sites within Hood River County. The inventory details location, quality, quantity and management options for the majority of these sites. A simple inventory of available information on these sites will be adequate and it will not be necessary to complete the Goal 5 process. All sites are classified 1C.

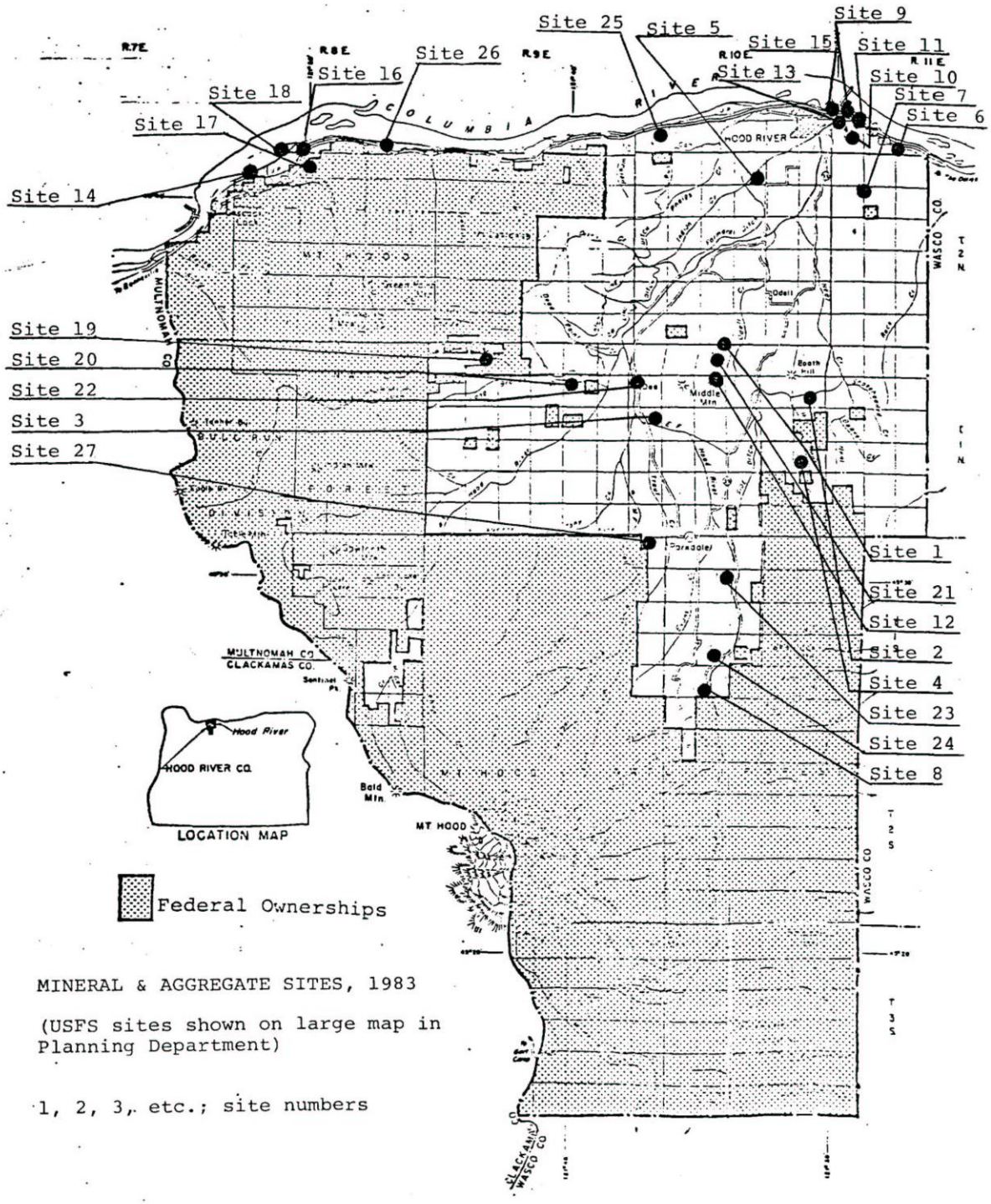
4. Recommendations:

a. Support the U.S. Forest Service management activities for resource sites located on their lands.

b. If USFS mineral and aggregate sites become private lands, they will be required to be evaluated under the Goal 5 process and if deemed necessary, obtain Surface Mining Combining Zone at the time development is requested.

c. Designate all USFS sites 1C (Include on Plan Inventory), however the County is not required to complete the Goal 5 process.

ATTACHMENT "B"



For specific details see large scale map, Mineral & Aggregate Resource Sites, Hood River County, 1983, Hood River County Planning Department, Hood River, Oregon.

ATTACHMENT "C"
INVENTORY OF HOOD RIVER COUNTY MINERAL AND AGGREGATE SITES, 1983

Site No.	Name (OWNERSHIP)	Location (T, R, Sect.)	Quantity (CUBIC YARDS)	Quality	Plan & Zone Designation	Goal 5 Designation	Comments
1.	Dukes Valley Prospect (Hood River County)	1N 10E NE¼	U	U	Forest (FR)	1B	Prospect
2.	West Fork Neal Creek (Hood River County)	1N 10E SE, NE, 12	300,000	Good	Forest (FR)	3B	Development discontinued
3.	Dee Pit (Trout Creek) (Oregon State Highway & Hood River County)	1N 10E 18 #400	50,000	Poor to Good	Forest (FR)	3A	CUP #972 (1971) by OSHD: CUP (1974);DOGAMI Surface Mining Permit
4.	No Name (Hood River County)	1N 10E SW, SE, 24	U	U	Forest (FR)	1B	Purchased from U.S.F.S.
5.	Alameda Pit (Hood River County)	2N 10E 3A #1400	1,000	Good	Farm (EFU)	3B	Inactive; DOGAMI Total Exception Permit, CUP withdrawn
6.	East Pit (Hood River County)	2N 11E 4 #100 3N 11E 33 #100	200-300,000	Good	Forest (FR) CG	3B	DOGAMI Limited Exception Permit, No County permit.
7.	Old Dalles-Sandy Wagon Road Pit (Hood River County)	2N 11E NW, NW 8, #200	10-15,000	Poor-Good	Forest (FR)	3A	DOGAMI Limited Exception
8.	Ash Creek (Hood River County)	1S 10E 29 #500 1S 10E 30 #1500	500-1,000	Good	Forest (FR)	3B	County SM Zone; discontinued by end of 1982
9.	George Quarry (J. Arlie Bryant, Inc)	3N 11E 30 #1000 3N 11E 31 #500 3N 11E 31B #100 (portion)	35 million	Very Good	Forest (FR) CG	3B	CUP #1248 (1972); DOGAMI Limited Exemption Permit

*Definitions:

CUP: Conditional Use Permit
DOGAMI: State Department of Geology and Mineral Industries
Limited Exemption: DOGAMI term.
Numbers: 1A, 1B, 3A, 3B, etc. See Attachment "A", Mineral & Aggregate Site Analysis Report, 1983.
OMA: United States Forest Service Term; Suitable for Other Management Activities.
Quantity & Quality: This information was provided by property owner or determined through permit applications.
SM: Surface Mining and Combining Zone.
Total Exemption: DOGAMI term.
"U": Unknown

Site No.	Name (OWNERSHIP)	Location (T, R, Sect.)	Quantity (CUBIC YARDS)	Quality	Plan & Zone Designation	Goal 5 Designation	Comments
10.	Hanel Quarry (J. Arlie Bryant, Inc.)	3N 11E 31 #301	100,000	Poor	Forest (FR) CG	3B	CUP #1229; DOGAMI Surface Mining Permit
11.	Koberg Quarry (B&D Pit) (J. Arlie Bryant, Inc.)	3N 11E 31 #100 3N 11E 31 #200 (portion)	500,000	Good	Forest (FR) CG	3B	DOGAMI Limited Exemption
12.	Dukes Valley Quarry (J. Arlie Bryant, Inc.)	1N 10E 3 #2101 1N 10E 10 #1401, 1402	5,000,000	Very Good	Forest (FR)	3A	CUP #1753 (1971); DOGAMI Limited Exemption Permit
13.	Hood River Sand & Gravel Co. (Tawn Mar, Inc.)	3N 11E 31 #800	Estimate 2,000,000	Good	Forest (FR) CG	1B	Prospect
14.	Cascade Locks Pit (Hood River Sand & Gravel; Tawn Mar, Inc.)	2N 8E 6 #200	900,000	Good	M-1	2A	DOGAMI Limited Exemption Permit
15.	Hood River Sand & Gravel Co. (Tawn Mar, Inc.)	3N 11E 30 #700, 800, 900, 1001	900,000	Good	M-2/CG	3B	CUP #1522 (1974); Plan & Zone Change #81-64
16.	Bohemia, Inc.	3N 8E 33	U	U	Scenic (SP) Protection	1B	Inactive
17.	Bohemia Sand Pit (Bohemia, Inc.)	2N 8E 4	U	Good	Scenic (SP) Protection	1B	Inactive; CUP 9/24/75; CUP 9/24/75
18.	Government Cove (Bohemia, Inc. & Port of Cascade Locks)	2N 8E 5 #100, 300	U	Good	M-1	2A	Highly visible, Inactive; CUP (1979); operations to lease (1981)
19.	Champion (Champion)	1N 9E SW, NE, 5	U	U	Forest (FR)	1B	
20.	Green Point (Champion)	1N 9E NE, NW, 11	25,000	Fair	Forest (FR)	1B	
21.	Settje Sons Paving (Lile Dudley)	1N 10E NE, SE, 4	Estimate 2 million	Good	Forest (FR)	3A	Zone Change (#80-85) and CUP DOGAMI Surface Mining Permit
22.	Winan's Dee Quarry (Mt. Hood Railroad)	1N 10E NW, 7 #300	Estimate 50,000	Poor to Good	Forest (FR)	3B	Unused since 1950's
23.	Smullen (Oregon State Highway)	1S 10E 9	400,000	Poor to Good	Forest (FR)	3B	CUP, pre-existing, non-conforming use (1982) DOGAMI permit
24.	Drake (Mt. Hood Meadows, Oreg. LTD)	1S 10E 20 #100, 1200, 1600	U	Good	Forest (FR)	1B	Estimate 1/2-3 million – inactive Zone Change #82-95 denied

Site No.	Name (OWNERSHIP)	Location (T, R, Sect.)	Quantity (CUBIC YARDS)	Quality	Plan & Zone Designation	Goal 5 Designation	Comments
25.	Mitchell Point Talus (Oregon State Highway	3N 10E 31	U	Good	Forest (FR) CG/GH	1B	Inactive
26.	Kirby Talus (Private)	2N 8E 1 #600	U	U	Scenic (SP) Protection	1B	Temporary use during freeway construction
27.	Green Pit (Private)	1S 9E 1 #200, 201			Forest (FR)/SM Farm (EFU)/SM	See Separate Report	DOGAMI Surface Mining Permit; Zone Change to SM (#81-14) appealed to LUBA; remanded to County. Separate report being prepared.
28.	Mosquito Ridge (USFS)	1N 8E NW, SE, 13	U	U	Forest (FR)	1C	OMA*
29.	Billy Dick (USFS)	1N 8E SE, SE, 15	U	Fair	Forest (FR)	1C	OMA
30.	(N10824M) (USFS)	1N 8E NW, SW, 24	0-10,000	U	Forest (FR)	1C	OMA
31.	(N10825D) (USFS)	1N 8E NW, SW, 25	0-10,000	Fair	Forest (FR)	1C	OMA
32.	(N10826D) (USFS)	1N 8E NW, NW, 26	0-10,000	U	Forest (FR)	1C	OMA
33.	(N10827J) (USFS)	1N 8E NE, SE, 27	0-10,000	U	Forest (FR)	1C	OMA - no potential
34.	(N10833F) (USFS)	1N 8E SE, NW, 33	0-10,000	U	Forest (FR)	1C	OMA
35.	(N10833A) (USFS)	1N 8E NE, NE, 33	70-200,000	Very Good	Forest (FR)	1C	Inactive; access problems.
36.	Raker Point (USFS)	1N 8E NE, SW, 33	70-200,000	Good	Forest (FR)	1C	
37.	(N10836C) (USFS)	1N 8E NE, NW, 36	0-10,000	U	Forest (FR)	1C	OMA
38.	(N11036E) (USFS)	1N 10E SW, NE, 36	U	U	Forest (FR)	1C	OMA
39.	(N20929C) (USFS)	2N 9E NE, NW, 29	0-10,000	Fair	Forest (FR)	1C	OMA
40.	Defiance (USFS)	2N 9E SE, NE, 29	30-70,000	Good	Forest (FR)	1C	
41.	(S10802M) (USFS)	1S 8E NW, SW, 2	0-10,000	U	Forest (FR)	1C	OMA little potential

* USFS Classification – suitable for Other Management Activities.

Site No.	Name (OWNERSHIP)	Location (T, R, Sect.)	Quantity (CUBIC YARDS)	Quality	Plan & Zone Designation	Goal 5 Designation	Comments
42.	Jones Creek (USFS)	1S 8½E NW, SW, SW, 2	0-10,000	U	Forest (FR)	1C	OMA
43.	Old Jones Creek (USFS)	1S 8 ½E SW, SW, SW, 2	0-10,000	U	Forest (1C)	1C	OMA
44.	(S10803P) (USFS)	1S 8E SE, SW, 3	None	N/A	Forest (FR)	1C	OMA no potential
45.	Marco Creek (USFS)	1S 8½E SE, NE, 13	Greater than 200,000	Good	Forest (FR)	1C	
46.	Butcherknife (USFS)	1S 8E NE, SW, 23	70-200,000	Fair to Good	Forest (FR)	1C	Inactive
47.	(S10823R) (USFS)	1S 8½E SE, SE, 23	250,000	Good	Forest (FR)	1C	Inactive
48.	(S10824BNE) (USFS)	1S 8E NE, NW, NE, 24	30-70,000	Good	Forest (FR)	1C	Inactive
49.	Tower (USFS)	1S 8E SW, NW, NE, 24	50,000	Good	Forest (FR)	1C	Inactive
50.	(S10826A) (USFS)	1S 8½E NE, NE, 26	10-30,000	Good	Forest (FR)	1C	Inactive
51.	Ladd Creek (USFS)	1S 8½E NW, SW, 35	Less than 5,000	U	Forest (FR)	1C	OMA
52.	Blue Ridge (USFS)	1S 9E SE, NE, 6	30-70,000	Poor to Fair	Forest (FR)	1C	
53.	Bear Creek (USFS)	1S 9E NE, SE, 16	0-10,000	U	Forest (FR)	1C	
54.	(S10916M) (USFS)	1S 9E NW, SW, 16	0-10,000	U	Forest (FR)	1C	OMA Low potential
55.	Tony Creek, (USFS)	1S 9E NE, NW, 18	30-70,000	Good	Forest (FR)	1C	Inactive
56.	Dollar (USFS)	1S 9E SE, NW, 20	Greater than 200,000	Good	Forest (FR)	1C	Potential for greater than 500,000.
57.	Coho (USFS)	1S 9E SE, NW, 21	Greater than 200,000	Good	Forest (FR)	1C	Active, undeveloped.
58.	Boomer Creek (USFS)	1S 9E SW, NW, 23	U	Fair	Forest (FR)	1C	Inactive
59.	Clear Creek (USFS)	1S 9E SE, NW, 28	10-30,000	U	Forest (FR)	1C	Inactive
60.	(S10928P) (USFS)	1S 9E SE, SW, 28	0-10,000	U	Forest (FR)	1C	OMA no potential

Site No.	Name (OWNERSHIP)	Location (T, R, Sect.)	Quantity (CUBIC YARDS)	Quality	Plan & Zone Designation	Goal 5 Designation	Comments
61.	(S10928B) (USFS)	1S 9E NW, NE, 28	10-30,000	Fair	Forest (FR)	1C	Inactive
62.	Vista (USFS)	1S 9E NE, SE, 31	10-30,000	Good	Forest (FR)	1C	Inactive
63.	(S10936H) (USFS)	1S 9E SE, NE, 36	Greater than 200,000	Good	Forest (FR)	1C	Inactive
64.	KiYi (USFS)	1S 10E SW, NE, 2	Greater than 200,000	Fair	Forest (FR)	1C	Active
65.	(S11002R) (USFS)	1S 10E SE, SE, 2	0-10,000	U	Forest (FR)	1C	OMA
66.	Shellrock (USFS)	1S 10E SW, NE, 27	U	U	Forest (FR)	1C	Estimate 200,000 active
67.	(S20901R) (USFS)	2S 9E SE, SE, 1	30-70,000	Good	Forest (FR)	1C	OMA inactive
68.	(S20901K) (USFS)	2S 9E NW, SE, 1	30-70,000	Good	Forest (FR)	1C	OMA inactive
69.	Cooper Spur (USFS)	2S 10E SW, NW, 7	0-10,000	Good	Forest (FR)	1C	Active in parking lot of ski area
70.	Robinhood (USFS)	3S 10E NW, SE, 5	70-200,000	Fair to good	Forest (FR)	1C	Active

GOAL 5 - BACKGROUND REPORT: MINERAL & AGGREGATE RESOURCES: GREEN PIT (SITE 27; ALSO KNOWN AS JAME CORP., INC. PIT)

A. Introduction:

The following issues, concerns, directives, etc., will be discussed regarding the Green Pit: Location of resource; Quantity and Quality of resource; Prior Planning Commission and Board actions; Appeal to LUBA; Plan Designation; Planning Commission compliance action regarding Natural Areas; USFS Management Direction; Conflicting Uses and Consequences; and Recommendations.

B. Discussion:

1. Location: Section 1, Township 1 South, Range 9, in portions of tax lots 200 and 201 (see Map #l). The Green Pit is located on the east side of the Parkdale Lava Beds and occupies approximately 30+ acres. The majority of the Parkdale Lava Beds are under Federal jurisdiction and encompass approximately seven sections, however approximately 840 acres along the eastern portion of .the beds are in private ownership.

2. Quantity and Quality: Estimated quantity of mineral in the site 9,000,000 cubic yards (information provided by applicant in DOGAMI application form, 1981). The applicant desired to take 200,000 cubic yards from the site. The mineral is Basalt Rock and the rock is considered suitable for road base use (Pittsburgh Testing Laboratories). DOGAMI also states that it is possible that the site contains premium riprap and that the existing quality is good to very good. The rock is also readily available; no blasting would be required and the site has good access. State Highway personnel (Mike Stovall) stated the riprap is an adequate source for the Highway 35 project.

   The Parkdale Lava Beds are also considered a unique geological and natural area primarily due to the young age (approximately 240 years) and because of their watershed potential and capabilities. These natural characteristics are discussed in detail under Goal 5: Ecologically and Scientifically Significant Natural Areas and are referenced below.

3. Planning Commission Prior Action: The Hood River County Planning Commission approved (March 25, 1981) a Zone Change from Forest/Farm to Forest/Farm/Surface Mining Combining for this site (see Appendix “A”, Commission Order). This decision was appealed to the Board of County Commissioners.

4. Board of County Commissioners Prior Action: The Board reaffirmed the Commission's decision and also added additional conditions (see Appendix “B”).

5. Appeal to LUBA: The Board's decision was appealed to LUBA (Land Use Board of Appeals) and LUBA remanded back to Hood River County and directed that additional specific concerns be addressed (see Attachment "D").

   In summary, the Planning Commission's Findings of Fact were inadequate and inconsistent with (4) specific items; the Commission and the Board failed to consider the application of Statewide Goals 2, 3, 4, 5, and 6 and must make adequate findings stating the quarry and rock crusher operation are consistent with the Statewide Goals and the County must apply a Plan Designation to the site. The above deficiencies are outlined in Appendix "C". This report will obviously address some of these deficiencies.

6. Plan Designation: In 1977, Hood River County zoned the site Forest, however the Plan designation was not applied to the site and surrounding lands. The lack of a Plan designation was noted by the LCDC and the Land Use Board of Appeals. To achieve compliance with the LCDC and to properly address the requirements of LUBA, a Plan designation must be applied. Based upon the data in the Undesignated Lands Report prepared by the Planning Department, September, 1982, and distributed to all affected property owners, it is recommended that the Plan designation of Natural Area be applied to those portions of tax lots #200 and 201 that lie within the Lava Beds and the remainder designated Farm.

   The plan designation of Natural Area is appropriate to protect watersheds and significant natural features. These uses are outlined in "Goal 2: Plan Designations" and the Natural Area Zone. This plan designation is consistent with surrounding agricultural and forestry uses.

   The hearing process involves the Planning Commission holding a hearing that is either quasi- or legislative, making a decision and forwarding that decision to the Board for final decision making.

   In summary, the site is zoned Forest, Exclusive Farm Use, and Surface Mining Combining. In the past the County has supported these designations, however in efforts of achieving compliance the Planning Commission has addressed Goal 5 issues and has recommended that the Parkdale Lava Beds be protected, and that mineral extraction not be allowed because of its possible negative impacts on the water resources, etc. The owner of the site also is requesting that the situation be resolved as soon as possible due to the economic burden.

7. Planning Commission Action/Compliance Process: In efforts of achieving compliance with Goal 5, Natural Areas, the Commission took the following action (hearing November 17, and December, 1982) regarding the Parkdale Lava Beds

a. Support the U.S. Forest Service designation of Special Interest for the Parkdale Lava Beds under Federal ownerships.

b. Designate the Parkdale Lava Beds on private lands as 3A (Protect the Resource Site) and include in the inventory. (Reasoning for the 3A designation is presented in the Goal 5 Background Report on Natural Areas - Parkdale Lava Beds Geological Areas and additional testimony presented to the Planning Commission November 17, 1982.)

c. The County do everything possible to negotiate a land exchange with Mr. Green and other similarly affected property owners in the area designated as the Parkdale Lava Beds, so that springs in the Lava Beds are not adversely impacted.

d. Revise the Forest Zone or create a Natural Area designation and zone to adequately protect the Parkdale Lava Beds as required by the 3A designation.

e. Prepare a separate report regarding the Green property due to remand from LUBA and extenuating circumstances such as Goal 5 requirements.

The Commission's action was in part based upon additional testimony received during the hearings process (see Appendix "D", Exhibits - Parkdale Lava Beds, November 17, 1982 hearing; and Appendix "E", Commission Minutes, November and December, 1982).

It must be realized that the Commission's decision is only a recommendation to the Board of County Commissioners and the Board must take final action. The Commission's decision could be forwarded to the Board with other legislative compliance items or as a single quasi- item.

8. U.S. Forest Service Management Objectives: Appendices "F" and "G" outline the U.S. Forest Service Management Objective for that portion of the Parkdale Lava Beds under their ownership. In summary: (a) the Parkdale Lava Beds are identified as an Unusual Interest Area in a recreation plan approved by the Assistant Regional Forester in 1968; (b) the Plan identified several potential recreational developments, however none have been developed primarily due to the lack of funds and public demand; (c) there are no plans in the foreseeable future to develop this area; (d) U.S. Forest Service Multiple Use Plan prohibits commercial use or removal of the lava bed resources, however, this direction is currently being revised through the U.S. Forest Service Plan update; (e) the U.S. Forest Service has no plans to acquire private lands which contain portions of the Lava Beds; and (f) the Forest Service does not expect to build a visitor recreation facility or develop other recreational facilities in the area.

The above information supersedes previous Forest Service information discussed under Goal 5: Natural Areas, Parkdale Lava Beds Geological Area. Furthermore, through Plan updating by the Forest Service, further management directives could create the need to revise existing information. It must be realized that planning is not static but continually changing.

9. Conflicting Uses and Consequences: As discussed under Goal 5, Natural Areas, etc., the Nature Conservancy considers the Parkdale Lava Beds, which includes the Green Pit, as a unique geological feature. The Conservancy has prepared a site report stating they have been found to contain elements of natural diversity. The Nature Conservancy can only recommend to local jurisdictions what they feel is appropriate based upon their site reports. If a site has a high enough priority, they will attempt to purchase. They were contracted by the LCDC in 1977 to inventory natural areas in each County to assist in meeting Goal 5 requirements. The Nature Conservancy states that the spring area at the toe of the lava flow is in danger of disruption by rock crushing operations which may destroy the quality of the spring water.

The majority of the Parkdale Lava Beds are under Federal jurisdiction and the U.S. Forest Service has identified the Lava Beds under their jurisdiction as an Unusual Interest Area and currently they prohibit commercial use or removal of the resources from the Lava Beds. They do not have control over the Green Pit and private lands and currently they are not seeking to purchase private lands to the east.

Hood River County through past actions has supported mineral extraction from this site. The importance of the watershed and water sources including mitigating measures to allow extraction while protecting water resources have been discussed at length. These issues will not be discussed here, however for further information see the following references available in the Planning Department: (a) Jack Green Zone Change application (file #81-14); (b) Board of Commissioner and Planning Commission Records regarding appeal filed by Paul Klindt et. al. from the Planning Commission decision to approve the application of Jack Green for a Zone Change to Surface Mining Combining; and (c) also see Appendices “A” through “G”, and to this report.

Prior County approvals (March, 1981 and June, 1981) were appealed to the Land Use Board of Appeals (LUBA) based primarily on the negative impacts of mineral extraction on water resources and flows within the Parkdale Lava Beds. LUBA's decision was to remand back to the County and the County must address deficiencies as noted in LUBA's Order (see Appendix “C”).

Subsequent to the directives of the LCDC and in part, due to LUBA's Order, the Planning Commission in addressing Goal 5 requirements determined through a public hearing, that the Parkdale Lava Beds be designated as a 3A site and that the Lava Beds be protected as a natural area from conflicting uses that would

adversely impact the water resources, water flows within the Beds, consequently the Planning Commission is recommending to the Board that the Parkdale Lava Beds be protected by the Natural Area Overlay Zone, which if adopted by the Board, supersedes the Surface Mining Combining Zone. The Planning Commission's decision and recommendation will assist the County in meeting deficiencies noted in LUBA's Order. The Forest Zone also permits mineral extraction specifically for forest uses (e.g., logging roads, bridges, etc.) outright. This is considered to be a major conflict with the existing natural area water resources in that particular area.

Economic: Maintaining the site as a natural geological feature will somewhat increase tourism and revenues to the County and the Community of Parkdale. Allowing Surface Mining will provide substantial revenues to property owners of the resource and provide a readily available resource to those in the area. Extraction could cause an economic hardship to those relying on the spring water if termination or disruption is caused by extraction activity. Extraction would provide an economic viable source of premium riprap in close proximity to those in the Upper Valley. Substantial economic cost to applicant in providing mitigating measures to ensure water quality and quantity, etc., will not be adversely affected. Substantial economic burden to both the applicant and the opponents as a result of the entire process. Economic cost to the applicant will be minimized primarily due to ease in access to the aggregate source and the natural availability of the source. No blasting would be required. To totally prohibit extraction will deny economic returns to the property owner, however to conditionally allow extraction and require the applicant to provide mitigating measures to ensure protection of water quality will allow some economic return.

Social: Maintaining the Lava Beds will increase tourism and obviously bring additional people into the area. Additional people in an area could have positive (additional revenue, new blood, etc.) and negative (e.g., more traffic, trespassing, etc.) impacts. Allowing extraction will increase over a short period of time traffic, noise, dust, etc. resulting in more complaints by surrounding people, especially if water resources are negatively affected. The Lava Beds are considered a Geological Interest Area, therefore they will attract the public. Private property owners in the vicinity and adjacent to the Lava Beds have complained about public trespassing, etc. Some strongly feel that if recreational uses are developed, increases in trespassing will be noted. More than likely this will occur, because the U.S. Forest Service has designated portions of the Lava Beds as an Unusual Interest Area, therefore people are interested in the site and they have tendencies to want to see the site. Mineral extraction provides an alternative site, other than the Gorge. This is significant because the County, through public hearings, has stated no additional extraction sites will be allowed in the Gorge. It must be recognized that Hood River County has a diversity of natural areas that warrant protection, however it is difficult to protect everything. Extraction that terminates water resource capabilities and qualities will cause a social hardship to numerous individuals relying upon that source. Denying

extraction will create a social hardship to the owner because the use of his property is limited to benefit several other people.

Environmental: Maintaining the Lava Beds will assist in maintaining natural systems and will have no negative effects upon the existing environmental quality especially water quality. Allowing mineral extraction would change the natural characteristics of the Lava Beds and allow over a short time period additional traffic, dust, noise, etc. All affected agencies would be notified regarding the Surface Mining Combining rezone request. Also a reclamation plan would be required to mitigate negative impacts. Impacts on water quality would also be addressed through this process.

Energy: Maintaining the Lava Beds as a natural area would provide an additional tourist attraction close to others in the Mt. Hood National Forest. Although energy would be consumed going to the area, less energy would be consumed because recreational sites are in close proximity. If water resources are negatively impacted, additional energy to establish new systems will be noted by those who have supplies interrupted. Maintaining the Lava Beds as a natural area requires no energy. An additional rock source in the Upper Valley will decrease hauling distances and energy consumption. If extraction is not allowed, additional energy will be consumed identifying other resource sites.

C. Recommendations:

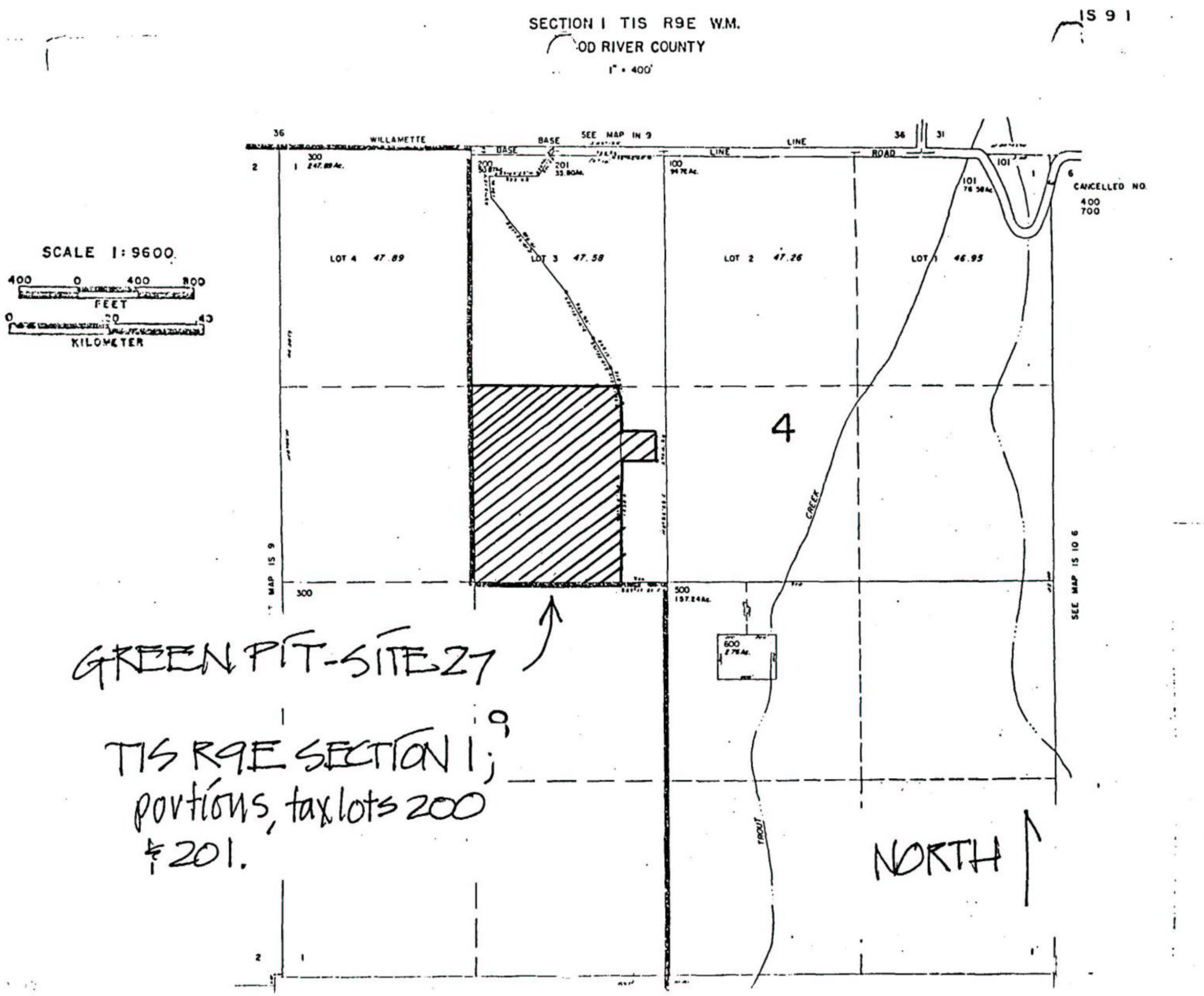
1. Include the above information in the County Background Report.

2. Apply the Natural Area, and Farm designation to the Green site.

3. Support previous actions by the Planning Commission of designating the Parkdale Lava Beds, including the Green site, as a 3A site (Protect the Resource Site). For details, see Goal 5, Natural Areas Report; Parkdale Lava Beds Geological Area.

4. Seek directives from the Board regarding LUBA's remand.

MAP #1


SECTION 1 T1S R9E W.M.
OD RIVER COUNTY
1" = 400'
1S 9 1
SCALE 1:9600
400 0 400 800
FEET
0 20 40
KILOMETER
WILLAMETTE
BASE
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CANCELLED NO.
400
700
LOT 4 47.89
LOT 3 47.58
LOT 2 47.26
LOT 1 46.95
300
200
201
100
101
500
600
4
CREEK
TROUT
SEE MAP 1S 9
SEE MAP 1S 10 6
GREEN PIT-SITE 27
T1S R9E SECTION 1;
portions, tax lots 200
& 201.
NORTH

BEFORE THE PLANNING COMMISSION

HOOD RIVER COUNTY

IN THE MATTER OF THE APPLICATION OF JACK H. GREEN AND MELVIN C. GREEN FOR A ZONE CHANGE	))))	ORDER

The above-entitled matter came on for public hearing before the Hood River County Planning Commission on the 25th day of March, 1981, upon the application of JACK H. GREEN AND MELVIN C. GREEN for a zone change from forest to forest-surface mining combining zone on property located at approximately 5665 Baseline Road, in Section 1, Township 1 South, Range 9 East of the Willamette Meridian, in portions of tax lot numbers 200 and 201.

Due notice was given of the hearing, and the applicant appeared by and through Wilford K. Carey, Attorney at Law.

Based upon a staff report and the evidence and testimony produced at the hearing, the Hood River County Planning Commission hereby makes the following findings:

1. The applicants are requesting a zone change from forest and exclusive farm use to forest-surface mining combining zone and exclusive farm use-surface mining combining zone. The applicants are requesting the surface mining combining zone be applied to approximately 20 acres of the existing forest and exclusive farm use base zones in order to mine lava rock for

rip-rap and other purposes.

2. The property is located near the toe of the Parkdale lava flow (i.e., the north end of the lava flow, and the lowest elevation or furthest extent reached by the lava flow). The location of the subject zone change is approximately 1500 feet south of the western end of Lava Bed Drive. Lava Bed Drive is the western most extension of Baseline Drive and extends for one-half mile due west from Baseline Drive from the point where Baseline Drive crosses Trout Creek. The distance between Parkdale to the east and the subject property is approximately one and one-half miles.

3. The zone change request is for all of that portion of tax lot 200 that is in the southeast quarter of the northwest quarter of Section 1, plus 1 acre of tax lot 201, also located in the southeast quarter of the northwest quarter of Section 1. All of this land is in the Parkdale lava flow, except about one-half of the aforementioned one acre is in a level small woodland on the valley floor. This one-half acre is proposed by the applicants to be used as an equipment turn-around area.

4. To the west, north and south of the property is more of the Parkdale lava flow. This lava flow is about twelve hundred years old, making it the youngest geologic feature in this part of Oregon. As the lava flow moved northward following the valley of the Middle Fork of the Hood River, it covered mainly glacial outwash material. The lava flow cooled and solidified as it was exposed to air. The lava flow, in the process of cooling, developed fissures and cracks that penetrate the entire lava bed.

As weathering continues, these cracks are gradually widening and increasing in number. The lava bed averages a height of 100 to 300 feet above the valley floor. It is clearly visible from the east. To the east and northeast of the area requested for the zone change lies the valley floor of the upper Hood River Valley. That portion of tax lot 201 that is not included in the zone change request is in alfalfa on the south part and orchard in the north part (i.e., abutting Lava Bed Drive). The applicant is proposing to build a haul road within a 50 foot road easement running along the east line of tax lot 201. This haul road would run from the proposed equipment turn-around area for a distance of 1900 feet north to connect with Lava Bed Drive. To the east of tax lot 201 and the proposed haul road is an orchard. The nearest year round residence to the proposed surface mine is that of the Mertens, owners of tax lot 201. This residence is 1000 feet north of the zone change request area.

5. The applicant has met his burden of proof in showing that this proposal is in the public interest. The need for a rock source in the upper valley has been adequately demonstrated.

6. Hauling costs to transport rock from the lower valley are severe because of the difference in elevation causing an uphill haul from the existing private rock source to the Parkdale area.

7. The site is an excellent source for rip-rap. There is virtually no other source of rip-rap in the Hood River valley. If this is available, it should be used.

8. The quality of the rock as shown by the tests performed by the Pittsburgh Laboratories shows that the rock meets the specifications for rock used on roads, including state highways.

9. Allowing the rock to be used for other than "forest uses as presently allowed will aid farms and other citizens who will need rock and can save tax dollars by allowing its use on public roads and projects.

10. The proposed site location is not located within 800 feet of an existing or proposed withdrawal point for public water supply. With appropriate conditions and required monitoring of the project, no injury to the water system will occur.

11. The proposal meets the requirement of the Comprehensive Plan. Concerns about air and water quality as is the case in any quarry operation will be resolved by appropriate conditions being placed on the site.

12. The quarry site is located in a natural canyon and is buffered by existing trees and is isolated from public view. The removal of the rock does not require removal of over-burden or the excavation of a deep pit since the rock is above ground level. The rock is extremely clean and can be removed under DEQ guidelines with no effect on air quality in the area.

13. Trends in land development are to locate mineral resources as close to the area of use as possible in order to conserve energy.

14. The proposed project would not affect the density of the area since no permanent structures will be placed on the property.

15. The applicant will be mining and processing the product right on the property which will preclude any further commercial operations in this area.

16. LCDC Goals 9, 11, 12, and 13 have been met.

Based upon the foregoing findings and after due deliberation

and a vote being taken by the Planning Commission, there being a quorum present,

IT IS HEREBY ORDERED that the application of JACK H. GREEN and MELVIN C. GREEN for a zone change is hereby GRANTED subject to the following conditions:

1. The applicant must meet all the requirements of the Mined Land Reclamation Act, State Department of Environmental Quality, and the Forest Practices Act. The applicant must file for permits and receive approval from each of the applicable state agencies prior to operation.

2. The applicant must improve an all-weather, hard surface road to the site location and the road must be maintained during any traffic on the road by oiling or watering the surface in order to preclude dust emissions.

3. The hours of operation of the quarry rock extraction or crushing shall be limited to daytime working hours, not more than six days per week, excluding Sunday.

4. A vegetative buffer must be provided around the quarry site with the exception of the entryway in order to help conceal the operation from public view.

5. All standards and conditions required by the County Sanitarian in relation to any water runoff or fuel storage shall be complied with.

6. The applicant shall abide by all rules or conditions concerning traffic to and from the site as required by the County Public Works Department in order to minimize the traffic impact to and from the quarry site during hours of operation and to minimize any potential traffic hazard.

7. During the operation of the site, the applicant at the applicant's expense, shall monitor Lava Bed Springs and Rogers Springs to insure that no turbidity is caused as a result of the operation.

8. If it is discovered that the quarry operation has an adverse affect on the quantity or quality of water from Lava Bed Springs or Rogers Springs, the operation of the site shall be suspended until the condition is corrected.

9. The surface mining combining zone approval is conditioned upon there being no adverse affect on adjacent springs; and upon proof that said use has such adverse affect, the zoning designation of S.M. shall be immediately lifted and the subject property will revert to the base zone of Forest.

10. The zoning designation shall be automatically reviewable two years from the date of its approval to insure compliance with all conditions and may be revoked if the conditions are not complied with.

11. Oral and written testimony shall become a part of the record insofar as they do not conflict with any specific condition.

12. The following uses are permitted:

a. Any use permitted in the base zone .

b. Extraction from deposits of sand, gravel, rock, earth or minerals.

c. Sand, gravel, rock, earth, or mineral processing.

d. Stockpiling.

e. Rock Crushing

Dated this 29 day of April, 1981, nunc pro tunc for March 25, 1981.

APPENDIX "A" 6/6

R Blaine Runnells
Chairman

BEFORE THE BOARD OF COMMISSIONERS

OF HOOD RIVER COUNTY, OREGON

In the Matter of the Appeal Filed by Paul H. Klindt, et al, from the Planning Commission Decision to Approve Application of Jack H. Green and Melvin C. Green for a Zone Change from Forest and Exclusive Farm Use to Forest - Surface Mining Combining Zone.	)	ORDER

The above-entitled matter came on for public hearing before the Hood River County Board of Commissioners on the 1st day of June, 1981, on the appeal filed by Paul H. Klindt, et al, from the Planning Commission decision to approve the application of Jack H. Green and Melvin C. Green for a zone change from Forest and Exclusive Farm Use to Forest - Surface Mining Combining Zone. The subject property is located at approximately 5665 Baseline Road in Section 1, Township 1 South, Range 9, East of the Willamette Meridian, near the village of Parkdale, in Hood River County, Oregon.

Due notice was given of the hearing which was a review on the record of the Planning Commission. The applicants and the appealing parties, who were all represented by counsel, appeared in person before the Board of Commissioners, with the exception of Melvin C. Green who is deceased. The hearing was continued, by vote of the Board of Commissioners, until June 15, 1981. The public meeting of June 15, 1981, was continued, by vote of the Commissioners, until 9:00 A.M., June 16, 1981.

Based on the record of the Hood River County Planning Commission and on arguments by counsel for the applicants and the appellants, the Hood River County Commissioners make the following findings of fact and conclusions of law:

APPENDIX "B" 1/7

Majority Findings and Conclusions

1. The majority of the Board of Commissioners adopts by this reference the findings, numbers 1 through 16, of the Hood River County Planning Commission.

2. The letter from the Department of Environmental Quality, dated March 19, 1981, indicates that the applicant will be able to control air emissions by employing standard technology.

3. There is no substantive evidence respecting quantity, quality or availability of other rock sources in the area.

Minority Findings and Conclusions

1. County sanitarian letter March 24, 1981 states "springs presently used for domestic purposes were seen discharging gound water North and South of the proposed site," and "a detailed ground water and geologic study has been recommended to be conducted in regard to evaluating any rock mining activity at this site." No study has been provided in the record.

2. DEQ letter March 19, 1981, requests "demonstration that the operation would not impact either water quality or water quantity." Such a demonstration should, at a minimum, include:

A. A detailed hydrogeologic analysis of the ground water situation beneath the lava flow.

B. A very detailed site plan that would list all potential sources of water pollution and the proposed measures that would be used to control these sources.

C. An inventory of current users of ground water from the Parkdale Lava Flow.

A detailed hydrogeologic analysis is not provided in the

record, nor is there a detailed site plan showing aggregate operation.

3. Water Resources Department letter, March 23, 1981, states "Both the quality and the quantity of water issuing from this formation as springs are directly threatened by removal of porous rock surface overlying the ground water body." And on April 22, 1977, states, "In addition, movement or settling of the lava blocks, resulting from blasting or excavation activities, could disrupt or block nearby ground water discharge channels and cause a depletion or cessation of flow." No receipt of data in record from which a determination could be made.

4. Department of Geology and Mineral Industries letter May 24, 1977, stated "If this activity is to be of small scale and designed to serve the needs of the immediate community, I would have no real objection." "If, however, a large scale operation is planned then several problems and considerations are raised." Raised problems regarding a scientific loss to destroy this interesting and scientifically interesting feature. "Before any full-scale operation be approved for the Parkdale lavas that other possible quarry sites be studied which would have a less negative impact on the cultural, economic, and scientific sensibilities of the community and the state." And finally, "Quite possibly any significant disturbance to the lava flow might have an adverse effect on this excellent water source."

Questions arise in the record of many other possible sites, but no in-depth inventory has been taken as to the location, quality and quantity of alternative sites and entered into the record.

5. All the above cited expert testimony from state and county agencies call to my attention that until inventories of quality and quantity and locations of various resources are provided, the information needed to make a determined decision is not now in the record.

6. Although aggregate resource land and watershed ground water are both limited in availability, both are essential to the citizens of Hood River County. There are at least 4 springs coming from under the lava beds as well as several wells in the area. The inquiry must be made to determine the effect on this excellent water resource if aggregate mining is allowed.

7. Argument in the record by proponents that this is merely an expansion of an already allowed use, the Goal 5 process was not addressed at the time aggregate mining was allowed for forest lands use initially.

8. From 1972 to the present, information in application tells us that 20,000 cu. yds. have been mined. However, it also tells us that in the next 12 month period, 200,000 cu. yds. are intended to be mined. The consequence of allowing aggregate mining of this magnitude has not been addressed in the record.

9. The record does not show a demonstrated need other than a possible market preference.

10. Goal issues - 5,6,12. The testimony in relation to the conflicting uses in Goal 5 has been identified as (1) mineral and aggregate resources; (2) ecologically and scientific significant natural areas; (3) watershed and ground water resources. The record does not provide information on location quantity and quality of these resources.

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as required by Goal 5. Goal 5 requires "when conflicting uses have been identified, the economic, social, environmental and energy consequences of the conflicting uses shall be determined and programs developed to achieve the goal." The record does not provide information on location, quality and quantity of resources to weigh, under Goal 5, the consequences of allowing mining of the aggregate in the magnitude of 200,000 cu yds. in a 12 month period.

Goal 6 - to maintain and improve the quality of air, water and land resources of the state. In describing "such discharges (water pollutants, contaminants, or products therefrom) shall not (2) degrade such resources and (3) threaten the availability of such resources." The record gives no assurances that the water resource will not be degraded nor does it assure that the availability is not threatened.

Goal 12 - to provide and encourage safe, convenient, and economical transportation system. And #5, minimize adverse social, economic, and environmental impacts and costs. Specific conditions set on truck traffic is to allow travel six days per week, during daylight hours, according to rules and regulations as required by the Public Works Department. Specific conditions should be given because of the magnitude of extraction and the short period of time (12 months) of increased truck traffic. Testimony in record that trucks will leave every 16 minutes, along with the normal and usual logging and fruit hauling traffic should have given consideration to conditions on Baseline Road and the impacts of all this traffic going through the small community of Parkdale.

Comp. Plan - Mt. Hood Planning Unit

1. Prevent intensive development within watershed that would adversely affect the quality and quantity of water produced. (page 12,2,C.)

2. The development will be free from offensive noise, vibration, smoke, dust, and other particulate matter, odorous matter, fumes, water pollution and other objectionable influences. (page 10#5.)

Based on the above Majority Findings and Conclusions, as the majority of the Hood River County Board of Commissioners, it is hereby ORDERED that the application of Jack H. Green and Melvin C. Green for a zone change respecting the within described property is GRANTED, subject to the following conditions:

1. Conditions 1 through 12 as imposed by the Hood River County Planning Commission are, by this reference, hereby imposed on the applicants and in addition, to Planning Commission condition No. 7, is added the specific order that the referenced water samples shall be taken weekly and that McIsaac Spring shall be sampled in addition to Lava Bed Springs and Rogers Spring.

2. Blasting in any form is prohibited.

3. An Oregon licensed ~~Geologists~~ Hydrogeologists' report of the ground water flow in the mining operation area must be submitted within 45 days following the signing of this Order. A negative report will result in automatic immediate withdrawal of this zone change and the applicants shall cease operation, except as is authorized under current zoning.

4. Planning Commission condition No. 8 is hereby amended to include McIsaac's Spring.

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5. If operation is stopped as a result of adverse effect as contemplated by Planning Commission condition No. 8, wherein it is shown the mining operation is the proximate cause of turbidity to any of the springs mentioned, and if such turbidity continues after a 90 day period following termination of mining operations, the applicants shall construct a water main from the Parkdale System adequate to replace the damaged water supply to the residents of the area effected.

6. The Surface Mining Zone designation shall end 90 days after completion of repairs currently contemplated to State Highway 35, said repairs being necessitated by the winter flood of 1980, or after a period of 4 years, which ever shall first occur, unless an application for renewal is filed during the above 90 day period. Upon termination of the Surface Mining Zone designation, the land shall return to that zoning in effect on the date of the applicants' initial request for a zone change.

Dated this 29 day of June, 1981.

HOOD RIVER COUNTY BOARD OF COMMISSIONERS

Chairman

Commissioner

Commissioner

Commissioner

Commissioner

APPENDIX "B" 7/7

BEFORE THE LAND USE BOARD OF APPEALS

OF THE STATE OF OREGON

MR. AND MRS. PAUL KLINDT, MR. AND MRS. ROBERT McISAAC, MR. AND MRS. DELBERT HEDGES, MR. AND MRS. M. C. SMITH, MR. AND MRS. JAMES DUKART, MR. AND MRS. MYRL JONES, MR. AND MRS. JOHN McISAAC, and MR. MARVIN NELSON, Petitioners, v. HOOD RIVER COUNTY, Respondent. and JACK H. GREEN and KATHERINE GREEN, Respondent-Participants.	LUBA NO. 81-080 FINAL OPINION AND ORDER

Appeal from Hood River County.

Garry P. McMurry, Rankin, McMurry, Osburn, VavRosky & Doherty, Portland, attorney for petitioners.

Wilford K. Carey, Annala, Carey & Hull, Hood River, attorney for Respondent-Participants Jack H. Green and Katherine Green.

Hugh V. Garrabrant, Hood River, attorney for Respondent Hood River County.

Bagg, Referee; Reynolds, Chief Referee; Cox, Referee; participated in the decision.

Remanded. 11/05/81

You are entitled to judicial review of this Order. Judicial review is governed by the provisions of Oregon Laws 1979, ch 772, sec 6(a).

BAGG, Referee.

Respondent Hood River County and Respondent-Participants Jack H. Green and Katherine Green move this Board for an order of remand. The motion was discussed at a conference call on October 27, 1981, at which time respondent and respondent-participants modified their motion for an order of remand to include grounds therefore. Specifically, respondents move for remand on the ground that petitioner's assignments of error no. 5 and 9 are well taken and additionally that the subject property had been omitted from the county's Mt. Hood planning unit.[1] Petitioners have no objection to remand on these grounds.

Now, therefore, on the basis of the motion and agreement of the parties, this matter is remanded to Hood River County for proceedings not inconsistent with this opinion.

It is also ordered petitioner's $150 shall be returned to them and the petitioner shall be reimbursed by respondent and respondent-participants for the $50 filing fee.

Remanded.

FOOTNOTES

[1] Petitioner's fifth assignment of error stated:

"The findings of fact of the Planning Commission (excluded from the County's Record but attached hereto as Appendix "A") were inadequate and inconsistent in the following particulars:

"(a) The findings are silent upon the need for, and the compatibility with, adjacent farm use and the conditins for a rock crusher operation;

"(b) No findings were made upon air pollution and its effect upon adjacent orchard uses;

"(c) No findings were given on the protection of the water resource potential of Rogers Creek, Lava Bed Springs or Klindt-McIsaac Spring; and

"(d) The findings do not amend the Comprehensive Plan or address Statewide Goals 3, 4, 5 or 6, or except the land from the Goals' application."

Petitioner ninth assignment of error stated:

"The Planning Commission and Board of Commissioners failed to consider the application of Statewide Goals 2, 3, 4, 5, and 6 and make specific findings that the commercial quarry and rock crusher operation was consistent with the aforesaid Statewide Goals."

CERTIFICATE OF MAILING

I hereby certify that I served the foregoing Final Opinion and Order for LUBA No. 81-080, on November 5, 1981, by mailing to said parties or their attorney a true copy thereof contained in a sealed envelope with postage prepaid addressed to said parties or their attorney as follows:

Garry P. Mc Murry
Rankin, McMurry, VavRosky
& Doherty
1600 Benjamin Franklin Plaza
One SW Columbia
Portland, OR 97258

Wilford K. Carey
Annala, Carey & Hull
PO Box 325
Hood River, OR 97031

H. B. Garrabrant
Room 309
County Courthouse
Hood River, OR 97031

Dated this 5th day of November, 1981.

Jeanne Hubbard
Secretary to the Board

Exhibits 2, 3, 4, 5, 6, 7, 8 and 13:
Planning Commission Hearing November
17, 1982; Parkdale Lava Beds.

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EXHIBIT "2"

I am Bob McIsaac, I reside at 7200 Old Parkdale Road-Parkdale, Or. I am addressing Goal 5- specifically- The Parkdale Lava Beds geological area.

I call your attention to the Planning Staff Revision of Goal 5 dated November 16, 1982. Page 3...Recommendations..Number 2, letters (b) and (d). Letter (b) recommends private lands on the Lava Beds be designated 3C..excluding the Green Property. Letter (d) states the fact that special preferential treatment be given the Green property in the way of a special report. Concerning letter(b).. a Classification of 1C would be more appropriate in order to protect the ecological and scientific significance of the Lava Beds.

I am unable to find the survey of the water sheds designated in Hood River County. I am also unable to find a rock inventory for Hood River County. I have observed by way of explanation that the information I desire is not ready and not available at this time. Since this is an inappropriate time to be addressing the water shed and rock inventories in the county, then I submit to you the fact that any discussion of the lava beds which deals with water and rock is also inappropriate at this time. How can any recommendations be made until these inventories are made? We should all be reminded of the proximity of the rock source that was used on the Hiway 35 project. If it had not been for legal entanglements the rock would have been hauled all the way from the lava beds to repair Hiway 35. How can our local government justify doing business in such a manner? The time has come when business should be transacted objectively and factually for the health, happiness and welfare of all the citizens and not on the basis of coercion, favoritism or individual monetary gain.

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The case concerning the Green property and the Klindt-McIsaac Springs...both located at the Parkdale Lava Beds.. is well-known in Hood River County. That record has to be one of the lengthiest in recent county history. The decision was made by honest and legal means. The conclusion is obvious...domestic water is more important to Man's survival than rock!

At this time I request that the entire file containing the transaction of the Green vs Klindt-McIsaac case be entered into evidence.

I am offended and disappointed that the issue seems to be starting all over again. I respectfully request an explanation for the revival of the rock vs water issue on the lava beds. It seems to me that enough individual and county time and money has already been spent deciding the issue. If the protection of a domestic water system and other water flows is not the prime factor that dictates the decision, then what is?

There appears to be an attempt to legislate that which can not be done legally at this time. I believe a public explanation is in order. Is the county willing to be held responsible if any aquafers in the Parkdale Lava Beds are disturbed?

At this time I would like to enter into evidence a letter from Mr. Malcolm McIsaac, Secretary and Manager of the Parkdale Water Co., Parkdale, Oregon.

Bob McIsaac

Bob McIsaac

I wish to thank you for all the effort the planning commission has put forth during

EXHIBIT "3"

PARKDALE WATER COMPANY, INC.
4990 Baseline Drive
Parkdale, Oregon 97041

December 10, 1981

Land Conservation and Development Commission
State of Oregon
Salem, Oregon 97310

Gentlemen:

The Parkdale Water Company is a stockholder owned Public Utility providing domestic water to 165 families, 6 migrant labor camps and other business and community organizations in the service area. The company was organized in 1922 by the local residents who financed the construction through stock purchases. Although the succeeding years have broadened the ownership over 3/4 of the stock remain in the hands of residents and consumers.

The service area includes all of the Parkdale Sanitary District, part of which lies in the Mt. Hood Planning Unit as well as extending outside of the Parkdale area to the North. Both utilities serve the only local area currently permitting higher density than that allowed in the Mt Hood Forest or Farm Zone.

The source of the water is Parkdale Cold Springs, the name designated by the Oregon State Water Resources Board. The use of the water is authorized by the State of Oregon Water Resources Department under Permit No. 42929 allowing 1.5 CFS for Quasi Municipal use. The spring is the headwater of Trout Creek, a tributary of the Middle Fork of Hood River and is located in the SW¼ of the NW¼ of Section 7 T1S R-10 E WM.

The spring is located in an orchard area surrounded by 10 acres of uninhabitated and uncleared land. It is covered by a concrete cap and reservoir to prevent any contamination by surface water. It has been the source of pure unchlorinated domestic water since put into service.

The springs proximity to the Lava Beds and to the other Lava Bed springs and the similiarity of the water indicates the same origin. Any disturbance that would affect the subterranean flow would have an adverse effect on all the water and would seriously endanger the recharge capability of the springs.

We strongly support the Parkdale Lava Beds as a Natural Area. The preservation of this great natural watershed would not only insure pure unadulterated domestic water for the valley but the retention of all scenic and geological values.

Sincerely yours,

Secretary and Manager

EXHIBIT #3

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EXHIBIT "4"

MIDDLE FORK IRRIGATION DISTRICT
P. O. BOX 291
PARKDALE, OREGON 97041
(503) 352-6468

Nov. 16, 1982

To: Hood River County Planning Commission,

I will be out of town on Nov. 17, 1982, which I unterstand is the date scheduled for the first hearing. I would like to make some input in the form of resubmitting previous letters that have come from me and the Middle Fork Irrigation District board. I also have some further thoughts pertaining to this which I would hope could be entered into the testimony.

The first thing I would like considered is the possibility that the area in question be entered into some designation that would safeguard the springs. They are currently a very important source of water for the irrigation district. The waters from them are also of a quantity and quality that rate them consideration as a future source of domestic water should the valley find itself deficient in good quality water in the future.

I suggest this area be entered into a watershed or natural area designation. I am also aware that the upper valley could benefit from a rock source that is available to the public.

If it is not too presumptous of me I would like to offer a possible solution. Possibly the county could trade the Green's for an area of lava bed farther south towards Laurance Lake Road. I believe there are easily accessible rock sites back there in county ownership that are over a mile away from the springs, farming and residential areas. Also the rock hauling traffic wouldn't have to be through the center of Parkdale.

I offer this as a possible solution that could satify both concerns.

Thank you for considering this.

Sincerely,

Wm. M. Stanley

Manager

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EXHIBIT #4

EXHIBIT "5"

November 16, 1982

Hood River County Planning Commission
Hood River County Courthouse
Room 101
Hood River, Oregon

The Members of The Hood River Soil and Water Conservation District feel that the proposed surface mining operation is not in the best interest of the county.

The majority of the Parkdale Lava Beds are under jurisdictional boundaries of the Mt. Hood National Forest, which thay have labeled a Special Interest Area. We cannot consider sections 1 & 36 any differently just because they are privately owned. It is a unique geological area which supplies both domestic and irrigation water for a large dependent group.

The Nature Conservancy states that the spring area at the toe of the Lava flow is in danger of disruption by rock crushing operations which may destroy the quality of spring water.

We of the H.R.SW.C.D. feel that such a proposed gamble far outweighs the economic gains of the two parties in question. It is our contention, along with the Forest Service Management Plan that we preserve and protect the Lava Beds and designate the Lava Beds a watershed area.

Sincerely,

Rod S. Laurance

Rod S. Laurance

Vice-Chairman H.R.S.W.C.D

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EXHIBIT #6

11/16/82

Hood River County
Planning Commission

Members of the Commission:

The documents relating to Goal #5 as submitted to the Commission by the Planning Staff contain Background and Recommendations regarding the Parkdale Lava Beds. The recommendations are inadequate to protect this area.

The Planning Staff has recommended that only those portions of the lava beds that are under Federal ownership be given special protection, and the portions of Lava Bed under private ownership be dealt with at a later time.

This is not the recommendation of the Nature Conservancy.. The Nature Conservancy has provided for all portions of the Lava Beds within sections 1,2,11-14,& 23. The Nature Conservancy has recommended that this area be given protection as a Special Interest Geological Area.

The purpose of this recommended designation is to maintain the integrity of the Lava Beds in its natural state, specifically to protect the scientifically significant rock flow, to protect the representative vegetation, and to protect its water storage capacity.

The county contends that sections 1,2,11-14, & 23 are all zoned as EFU, Forest, and that one portion of Section 1 has a Surface Mining Over-Lay zone. This is inaccurate. The Surface Mining zone was granted specifically for the reconstruction of Hi-Way 35 as necessitated by the Dec. 1980 flood. This site was never used and will not be used for Hi-Way 35 reconstruction, and final approval by the County Commission for this overlay zone was done at a Commission meeting where none of the interested parties recieved notification.

On this basis the overlay zone for Surface Mining has automatically become invalid and the property has reverted to that zoning in effect on the date of the applicants initial request for a zone change. I refer you to the final County Commission order. I also will submit into the record a document regarding non notification of the Commission meeting.

No rock has been removed from this site pursuant to a temporary restraining order issued by the State of Oregon Circuit Court and subsequently by a remand to Hood River County by the Land Use Board of Appeals.

The Parkdale Lava Bed is a unique and important part of our County. It has scientific and ecological significance. Itis a unique and geologically sensitive water shed that supplies the second largest combined flow of domestic water in Hood River County.

The Parkdale Lava Beds have repeatedly been the focus of developers attempts to obtain Surface Mining zones.

The only ~~only~~ way to adequately protect the water resources and ecology of this area is for our Comprehensive Plan to adopt the protective designation as recommended by the Nature Conservancy and to recognize and designate that this is a major watershed.

Sincerely,

Paul & Nancy Klindt
5291 Baseline Drive
Parkdale, Oregon 97041

Nancy Klindt APPENDIX "D" 7/20

June 17, 1981

Mr. Hugh Garrabrant
District Attorney
Hood River County
County Courthouse, Room 309
Hood River, Oregon 97031

Re: Klindt/McIsaac Appeal

Dear Mr. Garrabrant:

Thank you for your letter of June 16, 1981 advising that the Hood River County Commissioners reversed their public vote of June 15, 1981 by which they voted to tentatively approve the Planning Commission's Order but remanded the matter to the Planning Commission to take additional testimony on blasting conditions, review of alternative rock sites in the County; review of agency correspondence and questions regarding hydrologic and geologic concerns and for review of conditions on crushing operations.

As you advise in your letter at 11:30 p.m. after appellants and this writer and other members of the interested public had left the public meeting, the meeting was continued to the next morning to consider other items on the agenda which time precluded.

Thereafter, on June 16th following the 9:00 a.m. reconvening of the "public hearing", Commissioner Palmer, without notice to any interested party, moved to reconsider the motion made for remand and was successful in obtaining a reversal of that Order with the result that you set forth in your letter.

We view this ploy as demonstrating bad faith on the part of the majority of the Board of County Commissioners when coupled with the fact that they allowed no new testimony or evidence by appellants, although they have allowed a supplement to the record by Mr. Carey.

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We also wish to call to your attention Chairman Murry's failure to call upon the Commissioners to divulge all pre-hearing ex parte contacts they may have had so as to allow interested parties to seek the disqualification of any Commissioner who had become predisposed by reason of such contacts. This is of grave siginificance to us in view of the most recent events, especially when I called your attention to this omission and I thought you indicated that you would see to that requirement being fulfilled prior to the close of the public hearing.

We view this latest development as the latest evidence of violation of the Appellants' right to a full and fair hearing and wish to have this letter also included as part of the record for at least your review and undoubtedly review by the Land Use Board of Appeals.

Very truly yours,

RANKIN, McMURRY, VavROSKY
& DOHERTY

Garry P. McMurry

GPM:hb
cc: Wilford K. Carey, Esq.
Mr. Paul Klindt
Mr. Bob McIsaac

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EXHIBIT #7

November 16, 1982

Hood River County Planning Commission
Hoo River County Courthouse
Room 101
Hood River, Oregon 97031

RE: Goal 5 - Open Spaces, Scenic & Historic Areas & Natural Resources

It has come to my attention that some individuals in Hood River County are trying to exploit once again our limited natural resources. I am speaking of the Parkdale Lava Beds. On the Goal 5: Background Report #3, reference is made to the Lava Beds which are under jurisdictional boundaries of the Mt. Hood National Forest, but those parts of the Lava Beds in Section 1,2& 36 under private ownership are not mentioned. All of the Lava Beds must be included in this geological area. The question seems to be that a few individuals would like to make an economic gain on what could become an eyesore for many. This is not even to mention that once this area is open for mining, it will be damaged in a way that not even Mother Nature can repair. Rock is a non-renewable resource; i.e., it cannot be replaced once it is gone.

I wholeheartedly agree with the Nature Conservancy and the Forest Service. You have said that you will support the U.S. Forest Service designation of Special Interest for the Parkdale Lava Beds. Yet under your Resource Site Analysis, you designate the private lands as a 3c site (limited conflicting uses). I totally disagree with this designation. All of the Lava Beds should be designated a "Preserved Site" to complement the Forest Service and Nature Conservancy.

The quantity and quality of water flowing from the Lava Beds constitutes a major source of water for domestic and agricultural use. You would be sick if these sources were lost or contaminated. The combined flow from the Lava Bed Springs, Rogers Creek Spring and McIssacs Spring is over 1,600 gallons per minute and the Watermaster tells me this is on the low side. Crystal Springs has a flow of 2,100 gallons per minute. Why should we have to risk this possible loss that will affect many, so that a few can acquire an economic gain? Again I say NO.

If we look over our beautiful valley, one quickly sees how compact and close the lower, middle and upper valleys are to each other. Right now there are substantial mineral and aggregate sites in the valley. To exploit the Lava Beds would be a great mistake. The access is easy and extraction of this resource would not experience many difficulties. But what we must realize is its visual impact and that Lava Road drives right up to this natural geologic formation. If a park were ever built, which I hope some

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day it is, a new road would need to be built to skirt any quarry site that had been developed. This result would have a considerable impact on economic, social, environmental and energy issues.

To sum up, I would like to have the Lava Beds designated a "Perserved Site", realizing there are already substantial mineral and aggregate sites in the Hood River Valley. I would like for the Hood River Planning Commission to recognize what they have in their own back yard, a naturally occuring geologic formation unique to this area and the state, the Parkdale Lava Beds whose acreage is a 2,560 acres. The action taken will affect only the private lands, the most visible lands.

Respectfully Submitted,

David C. Tiller

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EXHIBIT # 8

Nov. 17, 1982

In regards to the Parkdale lava beds, we feel that sections 12-11 thru 14 and 23 should be kept and protected for a water shed. These lava beds have been a natural water source and shed for years, people in the area and farms depending on this source of water.

We feel we should follow the recommendations of the Natural Conservative Board for this Parkdale lava bed area to remain a water shed and not chance disrupting the natural flow of our water source in this area.

Jim and Pam Dukart
7175 Old Parkdale Rd.
Parkdale, Ore. 97041

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REVISION: GOAL 5: ECOLOGICALLY AND SCIENTIFICALLY SIGNIFICANT NATURAL AREAS - PARKDALE LAVA BEDS GEOLOGICAL AREA.

The Parkdale Lava Beds Geological Areas report has been updated to reflect inclusion of TlS R9E Section 1 and 2 as noted in revised report dated November 16, 1982. The previous report does include a discussion of Sections 1 and 2, therefore it is superseded.

REVISION; GOAL 5: ECOLOGICALLY AND SCIENTIFICALLY SIGNIFICANT NATURAL AREAS - PARKDALE LAVA BEDS GEOLOGICAL AREA: BACKGROUND REPORT

Citizen input resulted in further investigation and clarification of information provided by the Nature Conservancy. Basically, the Nature Conservancy provided (2) sets of information regarding the Parkdale Lava Beds: (1) County Map Key, and (2) a Site Report. The County Map Key did not include Sections 1 and 2 (TlS R9E), however the Site Report did. The County Key Map was used to prepare the report. This discrepancy was noted by the public, and the Planning Department verified the situation with the Nature Conservancy who stated the Parkdale Lava Beds does include Sections 1 and 2, TlS R9E, which does involve the Green property.

The following is an updated report regarding the Parkdale Lava Beds as designated by the Nature Conservancy.

a. Location: TlS R9E Sections 1, 2, 11-14 and 23; see Attachment A/l, Index Map, item #3. This location has been provided by the Nature Conservancy. The majority of Lava Beds described above are under jurisdictional boundaries of the Mt. Hood National Forest. However, within the (7) Sections dominated by Federal ownership, there are approximately 840 acres of private lands as shown on Attachment A/2 (Private Ownership – Portions of Parkdale Lava Beds). These private lands, however, are within what the U.S. Forest Service calls the Adjacent National Forest Boundary.

   The area described as the Parkdale Lava Beds Geological Area does include Section 1, Township 1 South, Range 9 East, which involves the Green property (see application #81-14). Because of the interrelated issues involved and as a remand from LUBA regarding the Green property, it will be discussed in its entirety in a separate report.

b. Quantity and Quality: Approximate acreage involved as designated by the Nature Conservancy, 4,480 acres however approximately 840 are in private ownership while the remainder, 3,640 ± acres are in Federal ownership.

   Those lava beds under Federal ownership are classed as a Special Interest area by the Mt. Hood National Forest. Basically this means that they may be developed as a visitor information area, if funds allow. Also, the U.S. Forest Service considers the Lava Beds under their jurisdiction as a unique area at the present time because no development exists. Until finances become available, the management direction is to preserve and protect the area from any and all types of exploitation such as sand, rock, or lava removal, or the removal of trees and other plants from the area.

   The Nature Conservancy considers the Parkdale Lava Beds a unique geological feature. The Nature Conservancy has also prepared a site report; see Attachment B/1 and the geological feature is considered to be a site of relatively high priority because a field survey has been conducted and it has been found to contain an important element of natural diversity.

Proposed plan and zoning designations for private lands are Forest and Exclusive Farm Use (see Report entitled "Undesignated Lands", available at the County Planning Department).

c. Conflicting Uses and Consequences: The Nature Conservancy states (see Attachment B/1) that the spring area at the toe of the lava flow is in danger of disruption by rock crushing operations which may destroy the quality of the spring water. The U.S. Forest Service Management Plan is to preserve and protect the Lava Beds, primarily under Forest Service jurisdiction from all types of exploitation as previously stated. In the early '70s management direction was to determine the feasibility of acquiring private lands adjacent to the east side of the area.

Overall, the majority of the Lava Beds designated by both the Nature Conservancy and the U.S. Forest Service are under federal ownership. The management direction of the U.S. Forest Service is to protect this geological feature from exploitation consequently conflicting uses will be mitigated on Federal Lands. Portions of the area designated by the Nature Conservancy are private lands. The majority of private lands are in farm use, however portions again are part of the Lava Beds. In both the agricultural and forest zones, mineral extraction for other than forest uses is allowed only through a rezone to Surface Mining Combining Zone. Through this process all affected agencies including the Nature Conservancy, U.S. Forest Service, DEQ, DOGAMI, etc., would be informed of the rezone request and their comments would be included through the hearings process. However, the Forest Zone permits outright sand, rock and gravel pits when used exclusively for forest or forest-related uses. The following is a discussion of consequences relating only to those private lands within the area designated by the Nature Conservancy.

Economic: Maintaining the site as a natural geological feature will increase tourism and revenues to the County and the Community of Parkdale. Allowing Surface Mining will provide revenues to property owners of the resource and provide a readily available resource to those in the area. Extraction could cause an economic hardship to those relying on the spring water if termination or disruption is caused by extraction activity.

Social: Maintaining the Lava Beds will increase tourism and obviously bring additional people into the area. Additional people in an area could have positive (additional revenue, new blood, etc.) and negative (e.g., more traffic, trespassing, etc.) impacts. Allowing extraction will increase over a short period of time traffic, noise, dust, etc. resulting in more complaints by surrounding people, especially if water resources are negatively affected.

Environmental: Maintaining the Lava Beds will assist in maintaining natural systems and will have no negative effects upon the existing environmental quality especially water quality. Allowing mineral extraction would change the natural characteristics of the Lava

Beds and allow over a short time period additional traffic, dust, noise, etc. All affected agencies would be notified regarding the Surface Mining Combining rezone request. Also a reclamation plan would be required to mitigate negative impacts. Impacts on water quality would also be addressed through this process.

Energy: Maintaining the Lava Beds as a natural area would provide an additional tourist attraction close to others in the Mt. Hood National Forest. Although energy would be consumed going to the area, less energy would be consumed because recreational sites are in close proximity. If water resources are negative impacted, additional energy to establish new systems will be noted by those who have supplies interrupted. Maintaining the Lava Beds as a natural area requires no energy. Extracting mineral requires additional energy. An additional rock source in the Upper Valley will decrease hauling distances and energy consumption. If extraction is not allowed, additional energy will be consumed identifying other resource sites.

d. Recommendations:

(1) Include information discussed in 3 a. through c. above in the County Background Document.

(2) add the following Strategies to Goal 5; Natural Areas:

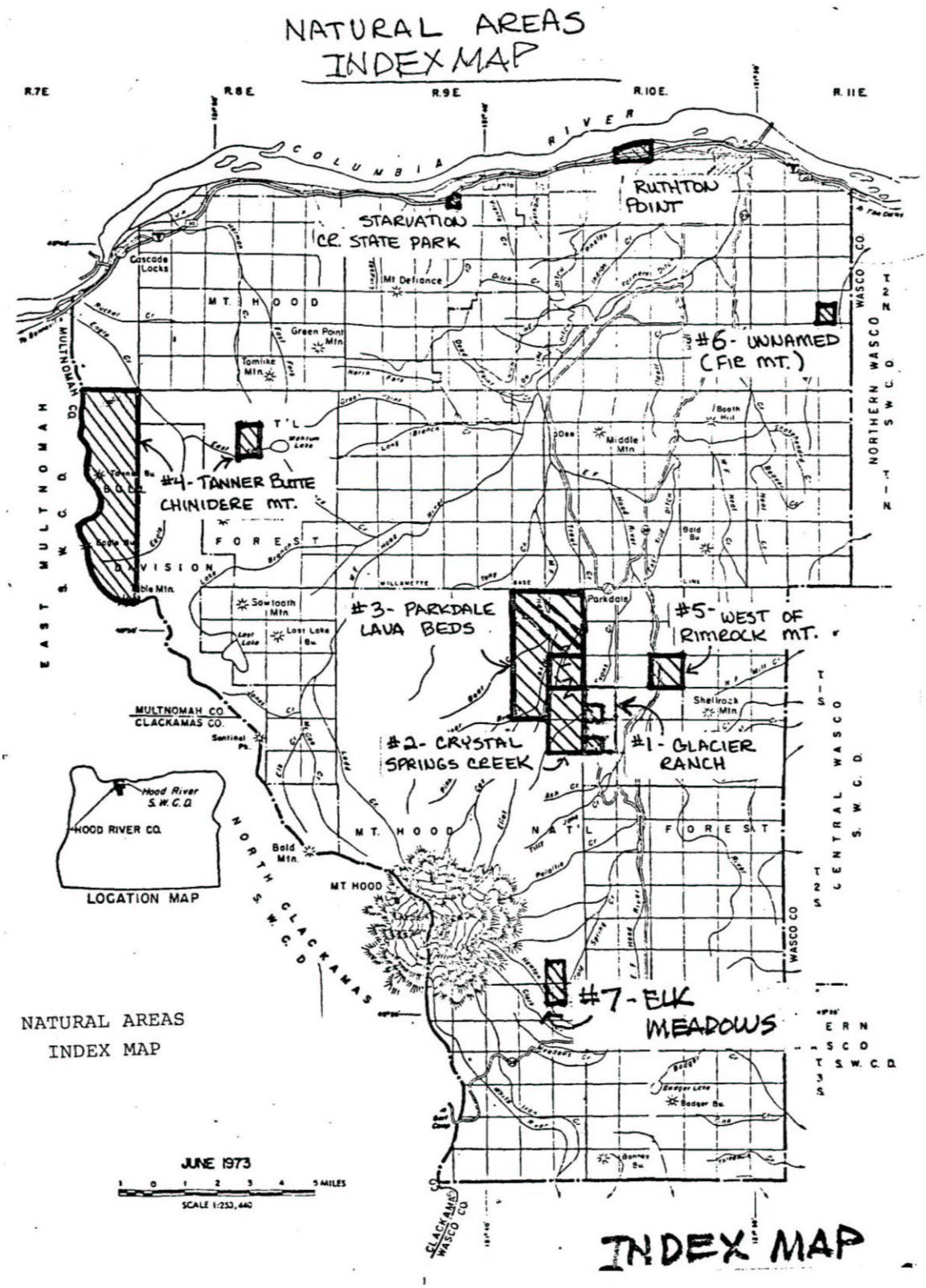
(a) Support the U.S: Forest Designation of Special Interest for the Parkdale Lava Beds under Federal ownership.

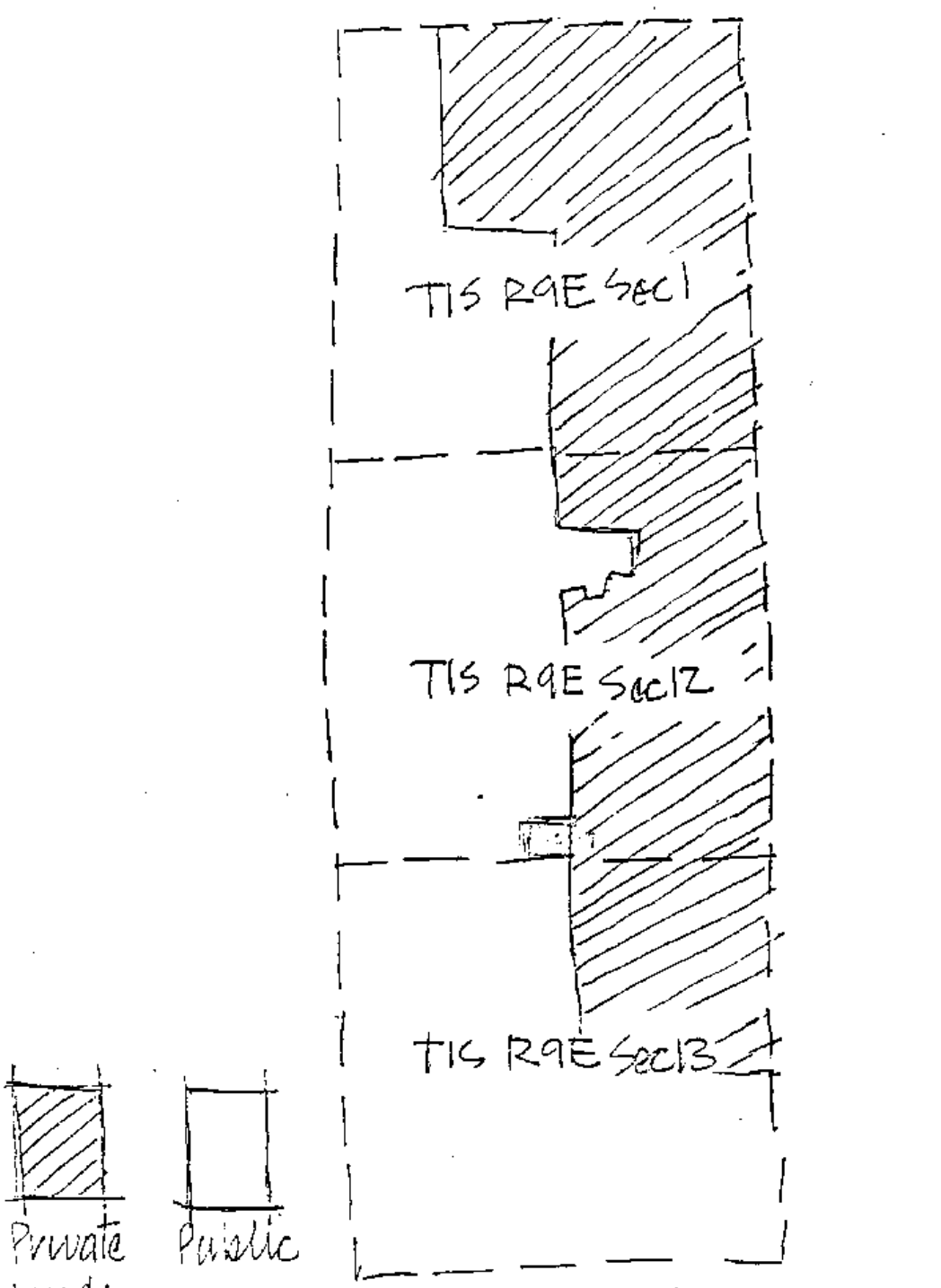
(b) Designate the Lava Beds on private lands as 3C (limit conflicting uses) excluding the Green property and include in the Plan Inventory.

(c) Require private lands containing portions of the Parkdale Lava Beds to obtain a rezone to Surface Mining and Combining prior to extraction of sand, gravel and rock, even when used for forest or forest-related uses.

(d) Prepare a separate report regarding the Green property due to remand from LUBA and other extenuating circumstances such as Goal 5 Requirements.

(e) Update the Goal 5 policies section to include the above strategies.


NATURAL AREAS
INDEX MAP
R.7E.
R.8E.
R.9E.
R.10E.
R.11E.
COLUMBIA RIVER
STARVATION CR. STATE PARK
RUTHTON POINT
#6- UNNAMED (Fir Mt.)
#4- TANNER BUTTE CHINIDERE MT.
#3- PARKDALE LAVA BEDS
#5- WEST OF RIMROCK MT.
#2- CRYSTAL SPRINGS CREEK
#1- GLACIER RANCH
#7- ELK MEADOWS
MULTNOMAH CO.
CLACKAMAS CO.
HOOD RIVER CO.
LOCATION MAP
NATURAL AREAS
INDEX MAP
JUNE 1973
SCALE 1:253,440
INDEX MAP



PRIVATE OWNERSHIP - PORTIONS OF PARKDALE LAVA BEDS

East Slopes Cascades Province
404.7 ha (1000 acres)
TlS, 9E, parts of S1, 2,11-14, 23
Ownership: U.S. Forest Service managed area
(Special Interest-Geological)

PARKDALE LAVA BEDS
Hood River County
HR-16

DESCRIPTION

The Parkdale Lava Beds are a rough, quite young (240 years) lava flow near the town of Parkdale, Oregon. The elevation varies sharply from 549 - 884m (1800-2900 ft.). The area is managed as a Special Interest Area by the Mt. Hood National Forest.

ELEMENT OCCURRENCES

6:01.000 Geologic--Lava Flow

The Parkdale Lava Beds are a relatively undeveloped area; only a few trails, camping, and picnic facilities are planned by the Forest Service. Hiking is extremely difficult on the rugged surface. Bare rock comprises over 90% of the surface area with only a few scattered trees and shrubs along gullies and ravines where moisture collects. These trees are often deformed by the strong winds and extreme conditions on the lava fields. Species present include: Chinquapin (Castanoosis sp.), vine maple (Acercircinatum), Oregon white oak (Quercus -garryana), and Ceanothus sp. Trees include small Douglas fir, white pine, and ponderosa pine. The rock is porous and springs emerge at the toe of the flow, cutside the boundaries of the Special Interest Area. Ranchers and orchardists use this water.

THREAT TO ELEMENT OCCURRENCES

The Special Interest Area is protected as a managed area. The spring area at the toe of the lava flow is in danger of disruption by a rock-crushing operation which may destroy the quality of the spring water.

DISCUSSION

The Parkdale Lava Beds are a possible candidate to fill RNA cell need EC-17[*] "low elevation recent lava flow with representative vegetation". The vegetation, however, may not be sufficiently developed on the flow to match this need. Cryptogam species may be very common and diverse, but seed plant cover is very low at present. The plant community fits loosely into Roach's classification type of Psendotsugetum-abietum grandis according to species composition[**].

[*] Research Natural Area Needs in the Pacific Northwest, USFS, 1975.
[**] Natural Vegetation of Oregon and Washington, USFS, 1973.

REF. NO.	SR	REFERENCE NAME	LOCATION T-R-S	PS	ELEMENT NO.	VO	ELEMENT NAME
HR-8		Glacier Ranch	1S, 10E	3	3.02.000	V	*Lilium washingtonianum*
			19, 30		4.11.110	V	Cold spring
					6.05.000	V	Research/education potential
HR-12		Crystal Spring Creek	1S, 9E	3	1.05.630	V	Mixed conifer
			13, 24, 25		4.11.110	V	Cold Spring
HR-13		Elk Meadows	3S, 9E	3	1.05.310	V	Mountain hemlock
			NW¼ 1		1.25.117	V	Wet meadow, sedge dominated
			2S, 9E		3.04.700	V	Wildflower area
			SW¼ 36		6.06.000	V	Recreation/open space/scenic features
HR-16	+	Parkdale Lava Beds Geological Area	1S, 9E 11-14, 23	2	6.01.000	V	Geologic feature
HR-17		Tanner Butte Mountain Goat Area	1N, 7E	3	2.02.809	V	Mountain goat
HR-20		Ruthton.Point	3N, 10E	3	1.05.621	V	Ponderosa pine-Douglas fir forest
			28		2.02.636	V	Osprey
					5.14.500	V	Waterfowl wetland
HR-21		Wells Island and Cove	3N, 10E	3	1.05.913	V	Wetland forest
			26		4.04.450	V	River island
					5.14.500	V	Waterfowl wetland
HR-24	+	Starvation Creek State Park	2N, 9E	2	2.02.417	V	Larch Mountain salamander
			NW¼ NW¼ 3		4.04.460	V	Waterfall
HR-25		Colorado Gorge, Chinidere Mountain	1N, 8E	3	3.04.100	NV	Western juniper, northwest periphery of range
			W½ 10				
HR-26		West of.Rimrock Mountain	1S, 10E	3	1.05.621	V	Ponderosa pine-Douglas fir forest
			16		1.05.630	NV	Mixed conifer
					1.05.911	V	Oregon white oak/grassland
					1.05.913	V	Wetland forest

KEY: SR = Site Report

PS = Protection Status
1-preserved
2-legally protected
3-unprotected

VO = Verification of Occurrence
V - verified
NV - not verified

Planning Commission Minutes: November 17, 1982 and December 15, 1982, re: Parkdale Lava Beds

APPENDIX "E" Page 1/15

shall determine that the land in question is not subject to flooding. Mr. Kenward stated that this seems like a very high level of interest. With someone who doesn't know the Valley and know the flooding, he would have to be here in January when the snow melts to find out just where flooding is. Another concern is that there would be a very high expense for the person who has to get the testing done. Mr. Kenward said that he feels that the local staff could be put to a better use and they could go out and do site inspections.

Richard Kenward noted that he lives along the Hood River and he has a personal interest in this subject. Article 5 says that all new buildings will be set back 100'. Mr. Kenward said that this would take off his living room if it was measured 100' from the bank of the river. He said that he is concerned that he would not be able to rebuild his house as it is if it ever burned down. He questioned if there was a special provision for existing buildings in this Zone.

Article 7 says that there must be a good road that is accessible by emergency vehicles. Mr. Kenward questioned if this meant the road had to be paved. He questioned what a proper access road means.

Richard Kenward said that it seems from looking at the maps that a line was drawn along the Hood River from the Columbia River all the way up the Valley. This puts a lot of area into the Floodplain Combining Zone. It seems that this is taking the easy way out by drawing a line up the river, than by actually finding out which areas are susceptible to flooding. It would be much better for the property owners involved if the County would actually find out which areas flood each year, rather than drawing a line all the way up the Hood River and saying it all floods.

Richard Kenward pointed out that the map describes all the flood areas along the Hood River and major creeks. He questioned why none of the irrigation ditches were considered flood areas. Some of these ditches over flow every year. He stated that more thought should be given to this Zone.

BOB MCISAAC 7200 Old Parkdale Road, Parkdale, Oregon.

Goal 5: Bob McIsaac stated that he wished to speak about the Parkdale Lava Beds Geological Area. Mr. McIsaac's testimony is attached to these Minutes and marked as "Exhibit 2".

Bob McIsaac also submitted a letter from Mr. Malcolm McIssaac, Secretary and Manager of the Parkdale Water Company, Parkdale, Oregon. It is attached and marked as "Exhibit 3".

PAUL KLINDT 5291 Baseline Drive, Parkdale, Oregon.

Goal 5: Paul Klindt stated that he wished to speak about the Parkdale Lava Beds Geological Area. Mr. Klindt's testimony is attached to these Minutes and marked as "Exhibit 6".

Mr. Klindt also submitted a letter from Rod S. Laurence, Vice-Chairman, Hood River Soil and Water Conservation District. It is attached and marked as "Exhibit 5".

Mr. Klindt also submitted a letter from William Stanley, Manager, Middle Fork Irrigation District. It is attached and marked as "Exhibit 4".

DAVID TILLER 6100 Trout Creek Road.

Mr. Tiller passed around an aerial photograph to the Planning Commission showing the Parkdale Lava Beds. Mr. Tiller's testimony was submitted to the Commission as "Exhibit 7".

JAMES DUKART 7175 Old Parkdale Road.

Goal 5: Mr. Dukart stated that in regards to the Parkdale Lava Beds, he would like to see Sections 1, 2, 11-14 and 23 kept and protected for a watershed. These lava beds have been a natural water source and shed for years. People in the area and farms depend on this source of water. Mr. Dukart said that he would like the Planning Commission to follow the recommendations of the Nature Conservancy Board for the Parkdale Lava Beds to remain a watershed. He said that the County should not take a chance disrupting the natural flow of the water source in this area.

WILL CAREY, Attorney at Law 540 Highline Road.

Goal 5: Will Carey stated that he did not know that there was going to be a recap of the Green hearing, and this is what has been going on previously. There are some misconceptions as to where that matter currently stands. Currently this land has been designated by the Planning Commission and the Hood River County Board of Commissioners as a Surface Mining Combining Zone. After that designation, it was appealed. It went to LUBA and it was discovered that this area of the County was not included in the Comprehensive Plan. It was remanded back to the County to adjust their findings. That did not have an affect of destroying everything that was done at the County level.

Will Carey stated that he has been hearing a lot of discussion about water. This was the same issue that was before the Planning Commission at the Green hearings. This is a scare tactic. Mr. Carey commended the Planning Staff and Planning Commission on their work on the report regarding the Parkdale Lava Beds. There are approximately 4,000 acres in this area. 840 acres are in private ownership. The balance is in public ownership. Some distinction should be made between public and private ownership of land. Mr. Carey noted that one person kept bringing up the words "economic gain", like "why would anyone be so gross as to do something on their property for economic gain?". If someone owns 51 acres of rock, what should they do with it? Mr. Carey asked if a person owning 51 acres should preserve it for someone else to use it to their advantage. All the questions regarding the Lava Beds Area can be answered, and they can be answered compatibly with each other.

Will Carey stated that it is not incompatible to extract some rock from private lands in a very needed area of the County. What is currently designated is a very small portion of land. Mr. Carey said that he agrees with the concept of a Scenic Protection Zone for the Lava Beds, but only for everything that is not in private ownership. If entities desire to maintain this property so that it is completely in a scenic area with no other

uses allowed, then that property should he purchased. You cannot expect a private property owner to maintain his land, pay his taxes, and bear the cost of it so that everyone but himself enjoys the property.

Goal 5 requires an aggregate study and this is scheduled for a later hearing. Mr. Carey stated that the recommendations in the report are accurate and that the Green parcel is in a different category than the other portions of the Lava Beds.

JACK AND CHRIS WALLS 1808 Country Club Road, Hood River, Oregon.

Chris Walls stated that she and her husband wished to make a presentation together and requested a maximum of 10 minutes for the presentation.

Goal 7: Geologic Hazards: Chris Walls stated that her property is being recommended for a zone change to Geologic Hazard. This property is located at T2N R10E Section 8, tax lot #100. This property is shown on Exhibit "I" of the County's report.

Chris Walls stated that Phelps Creek was designated as a potential flood site on the Soil Conservation District's Generalized Floodplain Report. This report is a generalized report. Chris Walls stated that she spoke to David Tiller, Soil Conservation District, and he indicated that the maps were very general and for any specific use an on-site evaluation should be done. Mrs. Walls emphasized that no on-site evaluation has been done. The report was based on a 100-year flood plain, meaning a chance of rain or snow melt-off could possibly occur within a 100 year time period that would equal two times the storm of Hood River's January, 1980 snowstorm. During the runoff period after the snowstorm, Phelps Creek was watched carefully for flooding. Chris Walls stated that they watched it carefully because they had built a bridge and wanted to check for damages. There was no damage to the bridge. Phelps Creek did not overflow and since the creek bed is deep, overflow is not likely in this area. Chris Walls stated that Phelps Creek is not located correctly on the map. Jack Walls pointed out the proper location on a map and pointed out areas that could possibly be subject to flooding.

Chris Walls stated that she would like to see some serious consideration given to the geologic hazard designation that has been given to this property. Mrs. Walls said that she had contacted John Beaulieu of the Department of Geology and Mineral Industries. Mr. Beaulieu is the Deputy State Geologist for the State of Oregon. The map prepared in 1977 by the State has been used as the primary criteria for this proposed geologic hazard. Mr. Beaulieu said that these maps are generalized and must not be taken as site specific. Mr. Beaulieu has stressed that on-site examination is required for site specific evaluation. In the State's report it says that "boundaries are approximate, statements are general; site evaluations require on-site investigation". Chris Walls pointed out that no on-site evaluation has been done. In this as in any zone change application, the Burden of Proof is on the applicant. In this case, the applicant is Hood River County. They must prove there is a hazard and valid criteria must be used. The existence of a fault has not been proven. So far only one person's opinion (John Beaulieu) has been given and this is being relied on as fact.

Jack Walls said that he had to build a road to his house approximately seven years ago. Mr. Walls stated that this road has not shifted or moved one bit.

Chris Walls stated that some of the work that has been done is very good work, but it is very generalized. This work cannot be relied on as site specific information and proven fact. Mrs. Walls said that the Planning Commission must consider the consequences of this zone change. It will lower property values, not assessed value, but market value. Mr. Leonard Sheirbon, Director of Records and Assessments, indicated that so far the County has no experience with geological hazards, therefore they do not know how to evaluate these areas. Chris Walls pointed out that even if the tax assessment does not change, the value for resale will because it severely limits what can be done on the land. The County will require that a geological survey be done before any building can be done. Mrs. Walls mentioned that accessory farm buildings such as a barn or shed would not be subject to this requirement, however it depends on the size of the building.

Chris Walls stated that she checked to see who would do a geological survey on private property and there are no local firms. There are some in Portland and their prices vary from $200 to $600 for one specific building site. This does not count any soil testing which might have to be done. It is not the Planning Commission's intent to cause undue hardship for any of its citizens, but they must consider these costs. Mrs. Walls said that this Geologic Hazard Zone is beneficial in an area that can or will be subdivided later into many building sites. The development for the Walls property is already limited in the Forest Zone and EFU Zone. The probability of a subdivision there is very, very remote.

Chris Walls noted that any zone change proposed and submitted to the Planning Department is subject to a thorough investigation and an in depth staff report on the specific property in question. Field inspections are done on a regular basis for these reports. A one paragraph recommendation is not enough to base this proposed zone change on.

Chris Walls asked the Planning Commission to keep in mind that they cannot generalize. The Planning Commission must consider specific properties. Each must be treated individually, examined completely before any zone change is allowed. The Findings of Fact must be made public and an opportunity for rebuttal should be considered.

Michael Nagler, Planning Director, stated that the Planning Department received some additional comments. He read a letter into the record from Ken Galloway, County Forester. Mr. Nagler added that there were additional revisions to some of the drafts. They are available for anyone who needs them in the back of the Cafeteria. Mr. Nagler handed copies out to the Planning Commission.

JOHN BECK Oregon Department of Fish and Wildlife.

Goal 5: John Beck stated that the Department of Fish and Wildlife has the responsibility of maintaining big game animals in Hood River County that are compatible with the present land uses. Currently the compatible land uses with big game habitat (i.e., deer and elk) is forestry and agriculture. Mr. Beck said that the Department has designated three major areas that are valuable for wintering purposes of deer and elk. The majority of the animals in Hood River County are migratory. They spend their summers in high elevations and in the cold weather they move to lower elevations. The winter ranges are situated upslope from orchard areas which are subject to animal damage. One of the important factors in

designating this ground as winter range is the damage that is received to the orchard area. The Department feels that if these lands were allowed to be broken up into small acreages less than 40 acres, it would be very difficult for them to control the numbers of big game. If you have small lot sizes, you have a population of animals that is exceeding the carrying capacity of the land. There is no viable way of controlling those numbers of animals from hunting. Mr. Beck stated that the Department has already experienced problems on the east side of the Valley, where deer and elk have caused considerable damage to orchard areas. It is hard to get hunters in these areas to harvest these animals because of the already small lot sizes.

RICHARD KENWARD 4470 Riverside Drive

Mr. Kenward stated that he has already testified but he wished to submit additional testimony.

Richard Kenward stated that he wished to address the Floodplain Combining Zone. Mr. Kenward said that he felt that the 100' setback is excessive to the needs for providing trees and shrubs to grow along the riverbank. Mr. Kenward asked the Planning Commission to reconsider this.

Hearing no further testimony, Chairperson Reinig closed this hearing to any further testimony. She thanked everyone for coming.

FINDINGS OF FACT: MICHAEL BYRNE (FOR ANNA HAYES):

Commissioner Glenn Taylor stated that the Staff Report and the oral and written testimony of the applicant(s) will be made a part of the record. Section 66.20 of the Zoning Ordinance, Variance Guidelines, says "Variance applications shall not be accepted nor shall they be processed when a violation of this ordinance or other law exists." Mr. Taylor stated that it is too late to attempt to correct a problem ten years after a land partition has occurred. Therefore this long-standing violation is not justification to deny the Variance application.

Commissioner Taylor noted that the property has had a single-wide mobile home located on it since 1969. Improvements are needed immediately before the mobile home can be reoccupied. The proposed repairs are appropriate for this exceptional application. The owner should be allowed to repair this dwelling as any other owner in this zone would have the right to do.

Commissioner Taylor said that an additional one foot variance to an existing setback would not be detrimental to the purpose of this ordinance or to any property owners in the same zone or vicinity, or conflict with the purpose or objectives of the Comprehensive Plan.

Glenn Taylor further stated that this Variance is the minimum that would alleviate the hardship.

Commissioner Gloria Fawbush stated that she has a problem with this application. She said that after thinking it over, she wished to make a motion to reconsider the decision on this application.

Motion died for a lack of a second. The Planning Commission decision remains to approve the application.

HOOD RIVER COUNTY PLANNING COMMISSION

HOOD RIVER, OREGON

Minutes of the Work Session of the Hood River County Planning Commission, December 15, 1982, Basement Conference Room, Hood River County Courthouse.

COMMISSIONERS PRESENT:	Commissioner Gloria Fawbush, Commissioner Blane Howell, Commissioner Kim Parker, Commissioner Mike Udelius, and Chairperson Joyce Reinig.
COMMISSIONERS ABSENT:	Commissioner Jack Green and Commissioner Glenn Taylor.
COUNTY STAFF PRESENT:	Michael Nagler, Planning Director; and Dawn Baird, Planning Secretary.

The Work Session of the Hood River County Planning Commission was called to order at 7:35 p.m. by Chairperson Joyce Reinig.

Michael Nagler pointed out that the Planning Commission will review testimony received at the November 17th hearing, and they are in deliberation. The Planning Commission received a handout from the Planning Staff on December 8th giving recommendations on the testimony received. Mr. Nagler noted that Jeff Breckel and Phil Crawford were present and that they had something they wished to present to the Commission.

Chairperson Reinig suggested that the Planning Commission discuss each concern as it was raised in the public hearing. She stressed that the Planning Commission does not have to change anything if they don't want to.

Commissioner Parker suggested that the Commission start off by discussing the Parkdale Lava Beds.

Commissioner Howell pointed out that the lava beds have never been discussed in the Comprehensive Plan. The Planning Commission should decide how they want to designate the lava beds. There are a couple of alternatives: (1) designate Scenic Protection, to protect the water source in the lava beds; or (2) designate all public lands in the lava beds Scenic Protection and designate the private lands Forest.

Chairperson Reinig questioned if a trade with Hood River County is possible for private land owners of the lava beds. Ms. Reinig referred to a letter submitted by William Stanley at the November 17th hearing.

Michael Nagler replied that he did not think so. The Federal Government were thinking about acquiring the remainder of the lava beds in the early seventies. Their policy is still the same.

Commissioner Howell asked if the Planning Commission could designate all lands in the lava beds as Scenic Protection.

Michael Nagler replied that it is the Commission's option to do this if they choose.

Commissioner Howell said that during the Green hearing, he did not realize exactly how many people depend on the underground springs for their water supply. Mr. Howell said that there needs to be a provision to protect this water source. Hood River County could change the taxes on the property if the private lands were downzoned. It is the responsibility of the Planning Commission to protect the water source and to protect the lava beds. Commissioner Howell suggested designating the lava beds 3A - Preserve the Site.

Chairperson Reinig stated that David Tiller gave some testimony at the November 17th hearing that she wished to verify. He said that the spring in the lava beds provides 1,600 gallons per minute vs. Crystal Spring's 2,100 gallons per minute. She asked if this was a fact.

Commissioner Udelius noted that there is more than one spring in the lava beds and perhaps the total of all the springs is 1,600 gallons per minute.

Chairperson Reinig pointed out that she also was not aware of how many families depend on this water. She questioned where the Green Zone Change application stood.

Michael Nagler replied that LUBA remanded this application back to the County because there was no Plan designation for the lava beds. Mr. Nagler said that he feels that there has been so much going on on the Green property at the Board level and the Planning Commission level, that he should write a separate report on the Lava Beds area.

Chairperson Reinig noted that Bob McIsaac mentioned something about a survey of the Lava Beds. She asked if this survey was available.

Michael Nagler answered that he would have to look into it. He said that he is aware of the Nature Conservancy's survey. The County is getting some updated information on this.

Commissioner Udelius stated that Mr. McIsaac said that the rock and water inventories of the County were not completed yet. This could be what Mrs. Reinig is talking about.

Chairperson Reinig said that her only problem with designating the private lands in the Lava Beds "SP" was that Mr. Green paid good money for this land, and the County will be taking this away from him.

Michael Nagler stated that the Nature Conservancy does not have any clout unless they buy property, however they did a study on this particular area and other areas in the County under a contract with LCDC in 1977. LCDC said that if the County is going to allow limited use on private lands, the Surface Mining Combining Zone will have to be updated. This would be something that would have to be considered by the Commission. If the Commission designates this property 3A, private land owners could not even take rock off their land for forest purposes. It would be considered a natural area.

Chairperson Reinig stated that she is concerned that if the County zones all this land "SP", the land will not be worth anything to the private land owners. She wondered if the County could negotiate a land trade with private land owners of the Lava Beds.

Commissioner Fawbush stated that she concurred with Commissioner Howell's comments. She questioned how private land owners would be impacted by designating all of this land "SP".

She noted that the private land owners have invested quite a bit of money in their land and now it would be taken away from them.

Commissioner Howell stated that the Greens have been using their property for a long time. The Planning Commission should not try to decide the rightness or wrongness of whether private lands should be changed to reflect the situation that exists on the public lands. The Planning Commission must look at what is good land use. Mr. Howell said that one quarry in the Lava Beds will not affect the beauty of the area all that much, but there is a possibility of ruining a water source to many families in the area.

Commissioner Parker asked how much private land was in the Parkdale Lava Beds.

Michael Nagler replied that it is approximately 800 acres. Michael Nagler stated that he would like to define what a 3C site is. It means that the land will be saved, but certain types of uses would be allowed. This would require that the "SM" Zone would have to be updated, and this area (and possibly others) would have to be identified. Criteria would have to be placed saying that the excavation activity would not terminate the water resources, and the applicant would have to post a bond to insure that it would not. These criteria would have to be met prior to allowing extraction. If the resource were disturbed, the burden would be upon the applicant to pay to fix the problem. This is a compromise.

Commissioner Howell stated that his concern is that there could be irreversible damage. The Planning Commission should not have to prove that if mining occurs in the Lava Beds, the water will not be disturbed. The Burden of Proof should be upon the applicant. The Greens have had 12 years to prove that they will not harm the water if they extract rock.

Commissioner Parker said that what concerns her is that there is also no proof that there will be a problem to the water source.

Commissioner Howell questioned what would be done if the damage was irreversible. The residents of this area are very concerned about the damage that could be caused to the springs. These people are not trouble makers. They have legitimate concerns. They do not dislike Jack Green. The applicants of rock extraction should provide proof and not desire. The final decision is not actually up to the Planning Commission, but to the Board of Commissioners.

Commissioner Howell stated that if the Planning Commission proposes to make the Lava Beds a specific designation, this will make one side present some solid information and meet the Burden of Proof.

Chairperson Reinig referred to Mr. William Stanley's letter which was submitted at the November 17th public hearing (see Exhibit "4"). She said that the Planning Commission must be sure to consider both sides of the problem. She stated that she would like to see the County consider a trade with the Greens.

Commissioner Howell suggested that the Commission recommend designating the Lava Beds Environmental Protection and suggest that the County try to work out a land exchange with the Greens.

Chairperson Reinig stated that she felt this would be fair to the Greens. She said that she does not want to see the Greens paying taxes on land they cannot use for anything.

Commissioner Udelius said that his main concern is also the possible disturbance of the water source. Mr. Udelius said that supposedly 20-25% of the Lava Beds could be removed without ever disturbing the water. This may or may not be true. One hundred and sixty families use this water and this is a large number of people. Mr. Udelius stated that he felt that a land exchange with the Greens would be good but the County should be careful to trade a piece of land that did not have the same problem as Mr. Green's.

Commissioner Howell pointed out that Mr. Green is on the Planning Commission, however this does not mean that he should be given special treatment. He noted that when other properties were downzoned during the planning process, no other property owner was given compensation.

Chairperson Reinig stated that this is true, however, no other person has ever had this particular set of circumstances on their property.

Commissioner Fawbush mentioned that at the original Zone Change hearing in 1981, the information was incomplete. Mr. Stanley recommended approval of the application. Since then more information has been obtained and Mr. Stanley's recommendation has changed.

Michael Nagler stated that he previously defined a 3C site. He said that there is a difference between 3A and 3C. A 3A site means to Preserve the Site. If a site is designated 3A reasons must be given why. These reasons would have to be placed in the Comprehensive Plan. All conflicting uses would be prohibited.

Commissioner Howell suggested that the site be designated 3A and Mr. Nagler prepare a report stating the reasons why they Lava Beds should be designated as such.

Motion was made by Commissioner Blane Howell and seconded by Commissioner Mike Udelius to designate the Parkdale Lava Beds 3A - Preserve the Site. Mr. Nagler will prepare a report with reasons why this site should be 3A. The Planning Commission will also recommend to the Board of Commissioners that they should do everything possible to negotiate a land exchange with Mr. Green so that the springs in the Lava Beds are not adversely impacted.

Vote on the motion was as follows:
Commissioner Howell - yea
Commissioner Parker - yea
Commissioner Udelius - yea
Commissioner Fawbush - yea
Chairperson Reinig – yea

Motion carried unanimously (5-0).

GEOLOGIC HAZARD AREAS

Chairperson Reinig stated that Jack and Chris Walls brought up some good points in their testimony.

Commissioner Parker said that she feels that people should be able to live in Geologic Hazard Zones if they want.

Chairperson Reinig stated that there was testimony that much of the Geologic Hazard area was done just by looking at aerial photographs.

Michael Nagler said that he spoke with the State Geologist and he said that the information submitted to the County was very reliable. Mr. Nagler noted that the Planning Staff had changed the map to show the proper location of Phelps Creek on the Walls property. He said that Mr. Richard Birkett had also been notified that his property has been proposed to be in this zone, and will be notified of all future hearings.

Michael Nagler further stated that the Planning Department sympathizes with the people who are placed in the GH Zone because it costs hundreds of dollars to have a geologic study done. Some people feel that the County should absorb the cost of the study. Mr. Nagler said that the problem with doing this is that it would cost the County hundreds of thousands of dollars and the County would not budget that much money for a study. Another alternative is for the County to hire a geologist on a case by case basis. This would also be expensive and take a lot of time. There has been some talk about the County Engineer doing the geologic studies, but Jim Lyon is not qualified at the present time for this. He would have to have some schooling before he would be qualified.

Michael Nagler pointed out that having the applicant of a building permit sign an affidavit saying that he will take the responsibility if his building falls down due to the geologic hazard just will not work. The applicant would still end up suing the County.

Mr. Nagler said that he has made a recommendation regarding the Walls property which is listed on Attachment "B" of the report handed out (response to November 17 testimony). He asked the Planning Commission to review this. He said that this will not solve the Walls property and they probably will not be happy with this.

Chairperson Reinig stated that she does not feel it is fair to people to have to spend hundreds of dollars for a geologic study of their land if they are willing to take their chances.

Commissioner Howell said that he is not against someone building in a Geologic Hazard Zone, but the building should be done properly. The State Geologist said that this information is reliable. Mr. Howell suggested that something be placed in the Comprehensive Plan so that if the applicant can prove there is no problem with his area, he should be able to build without a geologic hazard study.

Commissioner Fawbush emphasized that all the tax payers in Hood River County should not have to bear the burden of paying for a study. This is not fair to them.

Chairperson Reinig questioned how the City of Hood River handles this type of situation.

Michael Nagler replied that they handle it the same was as the County: the Burden of Proof is upon the applicant.

Motion was made by Commissioner Blane Howell and seconded by Commissioner Kim Parker to make no change to the Geologic Hazard Zone, except for what Mr. Nagler has recommended in his report, and any changes he feels are necessary to meet compliance.

Vote on the motion was as follows:

Commissioner Howell – yea
Commissioner Parker – yea
Commissioner Udelius – yea Commissioner Fawbush - yea
Chairperson Reinig - yea

Motion carried unanimously (5-0).

Michael Nagler stated that Jeff Breckel and Phil Crawford were present in the room. He said that they have an update that they would like to present to the Planning Commission that would allow more flexibility in selective cutting in the Columbia Gorge.

Phil Crawford stated that he has spent much time with Jeff Breckel and Ken Galloway discussing this proposed change to the previous recommendation. Mr. Crawford referred the Planning Commission to the report written by Mr. Nagler entitled "Revisions per Testimony from the Director of the Oregon and Washington Columbia River Gorge Commissions". He referred to page 2, item #8, "Definitions". #1 under this section has been changed to read as follows: "The basal area criterion will apply only to stands of trees 7 inches d.b.h. and larger." Item #3 in this section was also changed. The original stated "Minimum basal area per acre to remain on the site at all times." Mr. Crawford suggests that the following replace that statement: "At least 40% of the normal* basal area per acre must remain on the site at all times." Then an asterisk will be placed at the bottom of the page and the following will be noted: "*Normal basal areas for fully stocked Douglas-fir stands may be found in Table 3, Technical Bulletin No. 201, United States Department of Agriculture, and for red alder in Table 1, Washington Department of Natural Resources Report No. 31."

Chairperson Reinig asked what "forest canopy" meant.

Phil Crawford answered that the forest canopy would mean the amount of treetops – the green. He said that what this means is that 40% of the canopy would have to remain.

Commissioner Fawbush asked how the 40% remainder would be determined.

Phil Crawford replied that this could be determined by aerial photographs taken before and after the timber harvest. This is an expensive process. Mr. Crawford said that this way of measuring is not very appropriate for the Planning area however. This is why it is being suggested that "basal area" become the measurement. This is a commonly used term that means the stump area. It measures how much timber is on a piece of property.

Chairperson Reinig asked if anyone from Champion International had seen this revision.

Phil Crawford said that he had not sent it to anyone at Champion, but Ken Galloway, County Forester, has reviewed it.

Chairperson Reinig pointed out that these recommendations will make the Scenic Protection Zone more restrictive than the Forest Practices Act. People in the forestry profession do not necessarily agree with what the Columbia Gorge Commission wants.

Phil Crawford pointed out that he is not representing the Columbia Gorge Commission. He stated that the Forest Practices Act does not talk about scenic issues. The purpose of this revision is so that timber can be

produced while maintaining the visual impacts of the area. Private land owners do not own large blocks of specific types of timber, however, large companies such as Champion do, and the Commission needs to help protect the scenic qualities of the Gorge by restricting certain things in the SP Zone

Phil Crawford said that he feels that people in the timber industry should not have any problem with this revision. They understand the language that is discussed in the draft. This revision was discussed with Ken Galloway and he liked the change. Mr. Crawford pointed out that the County Forestry Department has to make money just like a private timber company, so there really should be no problems with the proposed revisions.

Michael Nagler noted that Ken Galloway has reviewed and approved this change. He said that Mike Allen of Champion, does not favor the Scenic Protection Zone, so he may not agree with these revisions.

Chairperson Reinig said that perhaps Mr. Allen will agree; this is a compromise. Champion cannot have everything their way; they will have to give a little.

Commissioner Howell stated that he has a concern about keeping the process going. He said that he was a little concerned about taking additional testimony since the hearing has been closed, but this revision should be considered as an aid to Mr. Nagler to help provide recommendations to the Commission. If Champion is allowed to respond to this revision there will not be a problem.

Michael Nagler suggested that the Commission send this revision to Mike Allen and inform him that the Board of Commissioners will hold hearings in the future and they would be allowed to submit testimony at that point.

Chairperson Reinig said that she believes this compromise is fair and it should be noted that this is not the final decision. The Planning Commission will only be recommending this to the Board of Commissioners.

Motion was made by Commissioner Blane Howell and seconded by Commissioner Kim Parker to table action on this revision until January 19, 1983, to give Champion International a chance to respond to this change.

Vote on the motion was as follows:
Commissioner Howell - yea
Commissioner Parker - yea
Commissioner Udelius – yea
Commissioner Fawbush - yea
Chairperson Reinig – yea

Motion carried unanimously (5-0).

FLOODPLAIN COMBINING ZONE

Commissioner Fawbush stated that she feels that the Commission should be consistent with the Geologic Hazard Zone.

Commissioner Parker stated that someone testified at the hearing that 100' is excessive. She agreed with this statement.

Commissioner Fawbush pointed out that if 100' is not necessary, the burden is upon the applicant to prove that 100' is excessive.

Chairperson Reinig stated that one of the problems with a 100' setback requirement from streams and creeks is that some people do not have 100'. She said that a big concern is how this requirement will affect existing buildings.

Michael Nagler said that Jim Lyon, County Engineer, views all building permit applications. He reviews the site and examines the HUD maps. Michael Nagler stated that in all of his years in planning he has not seen anyone denied a building permit because of a floodplain. Mr. Nagler also pointed out that if someone was denied a building permit to rebuild a structure that was burnt down, they would get a free appeal to the Planning Commission and the Commission would make the final decision in this matter. He emphasized that there are certain houses in certain hazard areas that could not be rebuilt, however the final decision is up to the Planning Commission.

Chairperson Reinig asked if the Forest Practices Act was more stringent than the Floodplain Combining Zone.

Michael Nagler replied that the Floodplain Combining Zone is more stringent than the Forest Practices Act. Michael Nagler stated that LCDC did an analysis of the Forest Practices Program to address Goal 5 requirements. LCDC decided that if riparian vegetation is addressed, the Forest Practices Act is fine with them. Mr. Nagler stressed that the concern is for riparian vegetation whether that includes trees or other things. LCDC will be holding hearings on the change to Goal 5 requirements in the next few months.

Commissioner Howell asked if the Commission should wait until after LCDC has its hearings to see how everything comes out before they make their recommendation to the Board of Commissioners.

Michael Nagler stated that if it comes out that the Forest Practices Act is okay with the addition of the riparian vegetation requirement, the Commission should recommend to the Board of Commissioners to accept the Forest Practices Act.

At this time Chairperson Reinig handed the gavel over to Vice-Chairman Howell.

Motion was made by Commissioner Joyce Reinig and seconded by Commissioner Kim Parker to support the Forest Practices Act to include a provision to protecting riparian vegetation within 100' of any stream.

Vote on the motion was as follows:
Commissioner Reinig - yea
Commissioner Parker- yea
Commissioner Udelius - yea
Commissioner Fawbush - yea
Vice-Chairman Howell – yea

Motion carried unanimously (5-0).

The gavel was returned to Chairperson Reinig.

COMMENTS: JOHN BECK

Michael Nagler stated that Hood River County is trying to meet LCDC's requirements. Anything other than what LCDC addressed in their critique does not need to be addressed

Motion was made by Commissioner Blane Howell and seconded by Commissioner Kim Parker to make the corrections indicated tonight to include Michael Nagler's recommendations, for all items considered at the November 17th hearing.

Vote on the motion was as follows:

Commissioner Howell - yea
Commissioner Parker - yea
Commissioner Udelius - yea
Commissioner Fawbush - yea
Chairperson Reinig – yea

Motion carried unanimously (5-0).

ANNUAL DINNER

The Planning Commission suggested holding their Annual Dinner Meeting at either the French House in the Dalles, or Stonehedge in Hood River. The recommended date to hold this dinner was January 26, 1982. Mr. Nagler stated that he would inform the Planning Commission as to the definite date and place.

WELLS ISLAND

Michael Nagler questioned if one of the Planning Commissioners could give him a brief history of the situation with Wells Island.

Commissioner Howell offered the following story:

Right after Stanley Wells got off as President of the Port, the Port came out with the idea that Wells Island should be industrialized and a bridge should be built out there. They felt that all services should be put out there (road, electricity, sewer, water, etc.) and then it would be an ideal industrial site. Quite a few people felt there were other industrial sites available without nearly as much expense involved to the tax payers. The fight was bitter, long, and intense between the people who felt it should be exactly the way it is and the people who said it should be all factories. The compromise that was worked out in Planning Commission sessions was that it would be a Planned Unit Development. It was hoped that it would be designated recreational.

Chairperson Reinig stated that at the time the Planning Commission agreed that this would be the most viable use for the island.

Commissioner Howell said that he thought the Board went along with this recommendation. In the mean time the City decided to annex the land. Most of the people who wanted

United States Department of Agriculture | Forest Service | Mt. Hood NF | 2955 N.W. Division St., Gresham, OR 97030

Reply to: 1920 (1500)

Date: February 4, 1983

Mike Nagler, Planning Director
Room 101, Hood River County Courthouse
Hood River, OR 97031

FEB 10 1983

Dear Mike:

The following comments are in response to your January 21, 1983, letter concerning the Parkdale Lava Beds.

The Lava Beds are not classified as a Special Interest Area. The area has, however, been identified as an Unusual Interest Area (geological) in a recreation area plan approved by the Assistant Regional Forester in 1968. This plan identified several potential recreational developments. None have been developed due to lack of public demand and lack of available funds. There are no plans in the foreseeable future to develop this area.

Our current direction for this area is contained in the Hood River District Multiple Use Plan. The Multiple Use Plan prohibits commercial use or removal of the resources. This direction will be reviewed during our current Forest Planning process. Direction identified in the Forest Plan will supersede all District Multiple Use Plans.

We have no plans to acquire private lands which contain portions of the Lava Beds. We also do not expect to build a visitor recreation center or develop other recreational facilities in the area.

The term, "adjacent National Forest boundary", as used on our Forest map, refers to the boundary line which separates two adjoining National Forests.

If you have any further questions, please give us a call. I am looking forward to continued coordination as we proceed with our Forest Planning process.

Richard J. Pfilf

RICHARD J. PFILF
Forest Supervisor

266:4262D1

APPENDIX "F"

United States Department of Agriculture
Forest Service
Hood River RD
6780 Highway 35
Mt. Hood-Parkdale, OR
97041

Reply to:

Date: January 10, 1983

Mr. Jack Green
Hood River County Planning Commission
5700 Hwy 35
Parkdale, Oregon 97041

Dear Mr. Green:

The following comments are in response to your inquiry regarding future management of the Lava Beds on National Forest land.

The Lava Beds on National Forest land were classified as Special Interest Area (geological) in 1968. A Recreation Area Plan for the Lava Beds was also approved in 1968. During the past 14 years no action in relation to the Recreation Area Plan has occurred. There are no current plans to implement the recommendations and direction in the Area Plan. In fact, the Area Plan can be considered no longer relevant to current and future management for the Lava Beds.

Future management will be directed by the Forest Land Management Plan, which has been in the development stage for several years now.

The Lava beds on National Forest land are still classified Special Interest (geological) and are being managed in a near natural state. I foresee no change in this current management upon completion of the Forest Land Management Plan.

My comments are basically the same as documented in a letter to Bill Adams in 1978, and several phone conversations with Mike Nagler in the past several years.

In addition there are no current or future Forest Service plans to acquire private lands adjacent to the National Forest lands.

RICHARD L. MUELLER
District Ranger

APPENDIX "G"

GOAL 5: ENERGY SOURCES

A. Introduction:

Present undeveloped energy sources within the County are limited. Possible undeveloped sources range from the construction of pumped storage facilities to small energy conversions systems.

B. Forest By-Products:

Energy production from forest by-products has some potential in Hood River County. Many local residents depend heavily on cord wood for heating and cooking during the colder months of the year. Cord wood for residential use is obtained from private woodlands, Hood River County forest lands and national forest lands. Planer ends are also obtained from local lumber mills and used as a source of fuel.

Expanded use of renewable resources, such as logging slash, mill and other waste products is recognized as an energy source as is efficient use of existing energy resources and improved conservation measures, like proper insulation and recycling techniques. Recycling operations in the County include the newspaper drop stations operated by the Lions Club on Tucker Road and State Street and the Hood River Transfer Station which recycles cans, foil, glass, newspaper and cardboard.

C. Fossil Fuels and Geothermal:

There are no known fossil fuel reserves within the County and no nuclear site availability. The Mt. Hood mountain area displays some potential for geothermal energy development. There is currently a cooperative research project on the part of the U.S. Geological Survey, U.S. Forest Service, and State Department of Geology and Mineral Industries investigating the potential for the utilization of geothermal resources in the area around Mt. Hood.

D. Pumped Storage:

Pumped-storage waterpower has been discussed as an additional energy source along the Columbia River. The term "pumped storage" used in association with hydroelectric power development denotes a system in which off-peak power with little value is converted into valuable peaking power by pumping water to an upper storage reservoir with the cheap power and releasing it through hydraulic turbines to produce power during periods of high electricity demand. The Corps of Engineers has identified three potential pumped storage sites in Hood River County. South of Bonneville Dam pumped-storage could be constructed in Tanner Creek or on Tanner Butte.

A reservoir on the north end of the butte could create a head of about 3,000 feet with a conduit length of about two miles.[1]

E. Solar:

Energy from solar sources has good potential in Hood River County. The City/Westside area enjoys a mild climate and considerable sunshine. Several solar dwellings have recently been constructed in Hood River County and appear to be functioning quite well. The guarantee of solar access rights and easements may be addressed in the Zoning Ordinance.

Present undeveloped energy sources in the City/Westside area are limited and include primarily hydro and solar power and increased conservation. There are no significant reserves of non-renewable energy resources in the area.[2]

New technology is being developed that is making solar power competitive with traditional energy sources. The guarantee of solar access rights and easements may be addressed in the Zoning Ordinance. For additional information, see Goal 13 - Energy Conservation, and Goal 13 - County Policy Document.

F. Conservation:

Conservation as an energy resource should be recognized. Improved conservation measures like insulating properly, manufacturing more efficient engines and recycling are all indirect forms of energy sources. For additional information see Goal 13 - Energy Conservation Background Report and Goal 13 - County Policy Document.

G. Wind Energy: City/Westside Area:

1. Location: Map #1 identifies the location of wind energy potential in the State of Oregon. The Columbia River Gorge has been identified as a primary wind energy area.

   Site specific resources are not mentioned or designated in Hood River County at this time. However, at the State level, additional research could result in designating specific sites in Hood River County. The only site-specific resource area mentioned is in Wasco County around Seven Mile Hill which is approximately 7 to 10 miles east of Hood River County's eastern boundary (as the crow flies).

2. Quality and Quantity: [3]Map #1 identifies the Annual Average Wind Power in Oregon. The Columbia River Gorge has one of the highest wind energy potential

[1] Source: Mineral and Water Resources of Oregon. Prepared by the United States Geological Survey. Bulletin 64, 1969.

[2] Minerals and Water Resources of Oregon, U.S. Geological Survey Bulletin 64 (1969).

ratings in Oregon. A portion of Hood River County's land base is within the Columbia River Gorge and has a wind class rating between 5 and 6. These ratings are one of the highest wind energy ratings in Oregon. Furthermore, only 18% of the land area in the State of Oregon is rated 5 and 6. These ratings reflect an average wind speed between 17.8 and 19.7 m.p.h. An average wind speed of at least 12 m.p.h. is sufficient to operate a [4]wind energy conversion system (WECS), consequently the Columbia River Gorge area is one of the vital wind energy resource areas in the State of Oregon. Furthermore, Hood River, Wasco and Multnomah Counties are rated[5] high for wind energy potential in Oregon, commensurate with some counties along the Oregon Coast.

[6]Potential wind energy markets include: residential, farm/commercial and utility applications. It is estimated that there will be significant growth within these markets by the year 2000. It is estimated that 900 of the future installed WECS (wind energy conversion systems) will be in the utility sector.

Wind resource potential measurements have been taken at more than 70 sites throughout the State, but only a few were taken expressly to assess wind resource potential. Until many more sites have been evaluated, any statewide wind resource estimates are preliminary and subject to verification. Knowledge of the wind resource, it's location and intensity, is the cornerstone to the development of wind energy. The current level of resource information is inadequate for most wind energy purposes. Much more must be learned about the resource before one can confidently predict WECS economics and performance, siting location and potential.

3. Conflicting Uses and the Economic, Social, Environmental and Energy Consequences: Although additional research and evaluation needs to be done regarding wind energy potential, it behooves the County to become familiar with the positive attributes, conflicts and other characteristics associated with wind energy facilities

[7]Economics: WECS are generally recognized as currently not being economical alternates at this time. As the industry matures, prices for equipment are expected to decrease into a range of attractiveness. The cost of energy from WECS can be many times the cost of conventional source energy depending on the cost and performance of the particular WECS, and the wind environment in which it is

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[3] Wind Task Force; Final Report to the Oregon Alternative Energy Development Commission, June, 1980, p. 5.

[4] The purpose of wind energy conversion system (WECS) is to convert kinetic energy in the wind to a usable form such as mechanical or electrical energy.

[5] Regulation of Small Scale Energy Facilities by Oregon Counties: Siting Hydroelectric and Wind Energy Systems and Electric Power Transmission Lines, Oregon Department of Energy, August, 1983. Figure 2-1 after page 2.

[6] Wind Task Force Final Report to the Oregon Alternative Energy Development Commission, June, 1980, P. 14.

sited. Utilities are waiting for the costs to come down before committing themselves to orders for equipment. Manufacturers are waiting for quantity orders before they will invest in mass production facilities to assemble low cost WECS.

As various user groups wait for prices to fall, WECS implementation is delayed. The industry needs orders for equipment in order to gear up for mass production which would result in lower prices. Waiting for lower cost turbines is counter-productive to the expeditious development of a viable WECS industry.

[8]Social Benefits: The use of WECS to supply energy embraces a number of social favorable values. Relative to other energy generation systems, some of these benefits are quite attractive. A partial unprioritized list of the benefits are:

a. Induces pride by contributing to self-sufficiency.

b. Promotes energy awareness and conservation of non-renewable resources.

c. Has the potential for creation of local employment opportunities.

d. Has the potential for reduced dependence on outside energy resources.

e. Provides flexible and adaptive technology.

f. Permits wide participation because of a broad range of available system sizes and the dispersed availability of the resource.

g. Does not use scarce or costly resources.

h. Keeps the environment clean of air or water pollution.

i. Requires no waste disposal.

These benefits alone make wind energy an attractive and popular technology.

Environmental: Some environmental concerns include the following:

a. Land Use Compatibility: Incompatible land uses may include: Urban areas planned for future urban development, wilderness areas, endangered species habitat, wildlife refuge and estuaries, and areas identified as having outstanding vistas, fragile soils, floodplains, unstable soils, steep slopes or dense population (built out and committed areas).

[8] Ibid, p. 57.
[8] Ibid, p. 29.

Compatible land uses include: Agriculture, ranching, industry/manufacturing, retail /wholesale, commercial, material resource development (such as mining, thermal power plants, low density residential, and recreation areas.

b. Aesthetics: WECS towers must be tall enough to raise the rotor above turbulence near the ground. Many WECS are built on elevated, exposed sites where winds are strong and direct. This means that WECS can be prominent on the skyline. WECS draw positive and negative reactions from the public. Some regard WECS as landmarks or a symbol of a jurisdiction's commitment to renewable energy resources. Others may object to unfamiliar WECS design and the location of WECS in scenic areas.

Because aesthetics is such a subjective issue, there have been few attempts to regulate WECS visual impacts. The approach is basically "two fold either regulate WECS to reduce their prominence on the skyline, or reduce the public's exposure to WECS. Access to strong, direct wind should not be sacrificed to reduce visual impacts. Yet, towers and turbines can be painted colors that blend with the background. However, towers over 200 feet are subject to Federal Aviation Administration and Oregon Aeronautics Division regulation.

A WECS may also destroy a highly valued vista. However, WECS can be sited so as to minimize the visual impacts. This can be accomplished by placing a WECS against an appropriate backdrop, increasing the distance between the viewer and the WECS, or providing a visual barrier such as a line of vegetation near the viewer.

Wind farms have greater visual impact than single WECS. Wind farms comprising large WECS may have WECS between one-quarter and three-quarters of a mile apart to maintain wind access.

Because WECS usually extend above all the structures and vegetation in a zone, they can be visible for long distances. If WECS height is limited to reduce visibility, efficient operation may be sacrificed. Height can be mitigated based upon various heights of towers and the proposed location. Obviously a WECS proposed in the Columbia River Gorge Boundary will require considerable evaluation to protect scenic qualities of the Columbia Gorge.

c. Flora and Fauna: WECS do have environmental impacts. These impacts usually affect only the WECS site and the immediate area, but are important when WECS are sited near residential or environmentally sensitive areas.

The installation stage can impose significant but short-term environmental impacts. Heavy equipment and construction activity can result in increased water siltation, erosion-related impacts, and damage to wildlife habitats. Noise, dust and exhaust from equipment degrade the immediate environment but decrease rapidly with distance.

Most impacts on plants and animals occur during construction. Site preparation may require removal or plant cover. A change in vegetation can disturb wildlife habitats, threaten rare and endangered species, change the visual quality of the site, increase dust and increase sedimentation in surface waters. These impacts often are temporary.

Operation is the longest stage of a WECS life cycle, anticipated to be 20 to 30 years. Many WECS operate with few effects on the environment. Because WECS neither use fuel nor require water, they have no direct impact on air and water quality during operation. WECS have positive net effects on both air and water quality if they displace power production using fossil fuels. Human activity, permanent facilities, microclimate changes, and ground clearing for wind access may reduce plant cover or change the mix of plant species. Decreased wind velocity in the wake of a WECS has a minimal effect on plant life.

Negative impacts on plants and soils may be mitigated by requiring sites to be revegetated with low plants after installation. To reduce dust and erosion, soil protection procedures can be required. WECS siting standards may also require revegetation as part of site reclamation requirements.

In most cases, WECS will only have minor effects in wild and domestic animals and their habitat. Loss of vegetation may affect food supply and habitat for some wildlife, including rare and endangered species. Large WECS installations can disrupt wildlife habitats and migration patterns.

Birds may collide with rotating blades. Although the overall risk is low, large wetland birds such as geese and cranes and low-flying migratory song birds are susceptible to collisions. Collision potential will vary with weather conditions, terrain, WECS placement, rotor design and rotor speed. However, even high risk bird species, such as migratory birds, usually fly at 500 to 600 feet. This is well above the height of most WECS except for some prototypes. Bird collision is a concern for birds making short flights between nesting, feeding or resting areas because birds fly lower. Birds also are susceptible to collisions while ascending or descending from these areas.

Impacts on plants and animals can be addressed by consulting the Oregon Department of Fish and Wildlife (ODFW). They can assist in identifying

endangered species habitat and critical nesting, feeding or resting areas. They may suggest mitigation measures such as setbacks from refuge boundaries, alternatives sites, shorter towers, visual clues to alert birds, etc.

d. Noise: WECS noise falls into two categories of concern: (1) audible (including impulsive); and (2) infrasound. Audible noise created by WECS is the result of the steady and unsteady pressure of wind on the blades (loading), the displacement of air and the blades' responses to natural turbulence. Turbulence is caused by WECS towers, upwind obstructions and rotor wakes from upwind machines. These factors combine to create both broadband and impulsive noise. Broadband noise is the "swishing" sound of wind passing through and around the blades and towers. Impulse noise is often described as a "thumping" sound. This noise may occur when the blades pass through the tower wake (for downwind rotors) and/or layers of air with uneven wind speeds. WECS noise varies with rotor size and design, topography, and atmospheric conditions. A WECS with a rotor downwind of the tower can be expected to make more impulsive noise than one with an upwind rotor. Downwind rotors have a greater tendency for impulsive noise.

   WECS also may make inaudible or low frequency sound called infrasound. Infrasound is measured as sound pressure levels in decibels. In most cases, the infrasound output of a well-sited large WECS is estimated to be well below the threshold of negative effects on humans which is near 85dB. However, WECS may emit low frequencies that are annoying to humans.

   Oregon DEQ requires audible WECS noise to be limited in residential areas to 50 dBA during the day and 55 dBA at night at the nearest property line or the nearest point of a residence, hospital or similar structure. Although DEQ standards include audible WECS noise measured on the A scale, the DEQ recommends use of octave band standards for WECS. The DEQ standards are enforced upon receipt of a complaint. However, the DEQ standards do not regulate the full range of potential WECS noise. Local jurisdictions can request the DEQ to investigate and adopt standards that are appropriate to the full range of WECS noise output.

e. Wind Access Easements: A good WECS site needs clear access to an adequate quantity and quality of wind. A local jurisdiction and potential owner may be concerned that WECS sites have sufficient wind resources and that the flow of wind to the WECS remains unobstructed. Sufficient wind resources is the most important siting criterion. If on-site wind speeds are less than 12 m.p.h. (for an electrical WECS), the WECS may never operate efficiently.

A good site also must have an unobstructed flow of wind to the WECS, called "wind access". Wind access affects WECS operational life span and efficiency. Vegetation growth or new construction on upwind property could diminish wind speeds so that a WECS no longer could operate efficiently. These features also can create turbulence which can damage a WECS. A building creates highly disturbed wind as much as 10 to 20 times its height downwind. Wind can be highly disturbed up to two times the building height upwind. The disturbance area may extend a vertical distance equivalent to twice the height of the building. A dense row of trees might disturb wind 15 times its height downwind, five times its height upwind and over three times its height above the ground.

Future wind obstructions are as important as current ones. WECS sites within an urban growth boundary should be developed as if they were urban. This means 'siting the WECS above the height of future buildings. WECS sited in urban or suburban areas should consider potential changes in surrounding buildings and lots. For instance, within an urban boundary, a rural site may eventually be surrounded with tall buildings. Growth of nearby trees is a more immediate problem. A WECS on a site with immature trees could have wind access impaired in just a few years.

Options to protect wind access include the following: height limitations, setbacks, wind access easements and subdivision ordinances.

f. Safety: Three important factors used to evaluate the safety of electrical WECS designs: (1) structural safety; (2) rotor safety; and (3) electrical safety.

The structural stability of the tower and foundation is a major WECS safety issue. The foundation is a structural component that is particularly sensitive to land slides, soil instability and earthquakes. Construction standards to prevent damage from these hazards are site specific.

Blade materials, method of suspension, control in high winds and weathering effects on blades, affect safe rotor operation. With high rotation speed, there is also a risk of a WECS throwing a blade. The distance a blade might be thrown depends on rotor RPM, the angle of the blade at the time of release and blade dimensions.

WECS rotors may also strike objects beneath or to the sides of the blades if the WECS is sited too near obstacles or the ground. Blades striking transmission lines can be particularly dangerous. In cold climates, ice can accumulate on the rotor during stationary periods and fly from the blades of a WECS during start-up. If ice does accumulate, it more likely will fall to the foot of the tower rather than fly from the blades.

Electrical safety is a concern of electric utilities and state and local governments. Each has unique responsibilities. Because they are responsible for safe interconnection with the electrical transmission grid, interconnection is primarily a utility concern.

WECS have other safety impacts. Tall WECS can interfere with air traffic, particularly near airport runways. Batteries used as storage for non-interconnected WECS may emit explosive gases. Unattended and unmaintained WECS are particularly prone to safety problems. These WECS may attract tower-climbing children. They may throw a blade, or the tower may collapse.

Mitigation measures include: (1) Ensure a WECS is safely designed and installed through code enforcement; (2) proper placement of WECS on site; (3) adequate insurance; (4) controlling height; (5) site reclamation; and (6) control public access.

g. Electromagnetic Interference: Rotating WECS blades may reflect and scatter electromagnetic communication and navigation signals. The greatest interference might be expected with television and microwave communication signals. The severity of the interference is greater for large WECS and those with metal blades.

Microwave signals may be transmitted so close to the ground that a surface use is disturbed. The owner of the microwave equipment may record an easement to protect transmission paths. Potential WECS owners should check for these easements on the titles of their property. Interference with television and radio reception is a more difficult issue. To judge whether a WECS has interfered with reception, a local jurisdiction needs a baseline study which records the security of reception of all sites that might be affected and source of interference prior to WECS installation. If a baseline study has been conducted, the WECS owner is only liable for interference above baseline level. An owner who does not conduct a study may be responsible for mitigating any interference within the area of influence. Furthermore, a proposed WECS would have to comply with FCC regulations. This FCC regulates source of radio frequency sound.

h. Minimum Lot Size: WECS may be prohibited on small lots based on the assumption that distance is needed to buffer adjacent lots from WECS impacts. Minimum lot sizes are effective if a WECS is sited near the center of the lot. Yet, a WECS sited near a property line of a large lot may disturb neighboring properties. Therefore, a minimum lot size requirement should be conditioned with minimum setbacks for WECS.

Counties may consider a number of safety issues when deciding the specific lot size for WECS exemptions. Some local governments in other states exempt WECS on large lots from most siting standards. The lot size required for the exemptions ranges from one and two to 160 acres. Counties could choose a minimum lot size for exemptions based on the distance needed to buffer neighboring properties from WECS impacts. If this lot size considered the damage radius in case of WECS tower failure, lots should be large enough so that the WECS will not fall over property lines. For instance, if a 100 foot tall tower sited at the center of a three acre lot fell from its base, it would not cross property lines. Yet a WECS cannot always be sited at the exact center of a lot. To add flexibility, a lot should be larger than three acres. A 100 foot diameter rotor mounted on the tower might cross property lines, however. A six acre lot would be necessary to contain this rotor within property lines. A compromise between the distance needed for towers and rotor might be five acres.

Minimum lot size could be based on blade throw potential. For instance; a MOD-2 WECS with a 300 foot rotor diameter on a 625 acre site probably would not throw a blade onto adjacent sites. Because so little is known about the blade throw distance from a given WECS model and the lot size needed to protect abutting properties is so large, minimum lot sizes for exemptions should be based on tower failure rather than blade throw. WECS might be exempt from most standards if they are sited on lots of at least five acres. WECS on five acre lots should still comply with building and electrical codes, setbacks, and provisions that limit public access to the WECS.

i. Existing Zones: An assumption is made that wind energy sites would probably be located on lands zoned Primary Forest (F-2), or Forest (F-1) in Hood River County. Generally these zones apply to those lands at higher elevations where wind energy potential is more probable. However, the interior walls of the Columbia River Gorge in Hood River County are also planned and zoned to ensure protection of the important scenic qualities of the Columbia River Gorge.

However, current zoning can accommodate wind energy systems. For example, the following are conditional uses in both County Forest Zones: (1) commercial utility facilities generating power for public use by sale provided the scale of the project does not require an Exception to Goals 3 and 4 and the power is used locally; and (2) operations conducted for the exploration, mining and operation of geothermal resources.

Current requests for wind energy systems would be processed as a Conditional Use Permit because they are similar to the above uses. Furthermore, there are provisions in the County Zoning ordinance to

permit processing of uses similar to uses listed in the Forest Zones as a conditional use.

Protection of the scenic qualities in the Gorge are a sensitive issue in Hood River County. Hood River County has adopted the following Plan designations and zones oriented to protecting scenic qualities in the Gorge: Scenic Protection and Columbia Gorge Boundary Plan Designations, and Scenic Protection and Columbia Gorge Combining Zones.

Basically windmills, including other public facilities such as roads, power lines, etc., are a conditional use in the Scenic Protection Zone. Consequently Hood River County conditionally allows windmills within the majority of lands along the Columbia River. Furthermore, the Columbia Gorge Combining Zone is an overlay zone which implements the Columbia River Gorge Boundary Plan designation, specifically around the City of Hood River. The Columbia Gorge Combining Zone overlays approximately 2,525± acres zoned Forest. The above conditional uses in the Forest Zone can occur, however they are subject to limitations in the Columbia Gorge Combining Zone (e.g., buffering, earthtone exterior surfaces, controlled lighting, etc.).

Energy: WECS rank high in annual energy generated per site acreage. This minimizes costs and makes more land available for other uses. Since the energy inputs to construct a WECS are only ½ to ¼ as much as conventional energy systems per k.w.h. output, over time there could be a large cumulative reduction in energy consumed for the creation of energy generating facilities. This reduction makes the conserved energy available for other uses, through expanding supplies, or displacing the need for new generation. Reduced energy generation, while still supplying the same basic uses, means cower pollution levels, decreased use of fossil fuels and less need for other energy production facilities.

4. Recommendations:

   a. Include the Plan Inventory as a 1B category (Delay the Goal 5 Process) and address when site-specific information becomes available.

   b. Add the following to the County Policy Document under Goal 5 - Energy, as Strategies:

      1. Seek the assistance of the Oregon Department of Energy if applications are made for wind energy systems.

      2. Applications for new wind energy facilities shall be processed through the Goal 5 process prior to County approval.

H. Hydroelectric Energy: City/Westside Area:

1. Location: MAP #2 shows the overall hydroelectric potential for Hood River County. The entire northern boundary of Hood River County fronts on the Columbia River. Most of the electric power in Oregon is produced at large multi-purpose dams on the Columbia River System.

   Hood River County conditionally approved a hydro facility in the City/Westside Area. The location is shown on MAP #3 (2N 10E 12 #1300).

2. Quality and Quantity: Overall, MAP #2 shows that Hood River County is rated low for hydroelectric potential in the State of Oregon. However, water power provides about 80% of the electricity generated in Oregon. Most of this power is produced at large multi-purpose dams on the Columbia River System and distributed through a regional transmission network.

   The capacity of the Pacific Northwest's large-scale hydro system is almost fully developed. Existing non-power dams, irrigation ditches and municipal water storage are being reassessed for the addition of power facilities. Many Oregonians are interested in small scale hydro plants suitable for residences, individual farms and businesses.

   Recommendation from the [9]Hydro Task Force places particular emphasis on measures that can be implemented to encourage small, backyard hydro facilities.

   The approved hydro project in the City/Westside area was developed by the Farmers Irrigation District to improve irrigation services and control water losses by installing a pressurized system. Long range plans for the district include a diversion/intake structure with a pond, and a second powerhouse adjacent to the intake structure with a potential power generation capability of 1600 kW. The project had a favorable review before the State Water Policy Review Board.

3. Conflicting Uses and the Economic, Social, Environmental and Energy Consequences: Although Hood River County has a low potential for hydroelectric facilities, it behooves the County to become familiar with positive attributes, conflicts and other characteristics associated with hydro energy facilities. Reiterating, Hood River County has previously approved hydro facilities in the City/Westside area.

   While it is not possible to accurately predict the environmental impacts of all hydroelectric projects, the following describes common environmental concerns that may arise for large and small uses. Effects will vary with the scale and type of project.

   There are environmental impacts associated with a dam, diversion, reservoir, penstock, powerhouse, access roads and transmission corridors. Impacts will vary

[9] Hydro Task Force, Final Report to the Oregon Alternative Energy Development Commission. June I. Introduction, last sentence.

over the life of these facilities. Impacts may occur at the project site, downstream, and upstream. Environmental impacts are highly site- and design-specific. A particular design that is optimal for one site from an environmental standpoint may be very destructive for another site. Impacts will depend substantially on the size and type of the project, its specific design configuration, and the scale and sensitivity of the water body and setting it uses. Each individual hydroelectric use may have relatively minor effects. But, the cumulative effect of more than one hydro use using the same water source can be significant. Analysis of cumulative effects is difficult, because of the variety of ways hydro uses and their settings interact.

[10]Economics: A new hydroelectric facility provides positive and negative economic effects in the short-term and long-term. Short-term employment and needs for materials and supplies during construction contribute positively, but not usually in large quantities. Changes in productivity and value of the land and water occupied by or adjoining a facility may also occur. Improving power supplies and reliability and decreasing power costs may facilitate industrial development and population growth. Possible interstate power sales may reduce ratepayer costs in the region.

Losses to off-site lands can be avoided by complying with reclamation and construction impact control plans and by avoiding locations along sensitive lands and uses.

[11]The costs of developing large hydro projects are site specific and range from $700 to $1,000 per kilowatt. Smaller projects (1,000 kW to 25,000kW) cost between $1,000 and $2,000 per kilowatt. The residential and farm-size units often cost less because the licensing processes is simpler, feasibility studies are not always needed, and standardized equipment is sometimes available.

For a utility, the cost of energy from a typical 1 to 25 MW hydro project will vary from 3 cents (30 mils) to 10 cents (100 mils) per kilowatt hour. The actual cost of energy rate clearly is a function of waterflow availability.

Costs involved can be attributed to the following: (a) pre-feasibility costs; (b) preliminary permit and filing costs; (c) feasibility studies; (d) license preparation; (e) construction costs; (f) financing costs; (g) operating and maintenance costs; and (h) insurance, taxes, etc.

While the statutory requirement to maintain fish and wildlife resources often does not itself preclude hydroelectric development, it does place an economic burden on development, since the project must bear the costs of mitigation and the cost of

[10] Regulation of Small Energy Facilities by Oregon Counties: Siting Hydroelectric and Wind Energy Systems and Electric Power Transmission Lines, Oregon Department of Energy. August, 1983, p. 12.
[11] Hydro Task Force Final Report to the Oregon Alternative Energy Development Commission. June, 1980, page 17.

environmental assessment. Water required for fish ladders and adequate stream flows below projects can reduce the amount of water available for power. The economic burden of mitigation is generally directly proportional to the level of impacts. Therefore, it is advantageous both from the standpoint of hydroelectric development and conservation of fish and wildlife resources to develop those sites first that have the least environmental consequences.

Social/Environmental:

a. Land Use: The area needed for an energy facility may have to be cleared of existing structures. Otherwise permitted structures and uses in the area may be precluded. Substandard remainders of lots divided by a facility may not be usable. Residential and recreational uses may be less desirable near a large energy facility that causes noise, reduces privacy, or creates incongruous views.

   On the other hand, many uses may co-exist with an energy facility. Farming and grazing, recreation, other utilities and roads, mining, parking lots, landscaping and other uses are not as sensitive to possible adverse effects of the facility. Small energy facilities appropriately sited, landscaped, and operated can be an amenity, a focus or landmark for the community, or a symbol of energy independence.

   Transmission towers or other tall structures may be hazards where near uses with special clearance needs, such as airports. Structures in floodplains and natural areas may conflict with management goals and values for these areas.

b. [12]Fisheries: The construction of a dam or diversion structure can block migrating fish. Fish passages may be incorporated into the project, but they do not entirely, eliminate the problems created by blockage of the stream. Fish ladders must be designed and situated so they attract upstream migrants. Screening large volumes of water (500 cfs or more) is expensive, and may be prohibitive economically. Downstream migrants must be protected from project turbines. Injuries inflicted by the turbine blades and by rapid fluctuations in water pressure kill many fish outright, and increase the susceptibility of others to predators. Downstream migrants must be routed past the structure. This may be done by collecting fish and placing them beyond the obstruction, providing a pass fish. Screens, bypasses, and handling may increase mortality. Predators also may hamper these techniques, since collected fish may be an easy target and handling may disorient fish with the same result.

[12] Regulation of Small Scale Energy Facilities by Oregon Counties: Siting Hydroelectric and Wind Energy Systems and Electric Power Transmission Lines, Oregon Department of Energy. August, 1983. pp. 7 and 8.

Fish may also be affected by changes in water temperature, oxygen and nitrogen content, turbidity, and nutrients in water discharged from an impoundment. Impounded waters are heated by the sun at the surface and become cooler with depth. If water is discharged from only one level, differences between the temperature of that water and downstream water may stress fish. If water becomes stagnant, it may not contain sufficient oxygen to support spawning, fry, and fish. If water drops long distances, over a spillway and into a water body at the base of the spillway, the water body may become supersaturated with nitrogen absorbed from the falling water. Increased turbidity can adversely affect fish by filling in between the gravel. Gravel beds must be kept clean to percolate oxygen, process fish wastes, and provide for spawning.

Diversion projects where flows pass through a long penstock present special problems to migrating fish. Instream flows downstream of the diversion sufficient to support aquatic life must be maintained, particularly during peak migration seasons. Fish migrating upstream may become disoriented and delayed by an apparently navigable current at the outfall. The project must be designed to divert migrants upstream past the outfall or temporarily shut down to allow fish movement. High velocity outflows may scour beds and banks, resuspend solids, and cover or move gravel beds useful for spawning. Increased turbidity and destruction of bottom habitat can stress fish.

A flow of water must be maintained over salmonid spawning beds to oxygenate the eggs properly during incubation and to protect newly-hatched fry. The needed flow is lost in the slack water environment of a reservoir. Slack water also impairs migration of adult and juvenile. Because fish are confined in the reservoir, predators are more likely to destroy them.

c. [13]Wildlife: Creation of a large reservoir may flood wildlife habitat. Riparian and wetland habitats are among the highest quality habitats for wildlife. Inundation of those areas rarely can be mitigated. Animals from an inundated area may not be able to move to an adjacent habitat, because those adjacent habitats may be fully occupied, inaccessible, or unsuited. Consequently, unless a new habitat can be upgraded to support additional populations, animals may be displaced or destroyed.

Reservoirs and project works such as canals, pipelines, and transmission lines affect daily and seasonal movements of many wildlife species. In many cases, big game are unable to cross the obstruction. Bridges and ramps over the obstructions can help solve the problem. However, bridges, ramps, and canals can be stressful, hard to use, and may trap wildlife. Fencing has been used to protect game. It blocks wildlife, but

[13] Ibid, p. 9.

directs them to planned crossings. Transmission lines may also affect habitat.

Federal or state agencies can help determine whether any significant negative effect on designated species may occur. The change in habitat can be described and its effect predicted, based on species sensitivity, significance, and the availability of alternative habitat or migration. Effects can be reduced by prohibiting or limiting changes in critical habitat areas for protected species; by requiring appropriate revegetation; by limiting worker access to designated areas and public access into the site generally; by timing construction to avoid breeding season; by use of registered pesticides and herbicides; and by having licensed applicators control their use.

d. [14]Vegetation: Vegetation may be removed at construction areas, along transmission lines, conduits, flues, and in reservoirs. The effects of this on water quality and wildlife habitat have been described above. The aesthetic effects are described below. Many effects will be short-lived as revegetation occurs but long-term effects on timber and agricultural production and on endangered or threatened plant species also may occur. Species which are listed as "endangered", "threatened", or as candidates for listing by federal and state agencies, cannot be adversely affected by development under federal and state laws.

The relative impact of timber loss depends on how much is lost and whether its loss makes management of nearby timber more or less efficient or effective.

Effects on plants can be reduced by limiting clearing in areas of threatened or endangered species and in commercial timber areas. Use of planting and seeding reclamation and preservation schedules can repair short-term damage. Hand-clearing, limited use of registered herbicides under control of licensed applicators where hand-clearing is not possible, selective clearing, “feathered” right-of-way edges, and tree-topping instead of removal can further reduce effects. Allowing multiple use of rights-of-way avoids creating new rights-of-way.

e. Visual Effects: Visual impacts are caused by clearing the site and by construction of water conveyance structures, roads, and basins. The effect of clearing is greatest initially and can continue if restoration does not occur. Manmade objects in a natural environment generally attract attention because they contrast in form, scale, color, and texture with surroundings. The color and texture of an energy facility can be either bright or dulled, colored or metallic. Dams are usually concrete. This can contrast with or compliment surroundings. Visual effects in outstanding

[14] Ibid, p. 9.

scenic areas identified in the comprehensive plan are particularly important.

f. Electric Fields: Strong electromagnetic fields at high frequencies can affect human health. However, electric fields associated with hydroelectric facility transmission lines are too low for effects to occur.

g. Noise: Noise is produced by machinery and equipment during construction and operation. Noise may be produced by maintenance and inspection vehicles, but this is a short term effect. Falling water, turbines, generators, substation. equipment, and HV transmission lines also create noise. Construction noise is generally short-term and occurs only during daytime hours. However, noise levels from combustion engines and impact equipment range from 70 to 106 dBA measured 50 feet from the source. This can be reduced with mufflers and special equipment. Blasting would increase noise. The significance of the noise will vary with its duration and the isolation of the site from sensitive uses.

The EPA and ODEQ have noise criteria for new noise sources based on ambient noise levels and sensitivity of land uses. Mitigation can include landscape and earth form modification, relocation or treatment of structures and uses impacted, and prohibitions or limitations on construction or operation in noise sensitive areas.

h. Water Quality: Routing water through a turbine does not ordinarily affect water quality directly. Machine parts and conveyance systems do not pollute the water with oil or process chemicals. Neither does a turbine consume water. The water may be displaced for a distance or stored before being released, but it is available for downstream uses.

A dam stops water flow. This may change water temperature, dissolved oxygen levels, turbidity, and the bed and banks of the water body. In deep reservoirs, water temperature and chemical content may change. This can affect aquatic life. Decay of flooded organic matter and release of soil chemicals into the water also may affect water chemistry. Reduced water velocity will trap the stream's natural sediment load in the reservoir. This may change the distribution, reproduction, abundance, and diversity of aquatic life.

Water levels behind a dam fluctuate. This creates a draw down zone between low and high water lines (called a littoral zone) which is biologically unproductive and is subject to erosion. Cycles of inundation and desiccation can limit production of aquatic plants and bottom-dwelling invertebrates. This affects the success of reservoir fish species that use the littoral zone for spawning.

A run-of-river or diversion project does not impound a significant amount of water, so stagnation and temperature or nutrient stratifications should not occur. Water quality effects may result from these projects if the water body is shallow or slow moving, if a major portion of the flow is removed, or if the water is removed for a long distance. Other sources of water between inflow and outflows can reduce these effects.

Several short-term water quality impacts occur during project construction. Dredging, filling, and erosion may increase turbidity and can cause sedimentation downstream. Changes may occur in particle size, porosity of bottom sediments, and suspended sediment movement. The significance of dredging depends on the sediment and amount of dredging required. These impacts can be minimized through proper timing of construction activities, development of temporary catchment basins, and prompt revegetation of disturbed terrain. Runoff will be reduced if hillsides are contoured and rip-rapped. Revegetation will be facilitated if topsoil is stockpiled, then used for final landscaping.

i. Federal and State Law: Hydroelectric projects are subject to federal and state laws. Many the effects of hydroelectric uses are regulated by state and federal agencies. Relatively complex federal and state permit/license/examination processes must be followed before a hydroelectric use can be developed.

Use of water by a non-municipal entity for hydroelectric generation requires a permit or license from the Oregon Water Resources Department. A municipal applicant for a hydroelectric facility must obtain an appropriation from the Oregon Water Resource Department. After application is made, notice is sent to federal and numerous other State agencies. Agencies included: Oregon Department of Human Resources (Office of Environment and Health Systems), Oregon Department of Fish and Wildlife, Oregon Department of Forestry, Oregon Department of Environmental Quality, Oregon Department of Land Conservation and Development, Oregon Department of Transportation (Parks and Recreation Division) County Planning Departments, U.S. Bureau of Land Management, U.S. Fish and Wildlife Service, and U.S. Forest Service. Hood River County does send referrals to the majority of the above agencies when application is made at the Planning Department. Their expertise is relied upon in conditionally approving or denying the application.

j. Zoning: Hydro facilities are considered conditional uses in the County's Forest Zones (F-1 and F-2) and the Exclusive Farm Use Zone (EFU). However, the Forest Zones are more specific regarding commercial utilities. For example, "Commercial utility facilities generating power for public use by sale; provided the scale of the project does not require an

Exception to Goals 3 and 4 and the power is locally used". Forest and Exclusive Farm Use zoning dominates the County's private land base.

Over 83% of the County 's private land base is zoned primarily Forest followed by Exclusive Farm Use. This amounts to 114 square miles of the County's private land base, which is 138± square miles. Consequently, the County's private land base provides substantial opportunity to accommodate hydro energy.

The County has approved the above hydro project which is located on lands zoned Forest and Floodplain. The applicant was required to meet all provisions of both the Forest and Floodplain Zones, including numerous comments from other agencies.

k. Geology and Soils: Hydroelectric facilities have three potential effects on soil: erosion of cleared areas, soil compaction, and slope failure. All three effects may occur over time. Increased soil erosion can reduce productivity and degrade water quality. Compaction can reduce productivity, delay revegetation, and increase erosion. Slope failure can multiply these effects and cause structures to fail. Facilities in areas subject to earth movement and geologic hazards need to be sited on areas subject to earth movement and geologic hazards need to be sited or reinforced to prevent slope failure. Fluctuation of water levels in a reservoir may cause wave action that undercuts the banks of the reservoir.

Effects can be reduced by revegetating cleared areas. Hand clearing and hand-operated tools for clearing and building generally have less effect. Sensitive soils or geologic areas can be protected. Reservoir banks and stream banks below outfalls can be covered, vegetated, or reinforced.

Energy: Hydro power is a renewable, domestic energy resource which has provided and can continue to provide much of the region's electric power. A water turbine is a device which converts the energy in falling water to mechanical energy. This energy can be used directly to operate mill and grinding equipment, or to operate a generator to produce electricity. Water turbines are generally very efficient in converting the energy available in falling water into mechanical and electrical energy. Efficiencies of 70-85% are common.

Small individually owned and operated hydro resources of 200 kW or less present an opportunity for significant new contributions for meeting local energy resources, but will require some new programs if this is to materialize.

Although small micro hydro facilities appear to be viable and significant new contributions for meeting local energy sources, they have not been pursued for economic reasons and overall lack of knowledge of hydro facilities. Most incentive programs are new and have yet to have a significant impact as hydro

development. The availability of capital at reasonable cost is particularly important to small hydro developments.

Front end cost varies from $9,336.00 for a 5 kW facility to $19,105.00 for a 50 kW facility (1980 figures).

4. Recommendations: Add the following to the County Policy Document under Goal 5 - Energy Sources, as strategies:

   e. Designate Farmers Irrigation District site (2N 10E 11D #1300) 3B (Allow Conflicting Uses Fully).

   f. Applications for new hydro electric sites will be required to complete the Goal 5 process prior to County approval.

   g. Seek the assistance of the Oregon Department of Energy if applications are made for hydro energy systems.

I. Additional Conclusions and Observations: Findings:

1. Hood River County is somewhat limited in the production of traditional energy resources. Many people do, however, heat homes with firewood obtained locally. The use of solar and wind power have considerable long range potential for additional energy supplies. There is also some potential for hydroelectric development on the Hood River and its tributaries. Some hydro power is already generated on the Hood River and its tributaries. The environmental cost of additional facilities might outweigh the benefits derived from the exploitation of new hydro sources, however. The greatest potential for short range energy development seems to be through expanding the use of renewable energy sources (for example, using logging slash and mill waste to generate energy), and conservation measures through the efficient use of existing energy sources.

2. Small wind energy conversion systems are a possible energy source in the Columbia Gorge area.

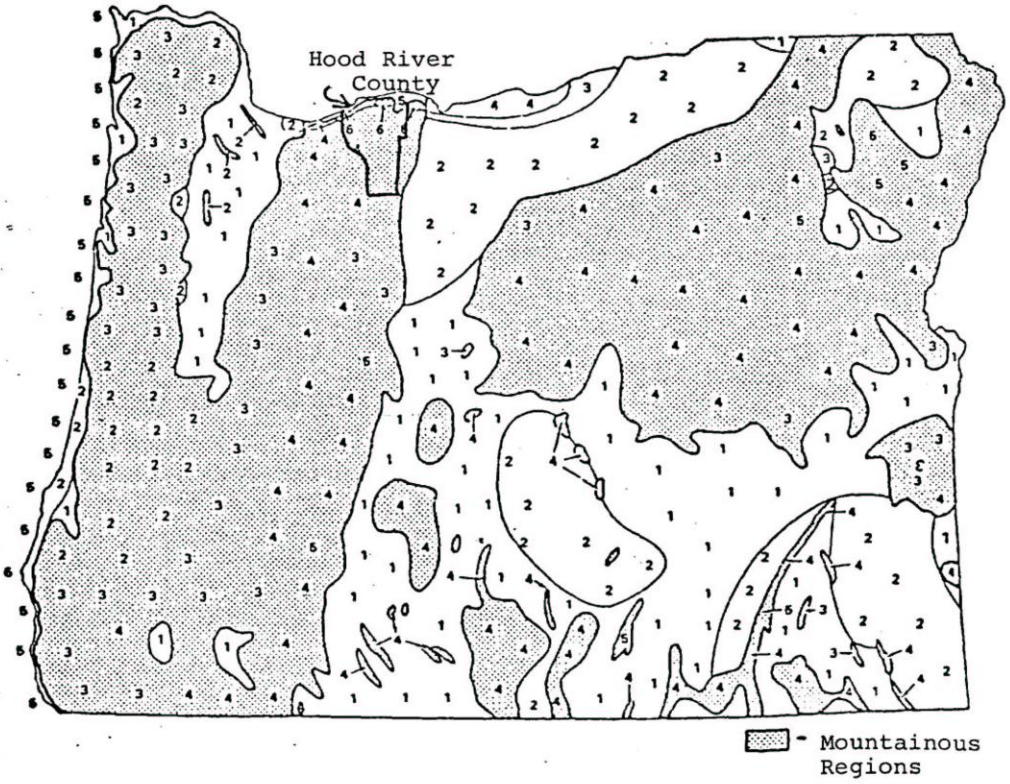
3. Energy by solar means has potential in the Gorge area.

4. Pumped-storage waterpower has been discussed as an additional energy source along the Columbia River.

5. In the early 1980's the Bonneville Pool will be raised in order to generate additional electricity at Bonneville Dam.

MAP #1

ANNUAL AVERAGE WIND POWER



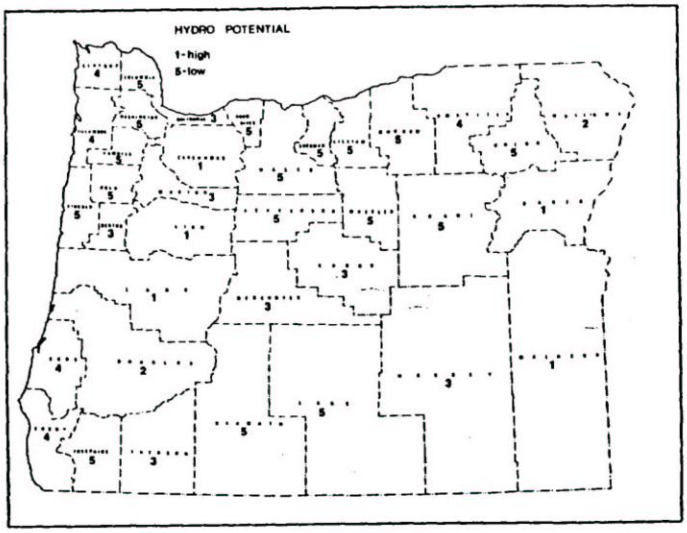
Areas designated 5 and 6 have wind speeds between 14.3 and 15.7 m.p.h. at 33 feet aloft and between 17.8 and 19.7 m.p.h. at 164 feet aloft.

Source: Elliott, D.L. and W.R., Barchet. Wind Energy Resource Atlas Volume 1 - Northwest Region, PNL-3195 WERA-1. Richland: Battelle Pacific Northwest Laboratory, 1980.

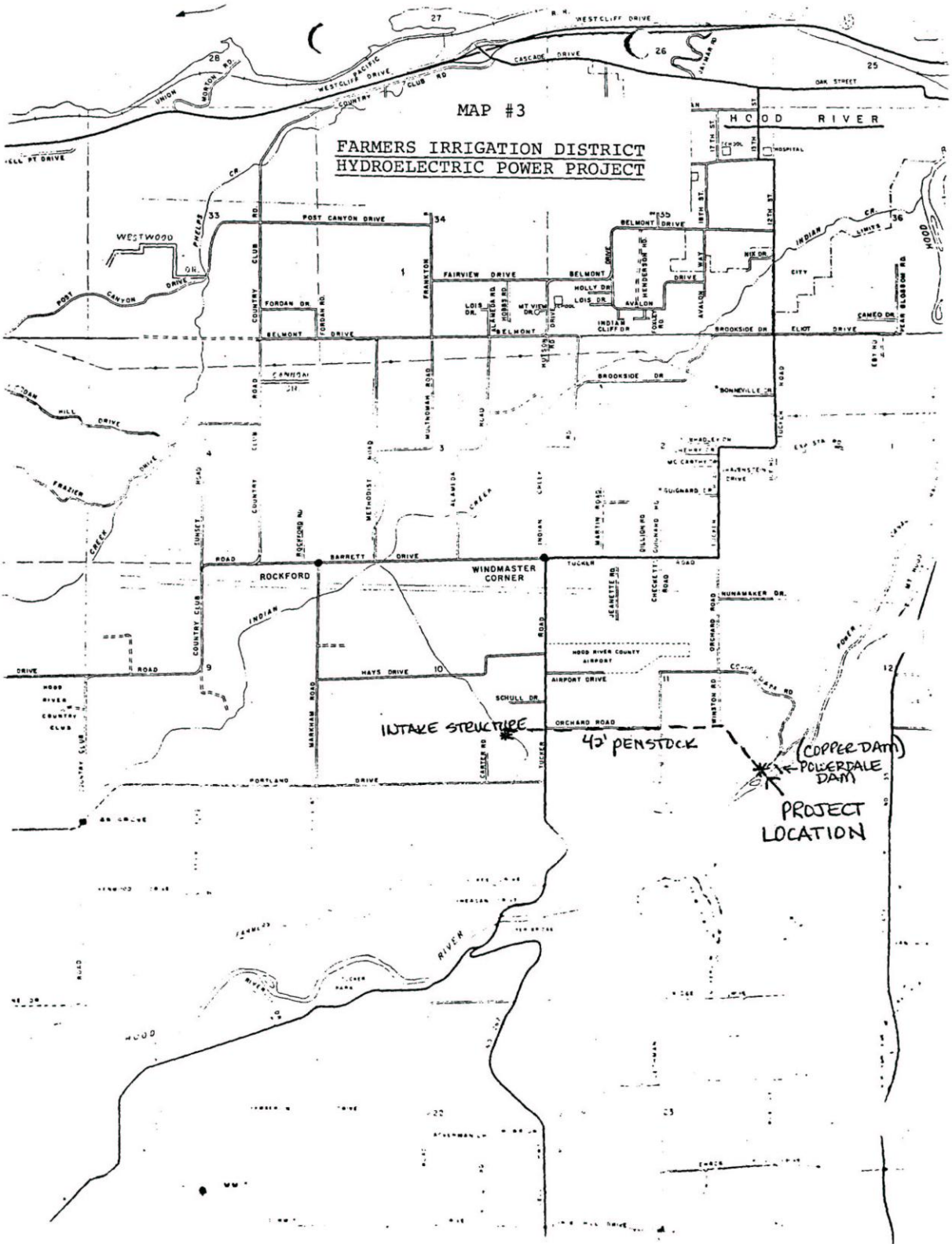
Taken from: Wind Task Force - Final Report to the Oregon Alternate Energy Development Commission, June, 1980, p. 5.

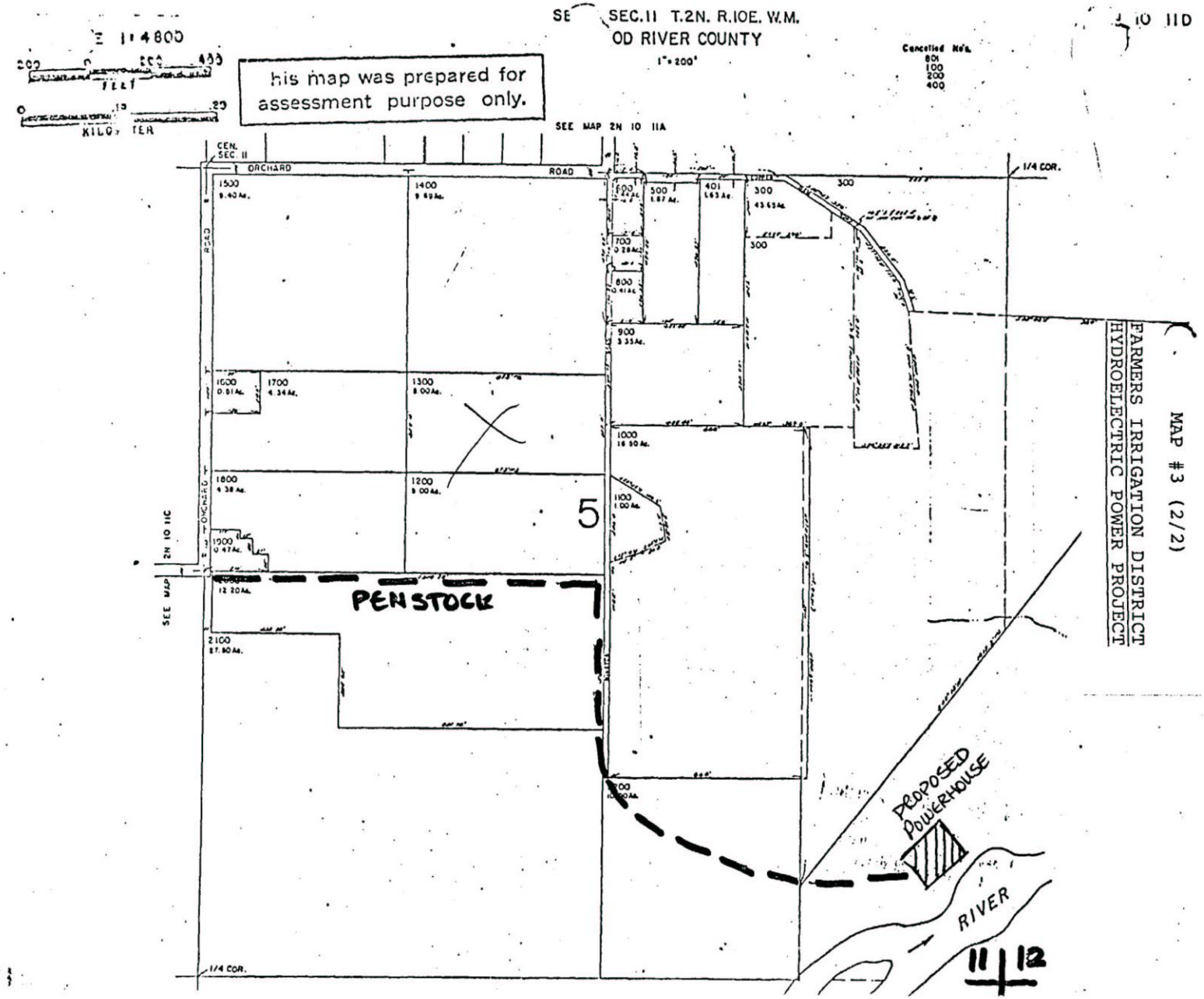
MAP #2

HYDROELECTRIC POTENTIAL IN OREGON COUNTIES



Source: Regulation of Small Scale Energy Facilities by Oregon Counties: Siting Hydroelectric and Wind Energy Systems and Electric Power Transmission Lines, Oregon Department of Energy. August, 1983.


MAP #3
FARMERS IRRIGATION DISTRICT
HYDROELECTRIC POWER PROJECT
HOOD RIVER
WESTWOOD
ROCKFORD
WINDMASTER CORNER
INTAKE STRUCTURE
42" PENSTOCK
(COPPER DAM)
POWERDALE DAM
PROJECT LOCATION
HOOD RIVER COUNTY AIRPORT
HOOD RIVER COUNTRY CLUB
WESTCLIFF DRIVE
CASCADE DRIVE
POST CANYON DRIVE
BELMONT DRIVE
FAIRVIEW DRIVE
BROOKSIDE DR
ELIOT DRIVE
BARRETT DRIVE
TUCKER ROAD
AIRPORT DRIVE
ORCHARD ROAD
HAYS DRIVE
PORTLAND DRIVE
INDIAN CREEK
RIVER


SEC.11 T.2N. R.10E. W.M.
OD RIVER COUNTY
1"= 200'
his map was prepared for assessment purpose only.
SEE MAP 2N 10 11A
ORCHARD ROAD
1/4 COR.
MAP #3 (2/2)
FARMERS IRRIGATION DISTRICT
HYDROELECTRIC POWER PROJECT
PENSTOCK
PROPOSED POWERHOUSE
RIVER
5
11/12

GOAL 5: FISH AND WILDLIFE AREAS AND HABITATS

A. Introduction: Fish Habitat (City/Westside Area):

The Hood River/Westside area has an abundance of valuable fish species and habitat areas. A summary of the most important fish species is found in TABLE 1, and the location of these fish resources are shown on the Natural Systems and Habitat, see Map #1.

1. Columbia River: The Columbia River supports a wide variety of fish life, ranging from salmon and steelhead to warm water game fish and miscellaneous non-game species. A summary of the most important fish species is found in Table 1. Habitat Requirements: In order to maintain the various anadromous and resident fish population found in the Columbia River, the water quality of the Columbia River must be protected, preserved, and/or improved when necessary.

   Game fish, in particular, are especially vulnerable to extended exposure to excess water temperatures. Increased water pollution, whether thermal, industrial, or domestic normally reduces or eliminates the most desirable fish species first. The effects of river level fluctuations also pose serious problems to other desirable fish species.

2. Columbia River Ponds: The Columbia River ponds support a wide variety of warm water game fish and miscellaneous non-game species. Most of the ponds are connected directly to the Columbia River by culvert or narrows. The ponds are also used by downstream migrant salmon and steelhead as a sanctuary at times when the Columbia River is high and turbid. Habitat Requirements: Rapid and excessive water level fluctuation will dramatically reduce segments of the warm water game fish population that normally spawn and/or rear in the backwater ponds. Any filling in the shallow backwater ponds will eliminate the important spawning and/or rearing areas of some segments of the warm water game fish population.

3. Hood River: This section of Hood River is inhabited by rainbow and sea-run cutthroat trout, summer and winter steelhead trout, summer and fall chinook, and coho salmon. There is also a minor population of brown trout and dolly varden, as well as miscellaneous non-game fish species. Habitat Requirements: Minimum flows are critical considerations for fish management in this section of Hood River. The present minimum flow of 100 cubic feet per second (cfs) is adequate for migratory fish passage; however, it is less than desirable for angling.

   Protection of riparian vegetation is essential to providing stream bank erosion control, cover and food production. Development in the corridor should be discouraged to protect this habitat and should be limited to open space use. This entire section of Hood River is used for spawning and rearing of the fish species present.

4. Indian Creek: Indian Creek is inhabited by rainbow, cutthroat and steelhead trout, and coho salmon as well as miscellaneous non-game fish species. Habitat Requirements: Low summer flows, combined with water withdrawals for human

consumptive use, as well as domestic, agricultural, and industrial pollution are the most limiting factors controlling fish populations in Indian Creek.

Protection of riparian vegetation is essential to providing stream bank erosion control, stream cover, and moderating the effect on water temperatures.

5. Phelps and Cedar Creeks: Phelps and Cedar Creeks support populations of rainbow trout. Barriers at the mouth of these creeks prevent the immigration of any anadromous species. Habitat Requirements: Low summer flows and/or excessive water withdrawals for human consumptive use, as well as domestic, agricultural, and industrial pollution, are the major factors which limit fish populations in these streams.

   Protection of riparian vegetation is essential in providing stream bank erosion control, stream cover, and a moderating effect on water temperatures.

B. Introduction: Wildlife Habitat (City/Westside area):

The area is not presently, and probably will not in the future be a critical habitat area for game species such as deer and elk. It does, however, provide habitats for a diversity of both game and non-game species of wildlife. How many of these species will continue to inhabit the area will depend on man's use of the land as determined by the Comprehensive Plan.

For ease of discussion, the area has been divided into six habitat areas: (1) Unique Columbia River Shores, (2) Riparian Columbia River Shores, (3) Rip Rap and Urban Columbia River Shores, (4) Urban Inland area, (5) Ravine/Floodplain area, and (6) The Ecotone (transition) areas. For locations of these areas refer to the Natural Systems and Habitat, Map #1.

1. Unique Columbia River Shores: The Fish and Wildlife Commission have identified a unique habitat area along the Columbia Shore from the east end of Wells Island to Ruthton Point. This area contains pilings, snags, and natural vegetation necessary for a varied habitat. The area is important as a resting, feeding, and reproductive area for a number of mammals, waterfowl, amphibians and reptiles. Some of the common species using the area are the canadian geese, mallard, coot, merganser, heron, osprey, mink, beaver, muskrat, several species of hawk, and the bald eagle.[1] Songbirds frequent the area and most of the waterfowl species are perennial residents. In the past few years, there has been an increase in the population of migratory geese to this area.

   Filling and flooding has in the past and will continue to reduce or eliminate this important habitat area. Because of this, wildlife has had to use other, less desirable habitat areas.

2. Riparian Columbia River Shores: This area is significant but possibly less important than the Unique area identified above. The location of this area is west

[1] The Bald Eagle and the osprey are on the endangered species list.

of the Unique area and to a lesser extent, east of the Hood River. Most of the wildlife that visits the Unique area also visits significant riparian habitat, although to a lesser extent.

3. Rip Rap and Urban Columbia River Shores: This shoreline constitutes the altered part of the Columbia necessary for flood control, transportation, or industrial development. These areas do not contribute to, nor possess the necessary requirements for, wildlife habitats.

4. Urban Inland Area: The central City/Westside area contains woodlots, pastures, orchards, residential and commercial activities which provide small and varied habitats.

   Man's activities control and will continue to determine which wildlife species inhabit the area. Orchard land provides food and protection to wildlife at certain times of the year. However, farming activities such as irrigation, mowing, and spraying with pesticides makes the orchards of limited value in supplying year-round needs of wildlife. Hunting opportunities will decrease and non-consumptive use of wildlife (bird watching, wildlife photography, etc.) will increase over time as this area develops. The pet population will also increase which will reduce the wildlife over time.

5. Ravine/Floodplain Area: These areas provide a natural corridor of vegetation and water for mammals, birds, reptiles, and amphibians. Common species include mink, beaver, pine and gray squirrel, chipmunk, kingfisher, and several species of songbirds. Hood River Gorge contains more abundant and varied wildlife than the other streams. Trails for fishing access, hiking, nature viewing, or low density parks are examples of uses that are compatible with wildlife conservation.

6. Ecotone (Transition) Areas: The Ecotone is a transition area between forest and fields or forest and orchards. Deer and elk frequent this area either as residents or as part-time migratory visitors. Both deer and elk cause considerable damage to orchards and crops throughout the area. The magnitude of the damage depends on the crop involved and to a lesser extent the tolerance of the land owner. Young orchards, row crops, and gardens are particularly susceptible to damage. Established timber stands and mature orchards receive little or no game damage.

   The Ecotone is also inhabited by a wide spectrum of non-game wildlife each having unique habitat needs. Land use planning which allows a diversity of vegetation is desirable for the benefit of wildlife.

C. Introduction: Fish Habitat (Central Valley Area):

The Central Valley contains a number of streams, lakes and reservoirs. Fish species present within the area are limited to resident trout, salmon, steelhead and miscellaneous species. (See Table 2 for more selected species list and Map #2 for location.)

1. Columbia River Streams: The small streams flowing north toward the Columbia River in the western portion of the area have high water quality essential for in-

stream fish production. The headwaters of these streams are inaccessible to anadromous salmonoids as the result of natural barriers in their lower reaches.

2. Hood River: Fish production in the Hood River is limited by water turbidity from glacial melt, pollution from industrial and agricultural origins and seasonal fluctuations combined with irrigation withdrawals. Unscreened and poorly screened water diversions pose a deadly threat to small downstream migrant salmon and steelhead. The Valley and eastside tributaries are plagued by periodic agricultural chemical contamination originating from the improper use or cleaning of agricultural spray equipment.

   The upstream migration of adult steelhead trout and salmon in Hood River is dependent upon passage conditions at the Pacific Power and Light Company Powerdale Dam. The dam, located at rivermile 4.0, has a marginal fish ladder that is inoperative at certain flow levels.

3. Hood River Tributaries: Small tributaries like Odell Creek and Neal Creek provide habitat for many anadromous fish. Neal Creek has a small run of migratory cutthroat which is one of the last of its kind in the Columbia River Drainage Basin. Maintenance of water quality and riparian vegetation is crucial to the survival of fish in the smaller creeks and streams. Smaller creeks are especially vulnerable to contamination originating from the misuse of agricultural sprays and industrial discharges. A tributary to Odell Creek is presently being contaminated with leachate from the Hood River County Landfill.

4. Lakes: The lakes and reservoirs within the area are classed as oligotrophic. The short summers and cold water temperatures limit fish production. Extreme water fluctuations in the reservoirs also limit fish production. Water quality is generally high.

D. Introduction: Wildlife Areas and Habitats (Central Valley):

The Central Valley, with it's rugged topography, moderate climate, and diverse vegetation provides basic habitat for diverse wildlife populations. Wildlife species and numbers are considerable within the area. Collectively, the wildlife species substantially contribute to the economy and livability within the Hood River County area. It should be noted that each species of wildlife has its own living area or habitat which is often a complex and specific set of conditions to which it is adapted and without which it cannot strive.

The following text outlines major habitat types within the area. Also refer to TABLE 3 for more detailed selected species list and Map #2 for location.

1. Riparian Habitat: Riparian habitat is characterized by vegetation associated with most areas and streamsides, and it is the primary life support zone for the majority of wildlife found in the County. Wildlife needs such as food, cover, and water are satisfied partly or totally by the presence of riparian habitat. Riparian habitat and associated wildlife species have been faced with environmental and land use problems. Excessive livestock grazing can cause degradation of soil and natural

vegetation in riparian areas. Channelization and dredging of streams causes erosion of streambank soils and the subsequent loss of vegetation. Road construction adjacent to stream corridors, indiscriminate cutting along streamsides and unrestricted spraying of herbicides have all had varying degrees of negative impact on wildlife population.

2. Mixed Conifer Habitat: This habitat area contains dense stands of conifers and high mountain meadows. Migratory big game animals utilize this habitat as do black bear, cougar and coyote. The migratory animals, deer and elk, alternate between the lowlands during winter and the highlands in summer.

   The available winter range which is now mostly on and adjacent to private property has now reached capacity which will limit further increase in deer and elk numbers.

   Introduction of the mountain goat in the Tanner Butte area has provided Hood River County with a truly unique wildlife species. Roadless areas and preserving key stands of mature old growth should be encouraged to maintain habitat for black bear and cougar. Various songbirds and woodpeckers require old growth timber for nesting habitat.

   Clear cutting methods have increased habitat for big game species but at the same time have eliminated habitat for some birds and small mammal species.

3. Pine - Oak Habitat: The pine - oak zone in the northeast section of the area is important because it serves as winter habitat for big game species. It is considered a fringe area which provides a buffer zone between the high country and the agricultural area. The introduced Merriams turkey has found a niche in this area.

4. Agricultural Land: Agricultural land serves as habitat for a variety of wildlife including upland birds, waterfowl, hawks, owls and small mammals. Blacktail deer inhabit the brushy streamsides and dense brush patches. Damage to fruit from deer occurs in the lowland orchard areas. Small birds find shelter and habitat in residential areas where food and shelter can be found in the winter months.

E. Introduction: Fishery Resources Summary[2] (Columbia Gorge Area):

For the purposes of this resource summary the area discussed includes the Columbia River and its Oregon tributaries from Bonneville Dam to Perham Creek. The Columbia River supports significant populations of anadromous and resident fish. The larger tributaries support resident and anadromous fisheries, while the smaller streams generally support resident fishes but can accommodate anadromous species in only restricted areas or time periods. The backwater ponds associated with the Columbia River support a diverse fishery of game and non-game species.

[2] From Oregon Department of Fish and Wildlife.

The various species of fish found within this area are summarized in TABLE 4.

1. Habitat Requirements - Columbia River Tributaries: The condition of the aquatic habitat within the Columbia River tributaries is generally good. The larger streams have good quality water, which is a characteristic of relatively undisturbed watersheds. Eagle and Herman Creeks have sufficient quality of water to warrant the construction and operation of major fish hatcheries.

   Several of the smaller streams (Ruckle, Dry, Lindsey, Warren, Starvation, Viento and Perham) also support some anadromous fish and a population of rainbow and cutthroat trout. Some channelization in the lower drainages has reduced fish production, one example is Viento Creek north of I-84. The only other water quality problem is temperature. Low winter temperatures retard fish growth.

   Habitat Requirements - Columbia River: In recent years the valuable anadromous salmonoids in the Columbia River have been faced with increasing hazards. Juvenile salmonoids suffer excessive delays during their downstream migration through the numerous slow-moving Columbia River Reservoirs. These juveniles are also faced with unscreened turbine intakes and supersaturation of nitrogen at the Columbia River dams. Another problem is the large predator population, including the voracious walleye pike, which has recently found its way into the Columbia River.

   Adult anadromous fish continue to face excessive delays while passing Columbia River dams. These delays can be critical to those fish that are exposed to excessive river temperatures for an extended time period. The warming of water in the slow moving Columbia River reservoirs is favorable to bacterial and fungal infections, which can kill these valuable fish before they can spawn.

   Production of warm water game fish in the Columbia River and associated backwater areas is at the mercy of the fluctuating Bonneville Pool. Rapid water level fluctuations during the early summer spawning period can either expose incubating eggs, or force adults guarding the nests to abandon them. In the first instance eggs exposed to the air are killed. In the second situation other predatory fish quickly devour the unprotected spawn. In either case the equally disastrous outcome can nearly eliminate a year class of fish.

2. Fish Habitat Protection Plan: The Columbia River and tributaries within the Columbia Gorge area are considered sensitive areas.

   Department goals for rivers and streams include retaining or restoring riparian vegetation, retaining channel integrity, meanders and stable non-eroding banks that will protect water quality, preserve fish and wildlife habitat and provide for a variety of recreational and aesthetic values.

3. Recommendations:

   a. The land classifications most compatible with river and stream resources is Open Space.

(1) Rivers and streams and the adjoining riparian vegetation should be managed by the "stream corridor concept" which maintains streams integrity (pool-riffle, meander, etc.) and stream bank stability.

(2) Residential development along streams should be low density and require appropriate setbacks.

b. The "streamway" and "floodplain" should be identified within this unit. A "streamway" is that area landward of a stream shoreline in which the stream will naturally wander or meander, seeking new channels by erosive action. A "floodplain" is the area subject to periodic flooding by a stream or drainage-way. The boundary depends upon the frequency of the high flood levels. The 100-year floodplain should be identified.

(1) Construction of vulnerable structures should be prohibited within the floodplain.

(2) Compatible land use should maintain the riparian vegetation along streams.

c. Development or land use requiring channelization, excessive removal of streamside vegetation, alteration of stream banks, and filling into stream channels should be restricted in order to maintain stream integrity.

d. Public access should be maintained or secured to appropriate river and stream areas.

e. Minimum stream flows should be established on streams within this area.

F. Introduction: Wildlife Habitat (Columbia Gorge area):

The Columbia Gorge is well known for its scenic beauty and overall unique geographic qualities. For many years people have sought to protect the Columbia Corridor for aesthetic purposes, but few have made mention of the wildlife resources found there. The wildlife values from a "freeway glance" may appear nondescript and unimportant but, collectively, total species using the Gorge area are considerable and contribute opportunities for the public user or the casual observer.

For purposes in this report, wildlife habitat areas will be discussed in two broad categories; the riparian zones and the mixed-conifer area. It is not intended to neglect other habitats that exist within the area, but it is felt that these two habitat areas cover the majority of land mass and are areas which are sensitive to man's activities.

1. Riparian Habitat: Riparian habitat or zones are defined as vegetative areas associated with streams or moist areas. For example; trees, shrub and grass species found growing adjacent to water are classed as riparian vegetation.

Riparian wildlife habitat zones within the Columbia Gorge area are directly related to the Columbia River and backwater pond areas. Other important riparian habitat exist along all perennial and intermittent streamways. These riparian areas provide a variety of streamside vegetation and associated and health of wildlife species. Wildlife needs such as food, cover and water are satisfied partially or totally by the presence of riparian habitat.

Presently, as the result of man's activities, riparian areas have been grossly reduced. Greatest impacts were caused by inundation resulting from Bonneville Dam and fill material placed for highway and railroad right-of-ways. Removal of this vegetation and the ensuing human disturbances have made the remaining riparian areas very important for the benefit and survival of many wildlife species.

2. Areas of Major Concern: Considerable waterfowl nesting and wintering activity takes place on pond and cove areas along the Columbia River. All vegetation, island areas, cover and pond areas should be maintained to preserve the remaining suitable waterfowl habitat.

   Channelization of streams flowing into the Columbia, has in the past, reduced overall riparian habitat quality. If stream channelization is a must, the associated vegetation should- be maintained for water quality, stream integrity and the much needed wildlife habitat.

3. Mixed-Conifer Habitat: The mixed coniferous forest which is typical of the Columbia Gorge from Hood River to Troutdale comprises the largest land area associated with the Gorge. This habitat which is interspersed with natural openings, rock outcroppings and meadow rises from approximately 100 feet to above 4,000 feet in less than one mile. With this gradient and rough topography, wildlife species are relatively isolated and free of human encroachment.

   The vegetative overstory includes Douglas fir, true fir, mountain hemlock, maple and alder. Understory species include a variety of grasses and shrubs. With this vegetative cover and rugged terrain, a diverse food supply and escape cover provides wildlife with basic requirements.

   The recent introduction of the mountain goat in the Tanner Butte area has provided Oregon with a truly unique wildlife species. Although the goat is not native to Oregon, the habitat associated with the Gorge area has provided a suitable environment for their selective needs. It is hoped the goats will produce a viable population and provide the wildlife enthusiast with opportunities for observing these magnificent animals under natural conditions. Other big game such as black-tail deer and Roosevelt elk are found using this habitat.

   The bald eagle is found wintering within the Gorge area and utilizes the precipitous-remote areas found there. Other raptors such as redtail, Cooper's and goshawks can be found as permanent residents. Non-game birds and mammals with the above mentioned species are presented in TABLE 5.

G. Introduction (Mt. Hood):

Fish and wildlife areas within the Mt. Hood area are discussed in detail under Goal 5: Evaluation Process: Fish and Wildlife areas and Habitats.

H. Goal 5 Evaluation Process: Sites and area evaluated under the Goal 5 process and are discussed in the report entitled: Goal 5 Evaluation Process: Fish and Wildlife Areas and Habitats which follows this report.

I. Conclusions and Observations: Findings:

1. The Oregon State Department of Fish and Wildlife has identified a unique fish and wildlife habitat along the Columbia shores from the east end of Wells Island to Ruthton Point. This area contains pilings, snags, and natural vegetation necessary for a varied habitat. It also provides nesting, feeding, and resting area for geese, ducks, herons, osprey, beaver, several species of birds, small mammals, and fish. The bald eagle and the osprey are both on the endangered species list.

2. The riparian habitat of the Columbia contributes to the wildlife life cycle (food chain). It is significant but possibly less important than the unique area identified above.

3. The Rip Rap and Urban Shoreline areas do not contribute significantly to, nor possess the necessary requirements for, wildlife habitats.

4. Several "backwater" ponds exist along the Columbia River shore south of I-84 and the railroad line. These significant habitats provide both game and non-game fish a place to spawn, feed, and rest, particularly when the river is high and turbulent.

5. The Urban Inland area (CityWestside) contains woodlots, fields, orchards, and small places suitable as a limited habitat for small mammals and birds. Towards the outer reaches of this area, some conflicts with orchard activity and deer feeding are reported.

6. The Ravine/Floodplain Inland area (City/Westside) contains significant habitats to support a variety of wildlife activities. These areas provide a natural corridor of vegetation and water for mammals, birds, reptiles, amphibians, and fish.

7. The Ecotone areas provide a significant habitat refuge for various forms of wildlife. The Ecotone is a transition area between forest and field, and provides necessary food, shelter, and space (niche).

8. For adequate fish propagation and migration, the stream flow rate must be at least 150 cubic feet per second (cfs)[3] and be of adequate water quality (Hood River).

9. The minimum stream flow rate required for sports fishing is 300 cfs[4] (Hood River).

[3] Environmental Investigations, Hood Basin Supplement, Oregon State Game Commission, April, 1973.
[4] Ibid.

10. Loss of streamside vegetation increases the loss of fish and small mammals and stream bank erosion (soil sedimentation).

11. Agriculture, open space and forest management are the most compatible land uses for wildlife preservation.

12. Riparian, mixed conifer and pine – oak habitat are important and should be maintained for wildlife.

13. The Eagle Creek and Herman Creek Basins and Tanner Butte area should be designated as roadless areas for the protection of the newly introduced Mountain Goat and to maintain the aesthetic quality of the area.

14. Timber management practices have a considerable influence upon wildlife habitat. A variety of harvest practices from selective cutting to clear cutting provide a diverse habitat for a multitude of wildlife species.

15. The pine – oak habitat in the northeast section of the Central Valley provides a unique wintering area for big game. Areas designated as big game winter range should be maintained in low density uses.
The following areas within the Central Valley area are designated as big game winter range or turkey habitat by the Fish and Wildlife Department.

    a. T1N R11E Sections, 4, 5, 7, 8, 9, 16, 17, 18, 19, 20, 21, 28, 29, 30, 32 and 33.

    b. T2N R11E Sections 8, 9, 16, 17, 20, 21, 28, 29, 32 and 33.

16. Areas used by big game for winter range should be of low density development.

17. Timber management practices should encourage the provision of habitat for a variety of wildlife including old growth and young growth timber.

18. Strong enforcement of leash laws would reduce unnecessary harassment of big game and other wildlife by free-ranging dogs.

19. Location and construction of new roads should be monitored to reduce detrimental impacts on big game winter range and riparian habitats. Seasonal roads should be closed to reduce harassment to wildlife during stress periods of winter and early spring. Roads no longer used for fire protection or logging should be closed permanently.

20. The maintenance of riparian vegetation and water quality are essential for instream fish production and maintenance.

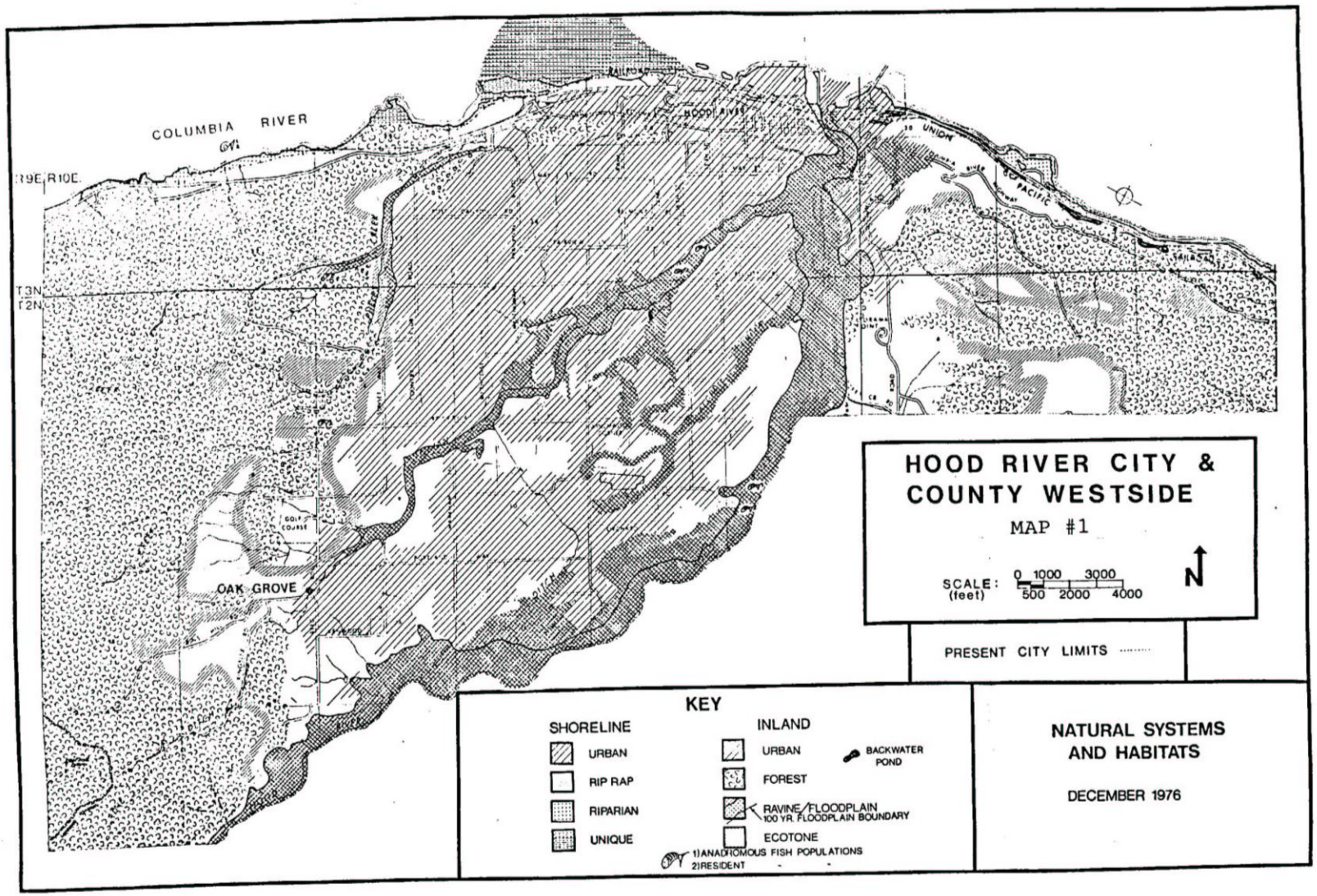
21. Good public access to appropriate lakes and streams is important in providing recreational opportunities.

22. Minimum stream flows are necessary for migratory fish passage and natural propagation.

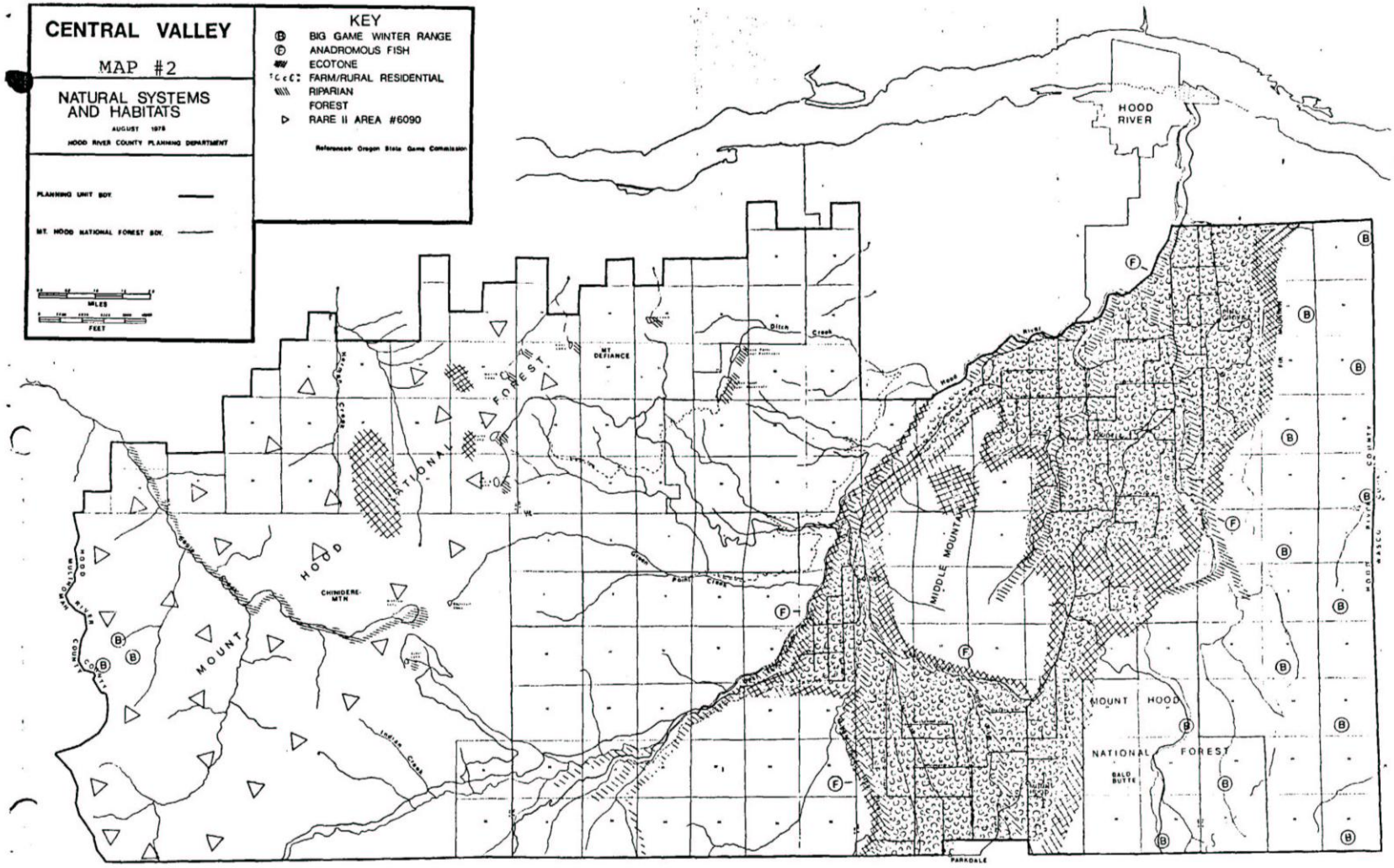
23. Streamside or riparian vegetation not only enhances fish habitat, it also helps prevent streambank erosion.

24. Stream contamination from chemical sprays and industrial wastes degrade stream and river water quality when not properly handled.

25. Herbicide spraying on road sides and clearcut areas, unless carefully done may leave residues in streamways and be harmful to fish and wildlife.
26. Because of the importance of riparian habitat, and its reduction in the past, maintenance of existing riparian habitat is an important need in the area.
27. The maintenance of the anadromous and resident fishery in the area depends on minimizing supersaturation from the Columbia River dams, minimizing water level fluctuation in the Bonneville Pool during the early summer spawning season of resident fish, and minimizing alteration of stream channels and banks.
28. For additional conclusions, etc., and recommendations, see the following report: Goal 5 Evaluation Process: Fish and Wildlife Areas and Habitats.



A larger scale map is available for review in the Hood River County Planning Department



A larger scale map is available for review in the Hood River County Planning Department

TABLE 1
(CITY/WESTSIDE AREA)

Game Species		Species Present					
		Columbia River	Columbia Back-water Ponds	Hood River	Indian Creek	Phelps Creek	Cedar Creek
Chinook Salmon	Oncorhynchus tshawtscha	X	X/1	X			
Steelhead	Salmo gairdneri	X	X/1	X	X		
Coho Salmon	Oncorhynchus kisutch	X	X/l	X	X		
Chum Salmon	Oncorhynchus keta	X					
Sockeye Salmon	Oncorhynchus nerka	X		X			
Rainbow Trout	Salmo gairdneri	X	X	X	X	X	X
Cutthroat Trout	Salmo clarki	X		X	X		
White Sturgeon	Acipenser transmontanus	X					
Green Sturgeon	Acipenser medirostris	X					
Mountain Whitefish	Prosopium williamsoni	X		X			
American Shad	Alosa sapidissima	X	X	X			
Channel Catfish	Ictalurus punctatus	X					
Brown Bullhead	Ictalurus nebulosus	X	X				
Walleye	Stizostedion vitreum bitreum	X					
Yellow Perch	Perca falvescens	X	X				
Largemouth Bass	Micropterus salmoides	X	X				
Smallmouth Bass	Micropterus dolomieui	X	X				
bluegill	Lepomis macrochirus	X	Y				
Pumpkinseed	Lepomis gobbosus	X	X				
White Crappie	Pomoxis annualris	X	X				
Black Crappie	Pomoxis nigromaculatus	X	X				
Non-Game Species							
Carp	Cyprinus carpio	X	X	X			
Northern Squawfish	Ptychocheilus oregonensis	X	X	X			
Fine-scaled Sucker	Catostomus syncheilus	X	X	X			
Coarse-scaled Sucker	Catostomus macrocheilus	X	X				
Pacific Lamprey	Entosphenus_tridentatus	X	X	X	X		
Miscellaneous Non-game Species							

/1 Juvenile only

TABLE 2
FISH SPECIES OF THE CENTRAL VALLEY

Game Species	A-Abundant C-Common F-Few R-Rare	Columbia Gorge Streams	West Fork Hood River & Tribs	Middle Fork H.R. & Tribs	East Fork Hood River & Tribs	Hood River	High Lakes	Kingsley Reservoir
Chinook Salmon	Oncorhynchus tschawytscha		F			C		
Steelhead	Salmo gairdnerl		C	C	C	A		
Coho Salmon	Oncorhynchus kisutch		R	F	C	C		
Chum Salmon	Oncorhunchus keta							
Sockeye Salmon	Oncorhunchus nerka		R			F		
Rainbow Trout	Salmo gairdneri	C	A	C	A		F	A
Cutthroat Trout	Salmo clarki	C	C	C	C	F		
SeaRun Cutthroat	Salmo clarki	C		F	C	C		
Mountain Whitefish	Prosopium williamsoni					C		
Brook Trout	Salvelinus Fontinalis						A	R
Non-Game Species								
Carp	Cyprinus carpio					F		
Northern Squawfish	Ptychocheilus oregonensis					C		
Fine-scaled Sucker	Catostomus syncheilus					F		
Coarse-scaled Sucker	Catostomus macrocheilus					C		
Pacific Lamprey	Entosphenus tridentatus					C		
Chiselmouth	Acrocheilus alutaceus					F		
Peamouth	Mylocheilus caurinus							
Red-sided Shiner	Richardsonius balteatus							
Speckled Dace	Apocope oscula carrington	C	C	C	C	C		
Long-nosed Dace	Rhinichthys cataractae							
Tench	Tinca tinca							
Sculpin	Family cottidae	C	C	C	C	C		

TABLE 3 (1/5)

Status
A-Abundant R-Rare
C-Common U-Unknown
F-Few

CENTRAL VALLEY SELECTED SPECIES LIST	Habitat Types					Use Period			
	Riparian	Mixed-Conifer	Pine-Oak	Agricultural		Spring	Summer	Fall	Winter
MAMMALS									
Opossum (Didelphus marsupialis)	F			F		X	X	X	X
Dusky Shrew (Sorex obscurus)		U	U	U		X	X	X	X
Vagrant Shrew (Sorex vagrans)		U	U	U		X	X	X	X
Trowbridge Shrew (Sorex Trowbridgeii)	U	U	U	U		X	X	X	X
Pacific Mole (Scapanus orarius)	F			F		X	X	X	X`
Little Brown Myotis (Myotis lucifugus)	U	U	U	U		X	X	U	U
Fringed Myotis (Myotis thysanodes)	U	U	U	U		X	X	U	U
California Myotis (Myotis californicus)	U	U	U	U		X	X	U	U
Long-eared Myotis (Myotis evotis)	U	U	U	U		X	X	U	U
Yuma Myotis (Myotis yumanensis)	U	U	U	U		X	X	U	U
Small-footed myotis (Myotis subulatus)	U	U	U	U		X	X	U	U
Silver-haired Bat (Lasionycteris noctivagus)	U	U	U	U		X	X	U	U
Western Pipistrel (Pipistrellus hesperus)	U	U	U	U		X	X	U	U
Big Brown Bat (Eptesicus fuscus)	U	U	U	U		X	X	U	U
Pallid Bat (Antrozous pallidus)	U	U	U	U		X	X	U	U
Raccoon (Procyon lotor)	C	C	C	C		X	X	X	X
Long-tailed Weasel (Mustela frenata)	F	F		F		X	X	X	X
River Otter (Lutra canadensis)	F					X	X	X	X
Striped Skunk (Mephitis mephitis)	C	C	C	C		X	X	X	X
Spotted Skunk (Spilogale putorius)	F	F	F	F		X	X	X	X
Beaver (Castor canadensis)	C					X	X	X	X
Badger (Taxidea taxus)	F					X	X	X	X
Muskrat (Ondatra zibethica)			F			X	X	X	X
Coyote (Canis latrans)	C	C	C	C		X	X	X	X
Bobcat (Lynx rufus)	F					X	X	X	X
California Ground Squirrel (Spermophilus beechevi)	C	C	C	C		X	X	X	X
Yellow Pine Chipmunk (Eutamias amoenus)	C	C	C			X	X	X	X
Townsend Chipmunk (Eutamias townsendi)	C	C	C			X	X	X	X
Western Gray Squirrel (Sciurus griseus)	C	C	C	C		X	X	X	X
Chickaree (Tamiasciurus douglasi)	C	C				X	X	X	X
Northern Flying Squirrel (Glaucomys sabrinus)	F	F				X	X	X	X
Northern Pocket Gopher (Thomomys talpoides)		C	C	C		X	X	X	X
Deer Mouse (Peromyscus maniculatus)	C	C	C	C		X	X	X	X
Bushy-tailed Woodrat (Neotoma cineria)	C	C	C	C		X	X	X	X
Longtail Vole (Microtus longicaudis)	C	C		C		X	X	X	X
Oregon Vole (Microtus oregoni)	C			C		X	X	X	X
Norway Rat (Rattus norvegicus)	C			C		X	X	X	X
House Mouse (Mus musculus)	C			C		X	X	X	X
Black Rat (Rattus rattus)	C			C		X	X	X	X
Porcupine (Erethizon dorsatum)	C	C	C	C		X	X	X	X
Snowshoe Hare (Lepus americanus)		C							

TABLE 3 (2/5)

Status
A-Abundant R-Rare
C-Common U-Unknown
F-Few

CENTRAL VALLEY SELECTED SPECIES LIST	Habitat Types					Use Period			
	Riparian	Mixed-Conifer	Pine-Oak	Agri-cultural		Spring	Summer	Fall	Winter
Mountain Cottontail (Sylvilagus nuttalli)	C		C	C		X	X	X	X
Blacktailed Deer (Odocoileus hemionus)	C	C	C	C		X	X	X	X
Black Bear (Ursus americanus)		F				X	X	X	X
Mountain Lion (Felis concolor)		F	F			X	X	X	X
Rocky Mountain Elk (Cervus canadensis)	C	C	C	C		X	X	X	X
Pika (Ochotona princeps)		C				X	X	X	X
Mink (Mustela vison)	C					X	X	X	X
BIRDS									
Killdeer (Charadrius vociferous)	C					X	X	X	X
Mallard Duck (Anas platyrhynchos)	C			C		X	X	X	X
Wood Duck (Aix sponsa)	F					X	X	X	X
Turkey Vulture (Cathartes aura)	C	C	C	C		X	X		
Bald Eagle (Haliaeetus leucocephalus)		F	F					X	X
Rough-legged Hawk (Buteo lagopus)		F	F	F				X	X
Redtailed Hawk (Buteo jamaicensis)	C	C	C	C		X	X	X	X
American Kestrel (Falco sparverius)	C	C	C	C		X	X	X	X
Long-eared Owl (Asio otus)	F	F	F	F		X	X	X	X
Short-eared Owl (Asio flammeus)	F	F	F	F		X	X	X	X
Screech Owl (Otus asio)	F	F	F	F		X	X	X	X
Great Horned Owl (Bubo virginianus)	F	F	F	F		X	X	X	X
Merriam's Turkey (Meleagris gallopavo)	C	C	C			X	X	X	X
California Quail (Lophortyx californicus)	C		C	C		X	X	X	X
Ring-necked Pheasant (Phasianus colchicus)	C		F	C		X	X	X	X
Mourning Dove (Zenaidura macroura)	C		C	C		X	X		
Rock Dove (Columba livia)	C		C			X	X	X	X
Common Nighthawk (Chordeiles minor)	C	C	C	C		X	X		
Belted Kingfisher (Megaceryl alcyon)	C					X	X	X	X
Common Flicker (Colaphtes auratus)	C	C	C	C		X	X	X	X
Lewis Woodpecker (Dendrocopos villosus)	C	C	C	C		X	X	X	X
Downy Woodpecker (Dendrocopos pubescens)	C	C	C			X	X	X	X
Yellow Bellied Sapsucker (Sphyrapicus varius)	F	C	F			X	X	X	X
Western Kingbird (Tyrannus verticalis)	F	F	F	F		X	X		
Western Flycatcher (Empidonax difficilis)	F	F	F	F		X	X		
Western Wood Pewee (Contopus sordidulus)	F	F	F	F		X	X		
Ash-throated Flycatcher (Myiarchus cinerascens)	F		F	F		X	X		
Western Wood Pewee (Contopus sordidulus)	F	F	F			X	X		
Horned Lark (Eremophilis alpestris)	C		C	C		X	X	X	X
Barn Swallow (Hirundo rustica)	C		C	C		X	X		
Violet-Green Swallow (Tachycinsta thalassina)	C	F	C	C		X	X		
Tree Swallow (Iridoprocne bicolor)	F	F	F	F		X	X		
Steller's Jay (Cyanocitta stelleri)	C	C	C	C		X	X	X	X

TABLE 3 (3/5)

Status
A-Abundant R-Rare
C-Common U-Unknown
F-Few

CENTRAL VALLEY SELECTED SPECIES LIST	Habitat Types					Use Period			
	Riparian	Mixed-Conifer	Pine-Oak	Agricultural		Spring	Summer	Fall	Winter
Scrub Jay (Aphelomoma coerulescens)	C	C	F	F		X	X	X	X
Black-billed Magpie (Pica pica)			F			X	X	X	X
Common Raven (Corvus corax)	C	C	C	C		X	X	X	X
Common Crow (Corvus brachyrhynchos)	C	C	C	C		X	X	X	X
Black-capped Chickadee (Parus atricapillus)	C	C	C	C		X	X	X	X
Common Bushtit (Psaltriparus minimus)	F	F	F			X	X	X	X
Dipper (Cinclus mexicanus)	C					X	X	X	X
White-breasted Nuthatch (Sitta canadensis)	F	F	F			X	X	X	X
Brown Creeper (Certhis familiaris)	F	F	F			X	X	X	X
House Wren (Troglodytes aedon)	C	C	C	C		X	X		
American Robin (Turdus migratorius)	C	C	C	C		X	X		
Varied Thrush (Ixoreus naevius)	C	C		C		X	X	X	X
Swainson's Thrush (Hylocichla ustulata)	C	C				X	X	X	
Western Bluebird (Sialia mexicana)	C	C	C	C		X	X		
Mountain Bluebird (Sialia currucoides)	C	C				X	X		
Golden-crowned Kinglet (Regulus satrapa)	C	C				X	X		
Ruby-crowned Kinglet (Regulus calendula)	C	C				X	X		
Bohemian Waxwing (Bombycilla garrulus)	F	F		F		X	X	X	
Cedar Waxwing (Bombycilla cedrorum)	F	F		F		X	X	X	
Starling (Sturna vulgaris)	C	C	C	C		X	X	X	X
Vaux's Swift (Chaetura vauxi)	F	F		F		X	X		
Solitary Vireo (Vireo solitarius)	F	F	F	F		X	X		
Orange-crowned Warbler (Vermivora celata)	F	F	F	F		X	X		
Yellow Warbler (Dendroica petechia)	F	F	F			X	X		
Common Yellowthroat (Geothlypis trichas)	F	F				X	X		
MacGillivray's Warbler (Oporornis tolmiei)	F	F		F		X	X		
Wilson Warbler (Wilsonia pusilla)	F	F		F		X	X		
Nashville Warbler (Vermivora ruficapilla)	F	F		F		X	X		
Yellow-rumped Warbler (Dendroica coronata)	F	F		F		X	X		
Black-throated Gray Warbler (Dendroica nigrescens)	F	F		F		X	X		
House Sparrow (Passer domesticus)	C		C	C		X	X	X	X
Western Meadowlark (Sturnella neglecta)	C		C	C		X	X	X	X
Red-winged Blackbird (Agelaius phoeniceus)	C			C		X	X	X	X
Brewer's Blackbird (Euphagus cyanocephalus)	C	C		C		X	X	X	X
Brown Headed Cowbird (Molothrus ater)	C			C		X	X	X	X
Northern Oriole (Icterus galbula)	F		F	F		X	X		
Western Tanager (Piranga ludoviciana)	F	F		F		X	X		
Evening Grosbeak (Hesperiphona vespertina)	C	C		C		X	X	X	
Lazuli Bunting (Passerina amoena)	F	F	F			X	X		
Purple Finch (Arpodacus purpureus)	F	F	F	F		X	X		
House Finch (Arpodacus mexicanus)	C		C	C		X	X		
American Goldfinch (Spinus tristis)	F	F	F	F		X	X		

TABLE 3 (4/5)

Status
A-Abundant R-Rare
C-Common U-Unknown
F-Few

CENTRAL VALLEY SELECTED SPECIES LIST	Habitat Types					Use Period			
	Riparian	Mixed-Conifer	Pine-Oak	Agricultural		Spring	Summer	Fall	Winter
Rufous-sided Towhee (Pipilo erythrophthalmus)	C	C	C	C		X	X	X	X
Savannah Sparrow (Passerculus sandwichensis)	F		F	F		X	X		
Vesper Sparrow (Pooecetes gramineus)	F		F	F		X	X	X	
Lark Sparrow (Chondestes grammacus)	F		F	F		X	X	X	
Dark-eyed Junco (Junco hyemalis)	C	C	C	C		X	X	X	X
Chipping Sparrow (Spizella passerina)	F	F	F	F		X	X		
White-crowned Sparrow (Zonotrichia leucophrys)	C		C	C		X	X	X	X
Hummingbirds (Trochilidae sp.)	C	C	C	C		X	X		
Pine Siskin (Spinus pinus)	F	F				X	X		
Mountain Quail (Oreortyx pictus)	F	F	F			X	X	X	X
Winter Wren (Troglodytes troglodytes)	C	C	C	C				X	X
Bewick's Wren (Thryomanes bewickii)	F	F	F			X	X		
Rock Wren (Salpinctus obsoletus)	F	F	F	F		X	X		
Canyon Wren (Catherpes mexicanus)	F	F	F	F		X	X		
Hermit Thrush (Hylocichla guttata)	F	F	F			X	X		
Fox Sparrow (Passerella iliaca)	C			C		X	X	X	X
Song Sparrow (Melospiza melodia)	C			C		X	X	X	X
Canada Goose (Branta canadensis)	C			C		X	X	X	X
Pintail (Anas acuta)	F			F				X	X
American Widgeon (Anas americana)	C			C				X	X
Blue-winged Teal (Anas discors)	F			F				X	X
Cinnamon Teal (Anas cyanoptera)	F			F		X	X	X	X
Green-winged Teal (Anas carolinensis)	F			F		X	X	X	X
Common Goldeneye (Bucephala clangula)	F	F				X	X	X	X
Bufflehead (Bucephala albeola)	F							X	X
Harlequin Duck (Histrionicus histrionicus)	F					X	X	X	X
Common Merganser (Mergus merganser)	C					X	X	X	X
Hooded Merganser (Lophodytes cucullatus)	F					X	X	X	X
Goshawk (Accipiter gentilis)	F	F				X	X	X	X
Cooper's Hawk (Accipiter cooperii)	C	C	C	C		X	X	X	X
Sharp-shinned Hawk (Accipiter striatus)	C	C		C		X	X	X	X
Marsh Hawk (Circus cyaneus)	F			F		X	X	X	X
Golden Eagle (Aquila chrysaetos)		F	F					X	X
Osprey (Pandion haliaetus)	F							X	X
Ruffed Grouse (Bonasa umbellus)	C	C	C	C		X	X	X	X
Blue Grouse (Dendragapus obscurus)	F	F	F			X	X	X	X
Spotted Owl (Strix occidentalis)		U				X	X	X	X
Great Blue Heron (Ardea herodias)	C			C		X	X	X	X
American Coot (Fulica americana)	C					X	X	X	X
Common Snipe (Capella gallinago)	F							X	X
Poor-will (Phalaenoptilus nuttallii)	F	F	F	F		X	X		
Hairy Woodpecker (Dendrocopos villosus)		F	F			X	X	X	X

TABLE 3 (5/5)

Status
A-Abundant R-Rare
C-Common U-Unknown
F-Few

CENTRAL VALLEY SELECTED SPECIES LIST	Habitat Types					Use Period			
	Riparian	Mixed-Conifer	Pine-Oak	Agricultural		Spring	Summer	Fall	Winter
Alder Flycatcher (Empidonax alnorum)	F	F		F		X	X		
Bank Swallow (Riparia riparia)	C		C	C		X	X		
Clark's Nutcracker (Nucifraga columbiana)	F	F	F					X	X
Townsend's Solitaire (Myadestes townsendi)	C	C		C		X	X		
Loggerhead Shrike (Lanius ludovicianus)			F	F		X	X	X	X
AMPHIBIANS									
Northern Long-toed Salamander (Ambystoma macrodactylum krausei)	U					X	X	X	X
Western Toad (Bufo boreas)	F	F				X	X	X	X
Pacific Tree Frog (Hyla regilla)	C	C		C		X	X	X	X
Leopard Frog (Rana pipiens)	F					X	X	X	X
Rough-Skinned Newt (Taricha granulosa)	C	C				X	X	X	X
REPTILES									
Painted Turtle (Chrysemys picta)	F					X	X	X	X
Northwestern Fence Lizard (Scelporus occidentalis)	C		C	C		X	X	X	X
Western Skink (Eumeces skiltonianus)	F	F	F	F		X	X	X	X
Oregon Alligator Lizard (Gerrhonotus multicarinatus scincicaudi)	F		F	F		X	X	X	X
Rubber Boa (Charina bottae)	U					X	X	X	X
Snap-tailed Snake (Contia tenuis)	U		U			X	X	X	X
Stripped Whipsnake (Masticophic taeniatus)	U		U			X	X	X	X
Western Yellow-bellied Racer (Coluber constrictor mormon)	U		U			X	X	X	X
Great Basin Gopher Snake (Pituophis melanoleucus deserticola)	U	U	U			X	X	X	X
Pacific Gopher Snake (Pituophis melanoleucus	C		C	C		X	X	X	X
Valley Garter Snake (Thamnophis sirtalis fitchi)	C	C	C	C		X	X	X	X
Wandering Garter Snake (Thamnophis elegans	U					X	X	X	X
Northern Pacific Rattlesnake (Crotalis viridis	F		F	F		X	X	X	X
Western Ring-necked Snake (Diadophis amabillis)	F	F	F	F		X	X	X	X

TABLE 4
Fish Species of the Columbia Gorge

Game Species		Columbia River	Wyeth Lake	Lindsey Pond	Vento Lake	Iris Lake	Eagle Creek	Rumble Creek	Dry Creek	Herman Creek	Lindsey Creek	Warren Creek	Starvation	Vento	Perhon	
Chinook Salmon	Oncorhynchus tschawtscha	A	C*	A	C*	R*	F			A	A					
Steelhead	Salmo gairdneri	A	C*	C*	C*	R*	F			A	C		F	F		
Coho Salmon	Oncorhynchus kisutch	A	C*	A	C*	R*	F			C	A					
Chum Salmon	Oncorhynchus keta	R														
Sockeye Salmon	Oncorhynchus nerka	A														
Rainbow Trout	Salmo gairdneri	C	F	C	C	R	A	C	C	A	A	A	A	A	C	A-
Cutthroat Trout	Salmo clarki	C	F	F	F	R	C	C		C	C	C	C	C	C	C- Common
White Sturgeon	Acipenser transmontanus	A	C	C	C	F				F						F- Few
Green Sturgeon	Acipenser medirostris	F	F	F	F	R				R						R- Rare
Mountain Whitefish	Prosopium williamsoni	C														*- Juvenile
American Shad	Alosa sapidissima	A	C	C	C	F				F						only
Channel Catfish	Ictalurus punctatus	F	F	F	F	R										
Brown Bullhead	Ictalurus nebulosus	C	C	C	C	C				F						
Walleye	Stizostedion vitreum vitreum	F	R	R	R	R										
Yellow Perch	Perca falvescens	C	C	C	C	C										
Largemouth Bass	Micropterus salmoides	A	A	A	A	C				F						
Smallmouth Bass	Micropterus dolomieui	A	F	F	F	F										
bluegill	Lepomis macrochirus	C	C	C	C	C										
Pumpkinseed	Lepomis gobbosus	F	F	C	F	F										
White Crappie	Pomoxis annualris	C	C	C	C	F										
Black Crappie	Pomoxis nigromaculatus	A	A	A	A	A										
Non-Game Species																
Carp	Cyprinus carpio	A	A	A	A	A				F						
Northern Squawfish	Ptychocheilus oregonensis	A	A	A	A	C				F						
Fine-scaled Sucker	Catostomus syncheilus	A	A	A	A	C				F						
Coarse-scaled Sucker	Catostomus macrocheilus	A	A	A	A	C				C						
Pacific Lamprey	Entosphenus_tridentatus	A	R	C	F	F	F			F	F					
Chiselmouth	Acrocheilus alutaceus	A	A	A	A	C				F						
Peamouth	Mylocheilus caurinus	A	A	A	A	A				F						
Red-sided Shiner	Richardsonius balteatus	A	C	C	C	C				F						
Speckled Dace	Adocope oscula carringtoni	A	F	F	F	F	C	C	C	C	C	C	C	C	C	
Long-nosed Dace	Rhinichthys cataractae	F	R	R	R	R				F						
Tench	Tinca tinca	A	C	C	C	F				F						
Schulpin	Family Cottidae	A	A	A	A	A	C	C	C	C	C	C	C	C	C	

TABLE 5 (1/6)

COLUMBIA GORGE
SELECTED WILDLIFE SPECIES LIST

Species	Habitat Types			Use Periods			
	Riparian	Mixed-Conifer	Open Space	Spring	Summer	Fall	Winter
Birds							
Common Loon	X					X	X
Horned Grebe	X					X	X
Eared Grebe	X					X	X
Western Grebe	X					X	X
Pied-billed Grebe	X					X	X
Great Blue Heron	X			X	X	X	X
Green Heron	X			X	X	X	X
Scaup	X					X	X
Common Goldeneye	X					X	X
Canada Goose	X			X	X	X	X
Mallard	X			X	X	X	X
Pintail	X					X	X
Widgeon	X					X	X
Green-winged Teal	X					X	X
Wood Duck	X			X	X	X	X
Ring-necked Duck	X					X	X
Canvasback	X					X	X
Hooded Merganser	X			X	X	X	X
Common Merganser	X			X	X	X	X
Turkey Vulture	X	X	X	X	X		
Goshawk	X	X	X	X	X	X	X
Sharp-shinned Hawk	X	X	X	X	X	X	X
Cooper's Hawk	X	X	X	X	X	X	X
Red-tailed Hawk	X	X	X	X	X	X	X
Rough-legged Hawk	X	X	X			X	X
Golden Eagle		X	X	X	X	X	X
Bald Eagle	X	X	X			X	X
Marsh Hawk	X	X	X	X	X	X	X
Osprey	X	X	X	X	X	X	
Peregrine Falcon	X	X	X	X	X	X	X
American Kestrel	X	X	X	X	X	X	X
Blue Grouse	X	X	X	X	X	X	X
Ruffed Grouse	X	X	X	X	X	X	X
California Quail	X			X	X	X	X
Mountain Quail	X	X	X	X	X	X	X
Ring-necked Pheasant	X			X	X	X	X
Virginia Rail	X					X	X
Sora	X					X	X
American Coot	X					X	X

TABLE 5 (2/6)

COLUMBIA GORGE
SELECTED WILDLIFE SPECIES LIST

Species	Habitat Types			Use Periods			
	Riparian	Mixed-Conifer	Open Space	Spring	Summer	Fall	Winter
Birds - Continued							
Killdeer	X			X	X		
Common Snipe	X					X	X
Long-billed Curlew	X					X	X
Spotted Sandpiper	X				X	X	X
Western Gull	X			X	X	X	X
California Gull	X			X	X	X	X
Ring-billed Gull	X			X	X	X	X
Band-tailed Pigeon	X	X	X	X	X	X	X
Rock Dove	X	X	X	X	X	X	X
Mourning Dove	X	X		X	X	X	
Barn Owl	X	X	X	X	X	X	X
Screech Owl	X	X		X	X	X	X
Great Horned Owl	X	X	X	X	X	X	X
Pygmy Owl	X	X		X	X	X	X
Saw-whet Owl	X	X		X	X	X	X
Poor-will	X	X	X	X	X		
Common Nighthawk	X	X		X	X		
Vaux's Swift	X	X	X	X	X		
Rufous Hummingbird	X	X		X	X		
Belted Kingfisher	X	X		X	X	X	X
Red-shafted Flicker	X	X	X	X	X	X	X
Pileated Woodpecker	X	X		X	X	X	X
Lewis Woodpecker	X	X		X	X	X	X
Hairy Woodpecker	X	X		X	X	X	X
Downy Woodpecker	X	X		X	X	X	X
Eastern Kingbird	X	X		X	X		
Western Kingbird	X	X		X	X		
Traill's Flycatcher	X	X		X	X		
Hammond's Flycatcher	X	X		X	X		
Gray Flycatcher	X	X		X	X		
Western Wood Peewee	X	X		X	X		
Olive-sided Flycatcher	X	X		X	X		
Horned Lark	X	X		X	X	X	X
Violet-green Swallow	X	X		X	X		
Tree Swallow	X	X		X	X		
Bank Swallow	X	X		X	X		
Rough-winged Swallow	X	X		X	X		
Barn Swallow	X	X		X	X		
Cliff Swallow	X	X		X	X		

TABLE 5 (3/6)

COLUMBIA GORGE
SELECTED WILDLIFE SPECIES LIST

Species	Habitat Types: Riparian	Habitat Types: Mixed-Conifer	Habitat Types: Open Space	Use Periods: Spring	Use Periods: Summer	Use Periods: Fall	Use Periods: Winter
Birds – Continued							
Red-winged Blackbird	X	X		X	X	X	X
Northern Oriole	X	X		X	X		
Brewer's Blackbird	X	X		X	X	X	X
Brown-headed Cowbird	X	X		X	X		
Western Tanager	X	X		X	X		
Black-headed Grosbeak	X	X		X	X		
Evening Grosbeak	X	X		X	X		
House Finch	X	X		X	X	X	X
Pine Siskin	X	X		X	X		
Red Crossbill	X	X		X	X		
White-winged Crossbill	X	X		X	X		
Spotted Towhee	X	X		X	X		
Vesper Sparrow	X	X		X	X	X	
Dark-eyed Junco	X	X		X	X	X	X
Chipping Sparrow	X	X		X	X		
White-crowned Sparrow	X	X		X	X	X	
Golden-crowned Sparrow	X	X		X	X	X	
Fox Sparrow	X	X		X	X	X	X
Lincoln's Sparrow	X	X		X	X	X	X
Song Sparrow	X	X		X	X	X	X
Western Bluebird	X	X		X	X	X	
Mountain Bluebird	X	X		X	X	X	
Gray Jay	X	X		X	X	X	X
Steller's Jay	X	X	X	X	X	X	X
Scrub Jay	X	X	X	X	X	X	X
Common Raven	X	X	X	X	X	X	X
Common Crow	X	X	X	X	X	X	X
Black-capped Chickadee	X	X		X	X	X	X
Common Bushtit	X	X		X	X		
White-breasted Nuthatch	X	X		X	X	X	X
Pygmy Nuthatch	X	X		X	X	X	X
Red-breasted Nuthatch	X	X		X	X	X	X
Brown Creeper	X	X		X	X	X	X
Dipper	X			X	X	X	X
House Wren	X	X	X	X	X	X	
Winter Wren	X	X	X	X	X	X	X
Bewick's Wren	X	X	X	X	X		
Rock Wren	X	X	X	X	X		
Robin	X	X	X	X	X	X	

TABLE 5 (4/6)

COLUMBIA GORGE
SELECTED WILDLIFE SPECIES LIST

Species	Habitat Types: Riparian	Habitat Types: Mixed-Conifer	Habitat Types: Open Space	Use Periods: Spring	Use Periods: Summer	Use Periods: Fall	Use Periods: Winter
Birds - Continued							
Varied Thrush	X	X	X	X	X	X	X
Hermit Thrush	X	X		X	X		
Swainson's Thrush	X	X		X	X		
Townsend's Solitaire	X	X		X	X		
Ruby-crowned Kinglet	X	X		X	X	X	X
Bohemian Waxwing	X	X		X	X	X	X
Cedar Waxwing	X	X		X	X	X	X
Loggerhead Shrike	X	X		X	X		
Starling	X	X		X	X	X	X
Solitary Vireo	X	X		X	X		
Red-eyed Vireo	X	X		X	X		
Warbling Vireo	X	X		X	X		
Orange-crowned Warbler	X	X		X	X		
Nashville Warbler	X	X		X	X		
Yellow Warbler	X	X		X	X		
Audubon's Warbler	X	X		X	X		
Black-throated Gray Warbler	X	X		X	X		
Yellowthroat	X	X		X	X		
Yellow-breasted Chat	X	X		X	X		
Wilson's Warbler	X	X		X	X		
House Sparrow	X	X		X	X	X	X
Western Meadowlark	X		X	X	X	X	X
Mammals							
Blacktailed Deer	X	X	X	X	X	X	X
Roosevelt Elk	X	X	X	X	X	X	X
Mountain Goat	X	X	X	X	X	X	X
Black Bear	X	X	X	X	X	X	X
Bobcat	X	X	X	X	X	X	X
Coyote	X	X	X	X	X	X	X
Beaver	X			X	X	X	X
Mink	X			X	X	X	X
Otter	X			X	X	X	X
Muskrat	X			X	X	X	X
Long-tailed Weasel	X	X		X	X	X	X
Mountain Beaver		X	X	X	X	X	X
Spotted Skunk	X	X	X	X	X	X	X
Striped Skunk	X	X	X	X	X	X	X

TABLE 5 (5/6)

COLUMBIA GORGE
SELECTED WILDLIFE SPECIES LIST

Species	Habitat Types			Use Periods			
	Riparian	Mixed-Conifer	Open Space	Spring	Summer	Fall	Winter
Mammals - Continued							
Raccoon	X	X	X	X	X	X	X
Opossum	X	X		X	X	X	X
Cottontail Rabbit	X	X	X	X	X	X	X
Snowshoe Hare	X	X	X	X	X	X	X
Brush Rabbit	X	X		X	X	X	X
Pika			X	X	X	X	X
Western Silvergray Squirrel	X	X		X	X	X	X
Chickeree	X	X		X	X	X	X
California Ground Squirrel	X	X	X	X	X	X	X
Northern Flying Squirrel	X	X		X	X	X	X
Townsend Chipmunk	X	X		X	X	X	X
Dusky Shrew	X	X		X	X	X	X
Trowbridge Shrew	X	X		X	X	X	X
Vagrant Shrew	X	X		X	X	X	X
Northern Water Shrew	X	X		X	X	X	X
Pacific Mole	X	X	X	X	X	X	X
Little Brown Myotis	X	X	X	X	X		
Fringed Myotis	X	X	X	X	X		
Long-eared Myotis	X	X	X	X	X		
California Myotis	X	X	X	X	X		
Long-legged Myotis	X	X	X	X	X		
Small-footed Myotis	X	X	X	X	X		
Silver-haired Bat	X	X	X	X	X		
Big Brown Bat	X	X	X	X	X		
Hoary Bat	X	X	X	X	X		
Mazama Pocket Gopher		X		X	X	X	X
Deer Mouse	X	X	X	X	X	X	X
Bushytail Woodrat	X	X		X	X	X	X
Mountain Vole	X	X		X	X	X	X
Townsend Vole	X	X		X	X	X	X
Longtail Vole	X	X		X	X	X	X
Oregon Vole	X	X		X	X	X	X
Pacific Jumping Mouse	X	X		X	X	X	X
Cougar							X

TABLE 5 (6/6)

COLUMBIA GORGE
SELECTED WILDLIFE SPECIES LIST

Species	Habitat Types			Use Periods			
	Riparian	Mixed-Conifer	Open Space	Spring	Summer	Fall	Winter
Amphibians							
Pacific Tree Frog	X	X		X	X	X	X
Bull Frog	X			X	X	X	X
Leopard Frog	X	X	X	X	X	X	X
Spotted Frog	X	X		X	X	X	X
Great Basin Spadefoot	X	X	X	X	X	X	X
Pacific Newt	X	X		X	X	X	X
Oregon Slender Salamander	X			X	X	X	X
Larch Mountain Salamander							X
Reptiles							
Western Fence Lizard	X	X	X	X	X	X	X
Western Skink	X	X	X	X	X	X	X
Rubber Boa	X	X	X	X	X	X	X
Western Racer	X	X	X	X	X	X	X
Gopher Snake	X	X	X	X	X	X	X
Common Garter Snake	X	X	X	X	X	X	X
Night Snake	X	X		X	X	X	X
Northern Alligator Lizard	X	X	X	X	X	X	X

GOAL 5 EVALUATION PROCESS: FISH AND WILDLIFE AREAS AND HABITATS

A. Inventory Deer and Elk Winter Areas (City/Westside):

1. Location: See Maps #1, 2, and 3 for areas identified by the Department of Fish and Wildlife.

2. Quantity: Approximately 4,373 acres.

3. Quality: Area east of Hood River is most important winter range in the area. Both areas provide a buffer area adjacent to orchard lands. Most of the areas are in forest or agricultural plan designations. According to Fish and Wildlife personnel, these uses are compatible with wintering big game needs, therefore they should be included in the Plan Inventory.

4. Conflicting Uses and Consequences: The area designated Rural Residential adjacent to the big game wintering range areas has an average lot size of 43 acres with a potential for approximately 20-22 additional lots for building purposes.

   The rural residential designated land to the east of Hood River (2N 11E Section 6) can be considered a conflicting use. It would allow uses not compatible with big game herds. Potential conflicts include: increased housing density which makes more traffic, etc., cuts down on cover, etc. (one dwelling per five acres); free ranging dogs, more ornamental shrubbery and gardens that could be damaged by wintering big game.

   The need for residential acreage has been shown in an Exception in the City/Westside Plan (see County Exception Document). The Exception has been re-evaluated and a recommendation has been made by the Planning Commission to maintain the existing Plan designation of Rural Residential and RR-5 zoning based upon a justified Exception as presented in the County Exception Document.

   Economic: (on resource) Will reduce the amount of suitable lands by approximately 110 acres (or 2%). No economic consequences will result to resource. Will somewhat maintain open space land that will act and deter animal access to orchard lands in the lower Valley. (on conflicting use) Loss of money due to damage or ornamental plantings, gardens and fencing necessary to deter animal and public access. The State Fish and Wildlife Department has issued several hunting permits in efforts of deterring damage to orchard crops resulting from animals foraging within the area. Additional hunting permits could generate additional revenue to the County through encouraging more hunting and thereby more economic spin offs resulting from the support of hunting activities.

   Social: (on resource) Loss of open space lands, scenic values, habitat areas, and reduction in viewing of wildlife. (to conflicting use) Reduces land potential available for open space, hunting, hiking, etc.; and brings with it the possibility of

undesirable social effects of increased development (i.e., noise, dust, traffic, dogs, etc.). It is questioned whether wildlife will be substantially depleted because residents residing in the area state big game wildlife is limited and furthermore, the State Fish and Game Department is issuing numerous permits to ensure that animals will not destroy crops.

Environmental: (to resource) Amount of range is lessened; noise, air and water pollution levels are increased, vegetation removed, increased traffic noted. All these things would threaten wildlife in the area. (to conflicting use) Animals cause damage to gardens and plantings by eating or trampling them. Making 5 acre tracts in the area could remove lands better suited for farm, forest, or open space uses. It is questionable whether this area is optimum range land because of the conflicts with orchards and because numerous permits are being issued to ensure that animals migrate to other areas.

Energy: (to resource) Travel time from populated areas increased to enjoy open space, hunting, forestry, etc. Maintaining areas in natural state will conserve energy because overall it costs more in energy consumption to maintain developed areas. t takes more energy to use 5 acres in residential uses (lawns, gardens, maintaining roads, etc.) or farm uses than leaving it as open spaces. (to conflicting use) Having housing lots further away from commercial and industrial areas will increase energy consumption to get to those uses. Requires more energy to maintain 5 acres than it would smaller residential lots. Larger lot may enable property owner to situate home to take advantage of solar energy and locate an adequate building site due to the physical limitations of this site (e.g., rockiness, slope, etc.).

5. Recommendations: Add the following to the County Policy Document.

   a. Designate 2N 11E Section 6, 3B (Allow Conflicting Uses Fully) and maintain the existing Rural Residential plan designation and RR-5 zoning as justified through the Exceptions process.

   b. Regarding the remainder of the Eastside Big Game Winter Range Area, place in the inventory as a 3B site (Allow Conflicting Uses Fully) and support the designation of primarily Forest and Farm for these areas.

   c. Add the following Strategy to Goal 5, Fish and Wildlife Areas and Habitats:

      "Apply plan and zoning designations of either forest or farm to areas identified as important Big Game Winter Range Areas."

B. Ruthton Point (City/Westside):

The majority of the area referred to is within the UGB of the City of Hood River; the concern is addressed in the City's request for acknowledgment. However, the following is an analysis of Ruthton Point which is just outside the UGB to the west. (Updated to include additional data from [*]Nature Conservancy, December, 1982.)

1. Location: See Map #4, General Location Map. The Nature Conservancy identifies the site as being in 3N 10E Section 28. It is obvious that the Point does not occupy the entire section, consequently additional refinement will be necessary to further identity specific natural areas. However, the Nature Conservancy states that the site is approximately 100 acres and is isolated in the most northern portion of Section 28.

2. Quantity and Quality: The following information was abstracted from the Port of Hood River Columbia Waterfront Plan, May, 1975; comments from the Department of Fish and Wildlife in correspondence dated August 26, 1982, and the Oregon Natural Heritage Program, the Nature Conservancy.

   The Nature Conservancy identifies Ruthton Point as a natural area (HR-20) and identifies the following important elements which occur on this site: (a) waterfowl wetlands; (b) Osprey; and (c) Ponderosa Pine-Douglas Fir forest. According to the Nature Conservancy these natural areas include the finest remaining example of native ecosystem types, habitat localities for special animal and plant species and other outstanding natural features.

   From Wells Island downstream to Ruthton Point is a most important natural resource area. The Point and area contains lowland forest. This forest and the numerous snags along the shoreline contribute significantly to the total wildlife production of the area. The most important terrestrial mammals habitat occurs from the east end of Wells Island to Ruthton Point. The lowland area is important to aquatic fur bearers (beaver, raccoon, muskrat, mink and otter). The lowland forest areas are the most important habitat zone for these animals.

   Overall, Ruthton Point is part of an area that contains the following: (a) important waterfowl and nesting areas, (b) important habitat for resident fish and juvenile salmonoids, and (c) contains within lowland forests numerous varieties of amphibians and reptiles. The Department of Fish and Wildlife states that the area from Ruthton Point to West Cove has been carefully surveyed on a number of occasions by a number of agencies and individuals to document fish and wildlife use. Work has been done and presented in both the Port's 1975 Water Front Plan and by the U.S. Fish and Wildlife to identify habitats in this area.

   Furthermore, the Nature Conservancy states that the area is a wintering area for bald eagles, a migratory resting area for canadian geese and trumpeter swans and has an osprey nest on it. Wells Island and the Cove area to the east contain

[*] See Appendix "A".

excellent bird habitat; a Great blue heron rookery of eight nests was noted in this area in 1979 (see Appendix "B", supplied by Nature Conservancy).

3. Conflicting Uses: Major alteration or development of lowland areas around the Port could eliminate a portion of the existing fur bearer population, however, because of mitigating measures, situations, etc., noted below it is not anticipated. Existing mitigating measures,. situations, etc., alleviating conflicting uses include:

   a. The Point is relatively isolated primarily due to topography, limited access, existing transportation system and existing resource plan and zoning designations.

   b. Access to the Point is limited because it is solely from the west bound lane of Highway I-84 with no return east. A narrow bridge over the existing railroad tracks must also be crossed.

   c. The site is at a lower elevation along the river whereas I-84 and other existing development approximately one mile to the east is at a substantially higher elevation and located along the upper vertical bluffs overlooking the Columbia River Gorge.

   d. A major egress and access (Exit 62) to Hood River exists one mile east and it is anticipated that development will first occur here where lands are planned and zoned for development and adequate access exists.

   e. Ruthton Point is approximately two miles west of the Port of Hood River, where the treatment plant and other developed utilities are located.

   f. Zoning along the river portions of Ruthton Point is Floodplain while the remainder of the area is zoned Exclusive Farm Use and Columbia Gorge Combining.

   g. An orchard has been developed on Ruthton Point which does not reduce its production potential for wildlife.

   h. The LCDC has supported the classifications of Exclusive Farm Use and Floodplain as adequate implementation measures for protecting habitats.

   i. Through consolidation and updating of all policies, etc., from all four Plans, the County has increased the number of Countywide policies, etc., applicable to protecting fish and wildlife habitat.

   j. Zone or plan changes to more intensive uses will require hearings and affected property owners and concerned agencies (e.g., Nature Conservancy, State Department of Fish and Wildlife, U.S. Fish and

Wildlife Service, etc.) will be informed and recommendations will be requested.

k. Proposed revisions to the existing Floodplain ordinance to include provisions for protection of riparian vegetation.

4. Recommendations: Add the following Strategies to the County Policy Document in Goal 5 (Fish and Wildlife).

a. Designate Ruthton Point as a 2A site (Preserve the Resource Site) and include in the Plan Inventory.

b. Support justification, as provided in the Background Report, that impacts of conflicting uses upon habitat areas on Ruthton Point are controlled and mitigated through several methods.

c. Adopt proposed revisions to the Floodplain Ordinance which will assist in protecting habitat sites.

d. Support the Nature Conservancy, State Department of Fish and Wildlife, and the U.S. Fish and Wildlife Service in further efforts of identifying and protecting natural areas, and fish and wildlife habitat sites on Ruthton Point.

e. Support the Nature Conservancy, State Department of Fish and Wildlife, and the U.S. Fish and Wildlife Service in coordinating all their efforts with affected property owners.

C. Designated Big Game Winter Range or Turkey Habitat by Fish and Wildlife Department:

1. Location: TlN R11E, Sections 4, 5, 7, 8, 9, 16, 17,18, 19, 20, 21, 28, 29, 30, 32, and 33. T2N R11E, Sections 8, 9, 16, 17, 20, 21, 28, 29, 32 and 33; see Map #5, General Location Map.

2. Quantity and Quality: Area encompasses about 16,640 acres and is located along the eastern portion of the Central Valley area at higher elevation. The Department of Fish and Wildlife considers this area as an important big game winter range area or turkey habitat. Support for its importance is further discussed in the Central Valley Background Document under Wildlife Areas and Habitats.

3. Conflicting Uses: Conflicting uses are noted in the Central Valley Background Report and have been discussed by the LCDC Lead Reviewer. Other conflicts were noted in the discussion about big game range areas located in the City/Westside area. The ESEE consequences were also discussed and they are applicable to this situation only to a lesser degree primarily because this area is more isolated. The reader is requested to review the ESEE consequences

prepared for the big game winter range area in the City/Westside area, because it will not be repeated here.

The Plan and Zoning designations of Forest appear compatible and do mitigate conflicts noted in the above references.

4. Recommendations: Add the following Strategy to Goal 5 (Fish and Wildlife).

"Include identified big game winter range area in Central Valley in the inventory as a 3C area, and support the Plan and Zoning designations of Forest for the area."

D. Starvation Creek State Park/Larch Mountain Salamander Site (Columbia Gorge Area):

1. Location: The County at this time can only provide a general location of the site based upon the following information: Starvation Creek State Park is a 152± acre site of which 20 acres are developed for intensive visitor use. Within the 20 acres are also located the trailhead for Defiance Mountain and the Columbia Highway Landmark. The Nature Conservancy Protected Area Report, states that the location of a natural area, Larch Mountain salamander/waterfall, T2N R9E NW¼NW¼ , Section 3, which is approximately 40 acres. See Map #6, General Location Map.

2. Quality and Quantity: See Appendix "C". In brief, the Larch Mountain salamander is found only between Troutdale and Hood River within the Columbia River Gorge. Starvation Creek State Park contains a good size population. It is listed on the State's Protective Wildlife List. It was also listed by the U.S. Fish and Wildlife Service as a species of special interest in Oregon and as an unfilled rare and endangered vertebrate animal RNA cell.

3. Conflicting Uses: See Appendix "C". Though current developments within the Columbia River Gorge do not pose a threat, known habitats need to be closely watched to assure survival of the salamander population. Because the habitat is located within and adjacent to a State Park, more intrusion by the public will be noted primarily due to ease of access. However, protection can directly or indirectly be provided through the following mechanisms: (a) by being in a State Park, continual observation by all state and other agency employees and general public will provide assistance in protecting the habitat area; (b) the existing plan and zoning designation of Scenic Protection will provide public awareness of this resource plus control high density development within the area; and (c) ease of access will assist in close monitoring to assure survival.

4. Recommendations: Add the following Strategies to Goal 5:

a. Support the Nature Conservancy, the State Department of Fish and Wildlife, the U.S. Fish and Wildlife Service and other applicable agencies

in all efforts to protect the Larch Mountain salamander habitat site in Starvation Creek State Park.

b. Designate the Larch Mountain salamander site, located in Starvation Creek State Park as a resource site (2A).

E. Inventory Deer and Elk Winter Range: Mt. Hood Area (Outside the Mt. Hood Planning Unit Final Environmental Statement (FES):

1. Quantity: Mainly below 2000' in elevation - approximately 3,200 acres.[1] See Map #7.

2. Quality: Poor; mostly in orchard and other farm uses. Some forest to the east; high amount of development in Parkdale and surrounding areas causes the quality of the range to be diminished (see page 44, FES). Department of Fish and Wildlife personnel have stated that there is no significant winter range in this area.

3. Site is categorized 1A, do not include on inventory.

4. Recommendation: Include the above information in the County Background Document.

F. Columbia River Gorge Fish and Wildlife Habitat Area:

1. Location: See Map #8, Columbia River Gorge Area; Fish and Wildlife Habitats - General Location Map. Detail location maps were previously submitted to the LCDC (1980) showing actual boundaries. The area extends west from a point approximately 32 miles west of the Hood River City Limits to the Hood River/Multnomah County line.

2. Quantity and Quality: Approximately 18,000+ acres are involved in this habitat area. The overall quantity and quality have been discussed in the previous Columbia River Gorge Background Report, including the Columbia River Gorge Selective Wildlife Species List. The majority of the land is under federal ownership.

Further recognition of the area's unique natural systems and habitat areas is noted in the Eagle Creek Management Plan prepared by the Mt. Hood National Forest. The majority of the Columbia River Gorge Area has been designated Special Interest and includes portions of the Herman Creek Wilderness Study Area and the RARE II Inventory Area. The RARE II area has been recommended to be designated as a wilderness area. (See Goal 5, Wilderness Areas).

[1] Mt. Hood Planning Unit Proposed Interagency Plan – Final Environmental Statement (FES), October, 1977, page 44.

Since the County's submittal to the LCDC (1980) the Department of Fish and Wildlife has further identified within the Gorge area additional big game winter range areas. This area includes: T2N R9E Sections 1, 12, 13, 24, 25, and 36; and T3N R9E portions of Sections 34, 35, and 36. The County, however, is only addressing the LCDC Critique.

3. Conflicting Uses: Conflicting uses and consequences are discussed in previous material submitted to the LCDC, noted in the Columbia River Gorge Background Report. Planning methods for further mitigating conflicting uses include the following:

   a. The entire area has been planned and zoned Scenic Protection. The purpose and intent of this designation is to protect, conserve, and enhance and maintain significant scenic, historic and cultural resources. The primary use of this zone is scenic protection. Minimum lot sizes for development, 40 acres, however limitations are placed on development. For example, development will not be seen from Highway 84, 14, or the Columbia River; exterior surfaces will be painted earthtone colors, etc.

   b. The Floodplain Combining Zone has been updated to include provisions for protecting riparian vegetation and criteria from the Environmental Protection designation has been incorporated into the Floodplain Zone. Several areas are planned and zoned Geologic Hazard Combining. Development is not allowed in geologic hazard areas (e.g., deep bedrock slides, thick talus, torrential flooding, etc.). These designations directly and indirectly preserve natural systems including habitat areas.

   c. The majority of the area has been designated as Special Interest and a portion is being recommended for Wilderness. The primary emphasis in these designations is upon protecting natural systems and to allow habitat changes to follow natural succession.

   d. In further efforts of protecting riparian vegetation, the following stream setback provision is recommended to be added to the Scenic Protection Zone under Dimensional Standards:

      Setbacks from streams: New buildings shall be set back 100' from ordinary high water line except for those uses in conjunction with a water-related or water dependent use. Exceptions to these requirements shall be allowed when affirmative findings are made to satisfy the following: (1) the proposal would provide better maintenance and retention of riparian vegetation than would occur by observance of the setback requirement; or (2) the protection, maintenance

and retention of riparian vegetation are not applicable to the proposal.

e. The County has developed and adopted over 40+ Goals, Policies, Strategies, and Land Use Designations and Standards to recognize, protect, maintain or conserve Fish and Wildlife Areas and Habitats.

4. Recommendations: Add the following Strategies to Goal 5:

a. Add the identified Columbia River Gorge Fish and Wildlife Habitat Area to the County Inventory and designate the area 3C (limit conflicting uses). Conflicting uses to be limited by the County Scenic Protection Zone including the proposed provision for stream setback for buildings; the Floodplain and Geologic Hazard Combining Zones; numerous adopted County Goals, Policies, Strategies, and Land Use Designations and Standards for protecting fish and wildlife areas and habitats, management plans developed and adopted by the Mt. Hood National Forest and continual recommendations by the Department of Fish and Wildlife and other applicable agencies regarding the processing of County permits.

b. Support the Mt. Hood National Forest, the Department of Fish and Wildlife, the U.S. Fish and Wildlife Service and other applicable agencies in their efforts to protect fish and wildlife habitats in the Columbia River Gorge and other identified habitat areas in the County.

c. Update the Scenic Protection Zone (SP) to include setback provisions for protecting riparian vegetation.

G. Inventory Fish and Wildlife Habitats: Mt. Hood Area (outside the Mt. Hood Planning Unit Final Environmental Statement (FES):

l. Location: See Index Map and Maps #9-15.

2. Quantity: Approximately 4,000 acres, primarily surrounded by or adjacent to federal lands.

3. Quality: Sensitive riparian habitat, class I streams, big game spring and summer range, deer and elk fawning and calving areas. Majority of area is zoned Forest or Exclusive Farm Use.

4. Environmental Investigations, Hood River Basin Supplement, Oregon State Game Commission, (December, 1963) (see Map #16) shows that summer and winter steelhead are also found in the West Fork of the Hood River in this area and go into McGee and Elk Creek (see Map 11). Class I are waters which are valuable for domestic use, are important for angling or other recreation, and are used by

significant numbers of fish for spawning, rearing, or migration routes. Stream flows may be either perennial, or intermittent during parts of the year.[2]

5. Conflicting Uses and Consequences: Possible conflicts noted on map 15 because this area is currently zoned Rural Residential. This area would have smaller lot sizes, more roads, higher housing densities, more vegetation that could be harmed by big game, more free-ranging dogs, etc. The area zoned Rural Residential - 5 acre has an acre lot size of 161.17 acres and the potential for a total of 32 lots. This area is in agricultural class 6 and 7, and cubic foot site class 4 and 5.

   A review of the existing Exception south of Parkdale necessitated are-evaluation of the area, resulting in a recommendation to replan and zone the area to Forest. Primary reasons: area is not built out or committed, and adequate justification has not been presented to justify the need for additional residential housing in this area. This area is discussed in the Exceptions Document. The Planning Commission recommends that the area be down-zoned to Forest, thereby mitigating conflicts generated by housing. However, because the Board of Commissioners has yet to review this recommendation, the following analysis is presented.

   Economic: (on resource) Will reduce the amount of suitable range and habitat area by 161 acres or by 4%. Indirect economic loss to the County associated with removal of hunting and fishing habitat areas. The negative economic impacts generated by additional non-forest dwelling units on surrounding forest lands are well known by the County. (on conflicting use) Loss of revenue associated with damage to farm or ornamental plantings and fencing to deter both animal and public access. Additional housing could broaden the County tax base.

   Social: (on resource) Loss of open space lands, scenic values, habitat areas, and reduction in viewing of wildlife. (to conflicting use) Reduces land potential available for open space, hunting, hiking, etc.; and brings with it the possibility of undesirable social effects of increased development (i.e., noise, dust, traffic, dogs, etc.).

   Environmental: (to resource) Amount of range is lessened; noise, air, and other pollution levels are increased, vegetation removed, increased traffic noted. All these things would threaten wildlife in the area. (to conflicting use) Animals cause damage to gardens and plantings by eating or trampling them. Making 5 acre tracts in the area could remove lands better suited for farm, forest, or open space uses.

   Energy: (to resource) Travel time from populated areas increased to enjoy open space, hunting, forestry, etc. Maintaining areas in natural state will conserve energy because overall it costs more in energy consumption to maintain

[2] Definition taken from Field Guide to Oregon Forest Practice Rules, Seventh Revision, effective January 10, 1980; State Department of Forestry, page 1, definition #(2).

developed areas. It takes more energy to use five acres in residential uses (lawns, gardens, maintaining roads, etc.) or farm uses than leaving it as open spaces. (to conflicting use) Having housing lots further away from commercial and industrial areas will increase energy consumption to get to those uses. Requires more energy to maintain five acres than it would smaller residential lots, large lot may enable property owner to situate home to take advantage of solar energy.

6. Recommendations:

   a. Add the above information to the County's Background Document.

   b. Designate areas as a 3B Site (Allow Conflicting Uses Fully). Support the plan designation of Forest and Forest zoning.

H. Riparian Vegetation:

To assist in protection of riparian vegetation the following setback provision has been added to the Forest, Exclusive Farm Use, and Floodplain Zones:

Setbacks from streams: New buildings shall be set back 100' from ordinary high water line except for those uses in conjunction with a water-related or water dependent use. Exceptions to these requirements shall be allowed when affirmative findings are made to satisfy the following: (1) the proposal would provide better protection, maintenance and retention of riparian vegetation than would occur by observance of the setback requirement; or (2) the protection, maintenance and retention of riparian vegetation are not applicable to the proposal.

I. Other Policies, Strategies:

Add the following Strategy to the County Policy Document under Goal 5, Fish and Wildlife Areas and Habitats:

1. Amend the Forest and Exclusive Farm Use Zone to include the proposed provision regarding "setbacks from streams".

2. Adopt the proposed Floodplain Combining Zone which includes standards from the Environmental Plan designation.

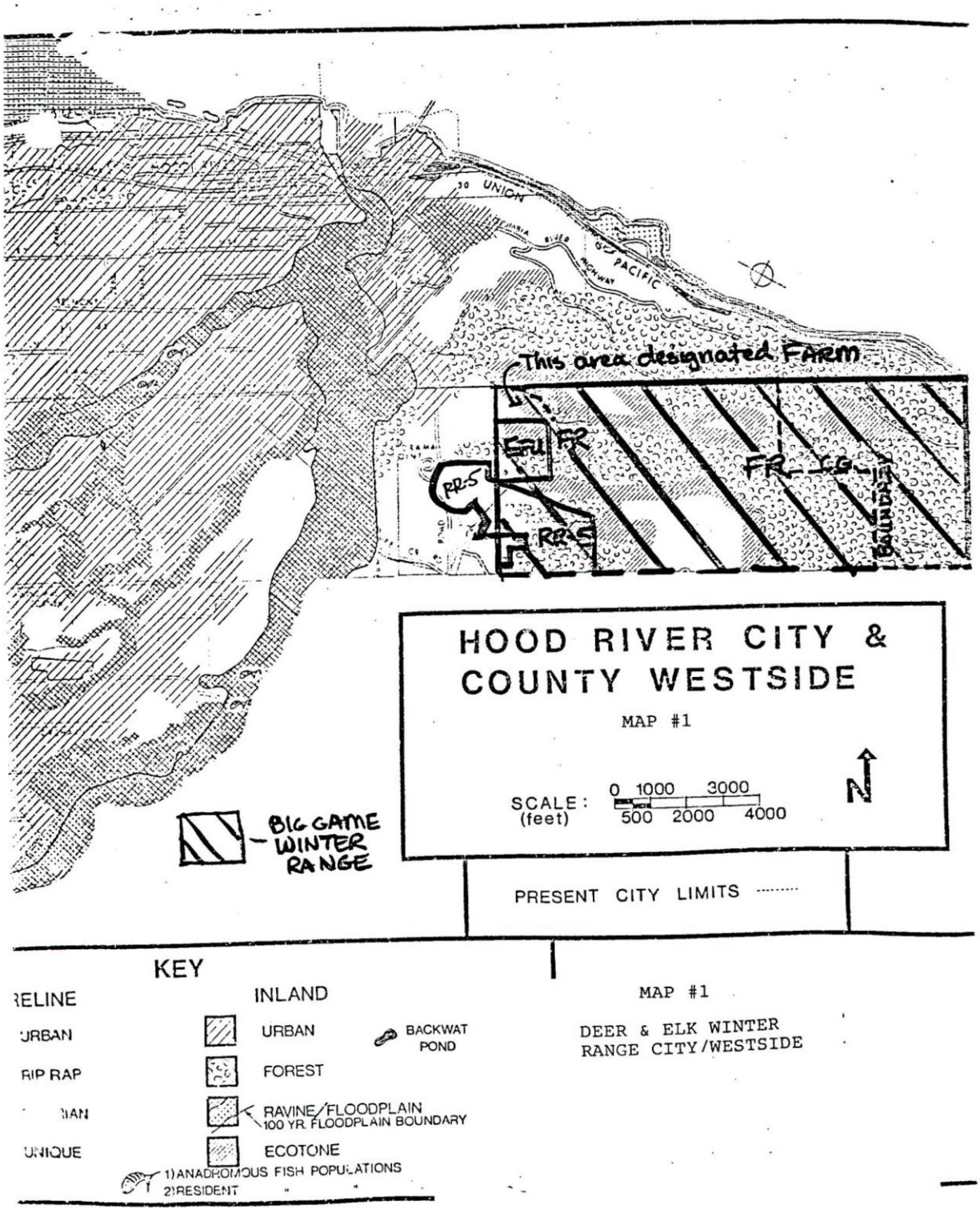
3. When important fish and game habitats are identified amend the Plan to evaluate if necessary the ESEE consequences of conflicts between these important habitats and other land uses; and amend existing policies and land use regulations as may be necessary.

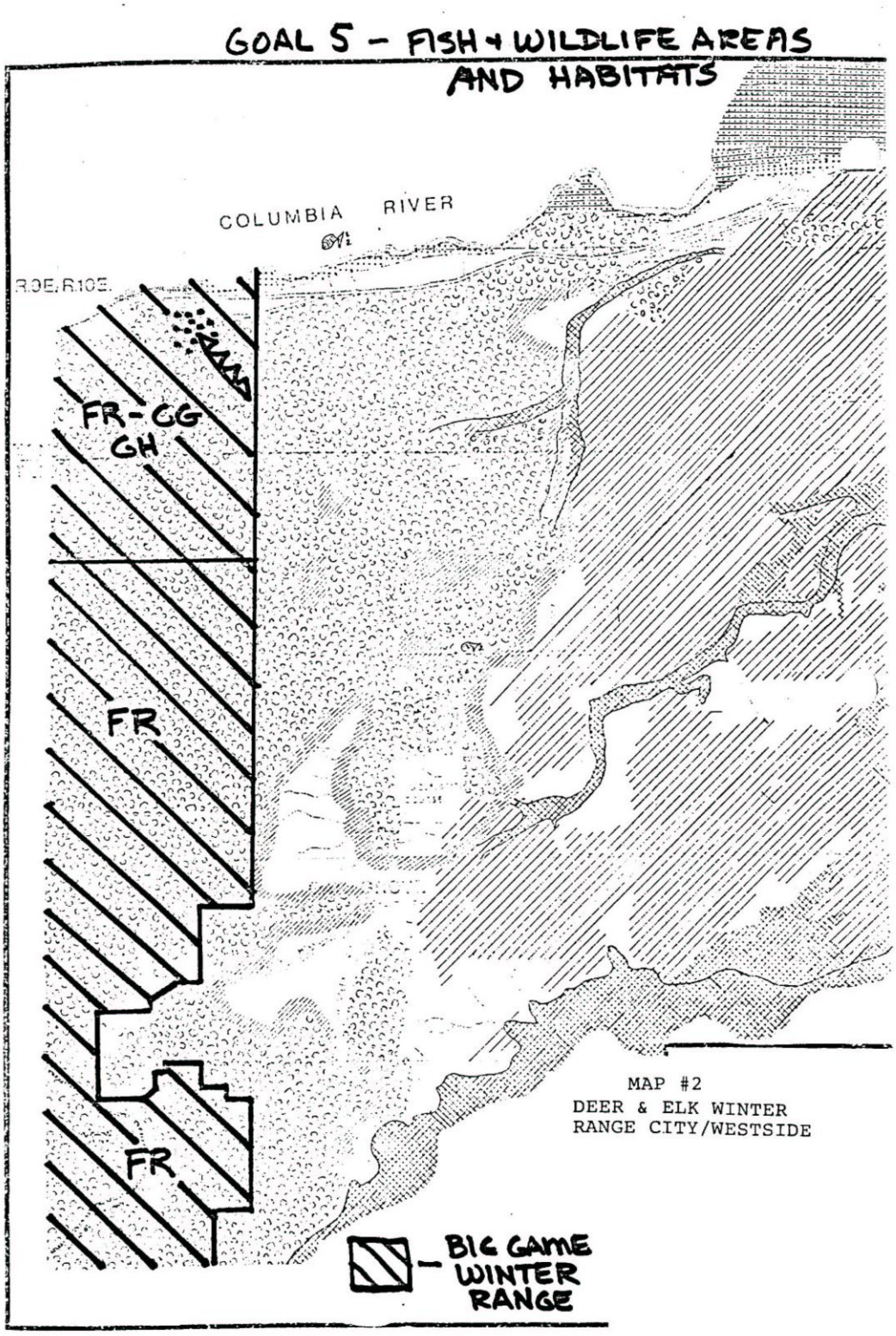
J. Other:

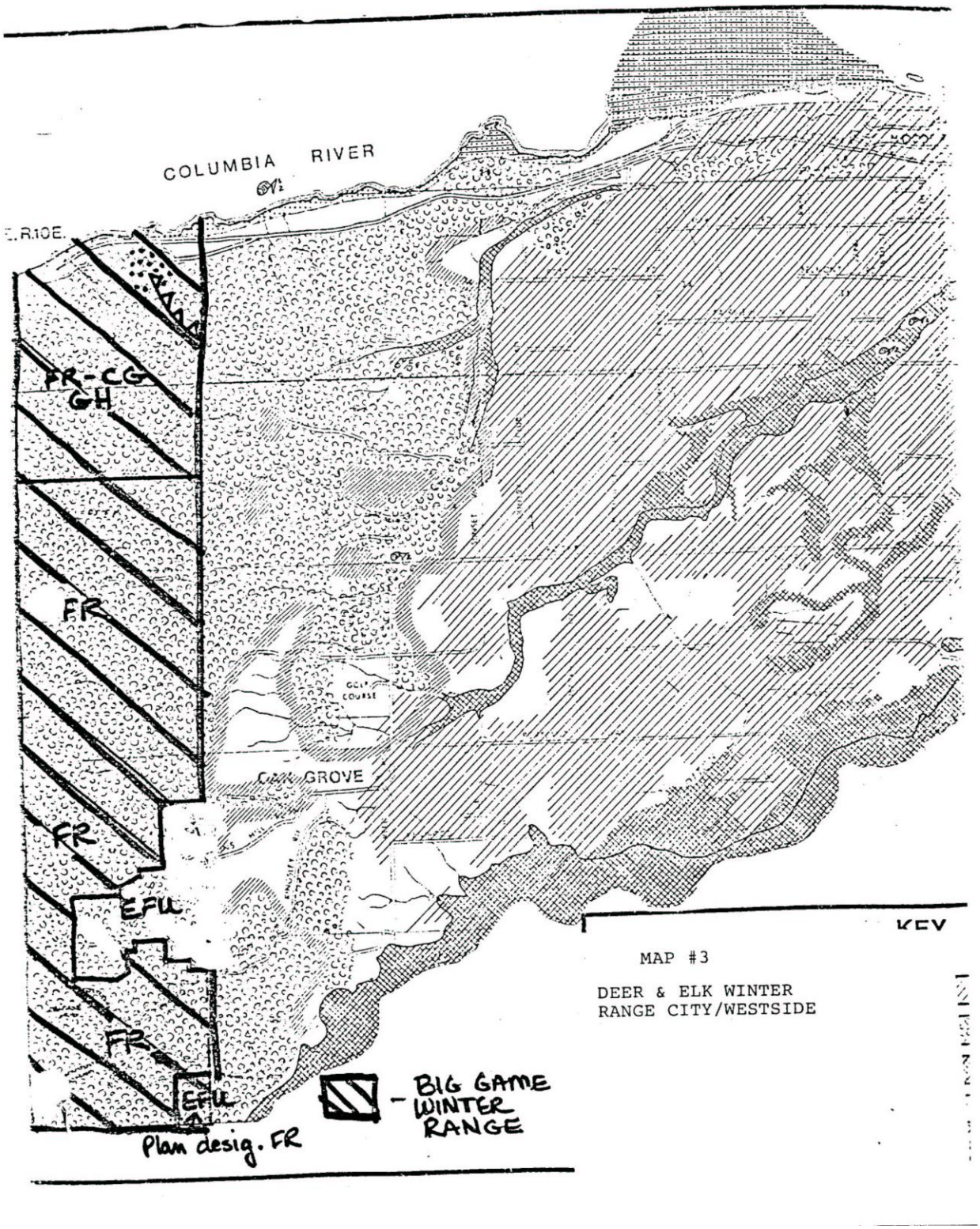
1. The County has made all applicable Goal related policies, etc., mandatory. See Countywide Policy Document, Goal 5; Fish and Wildlife Areas and Habitats.

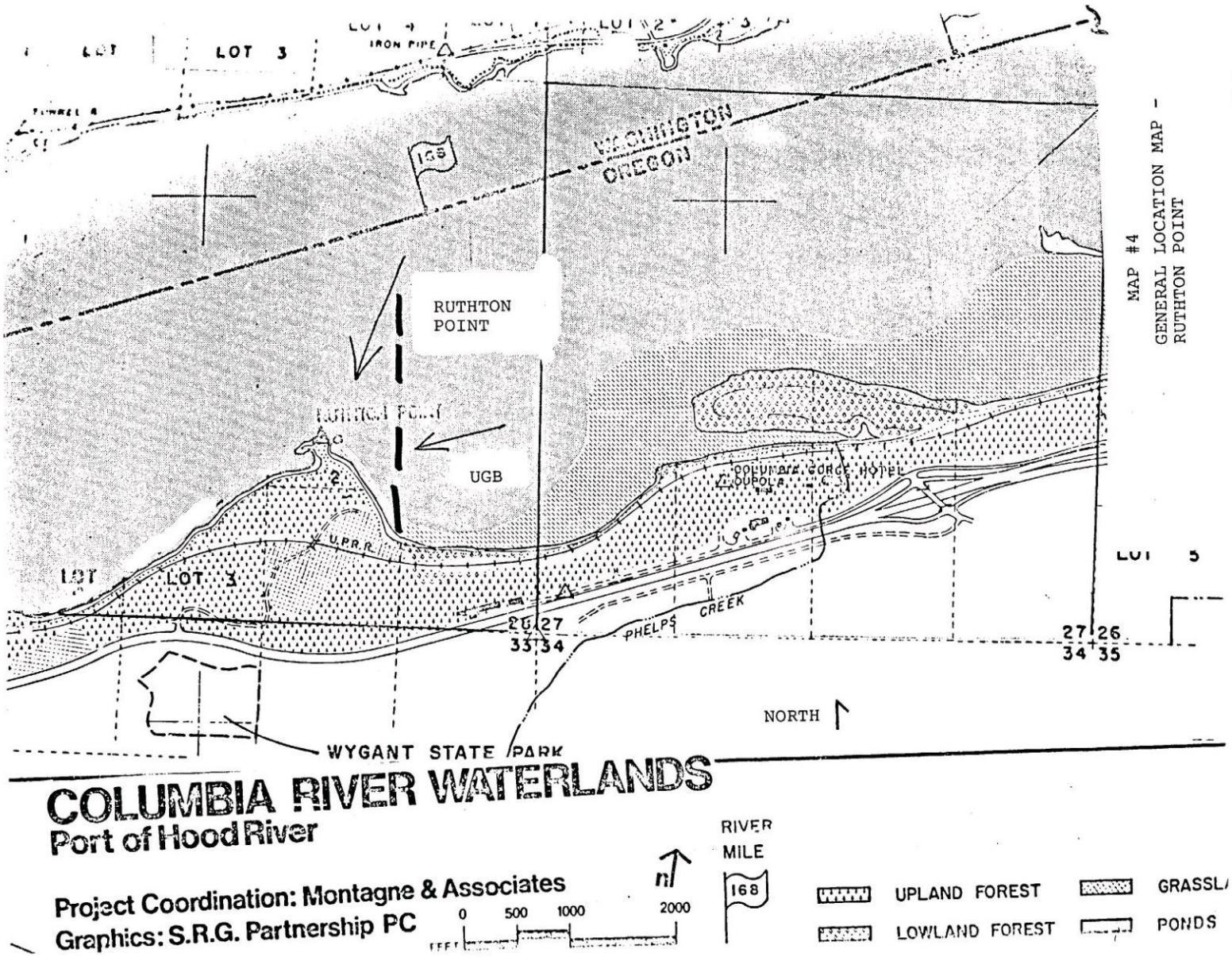
2. Through consolidation of all four Plans, appropriate policies do apply to fish and wildlife habitat areas in the Mt. Hood area and other areas of the County.

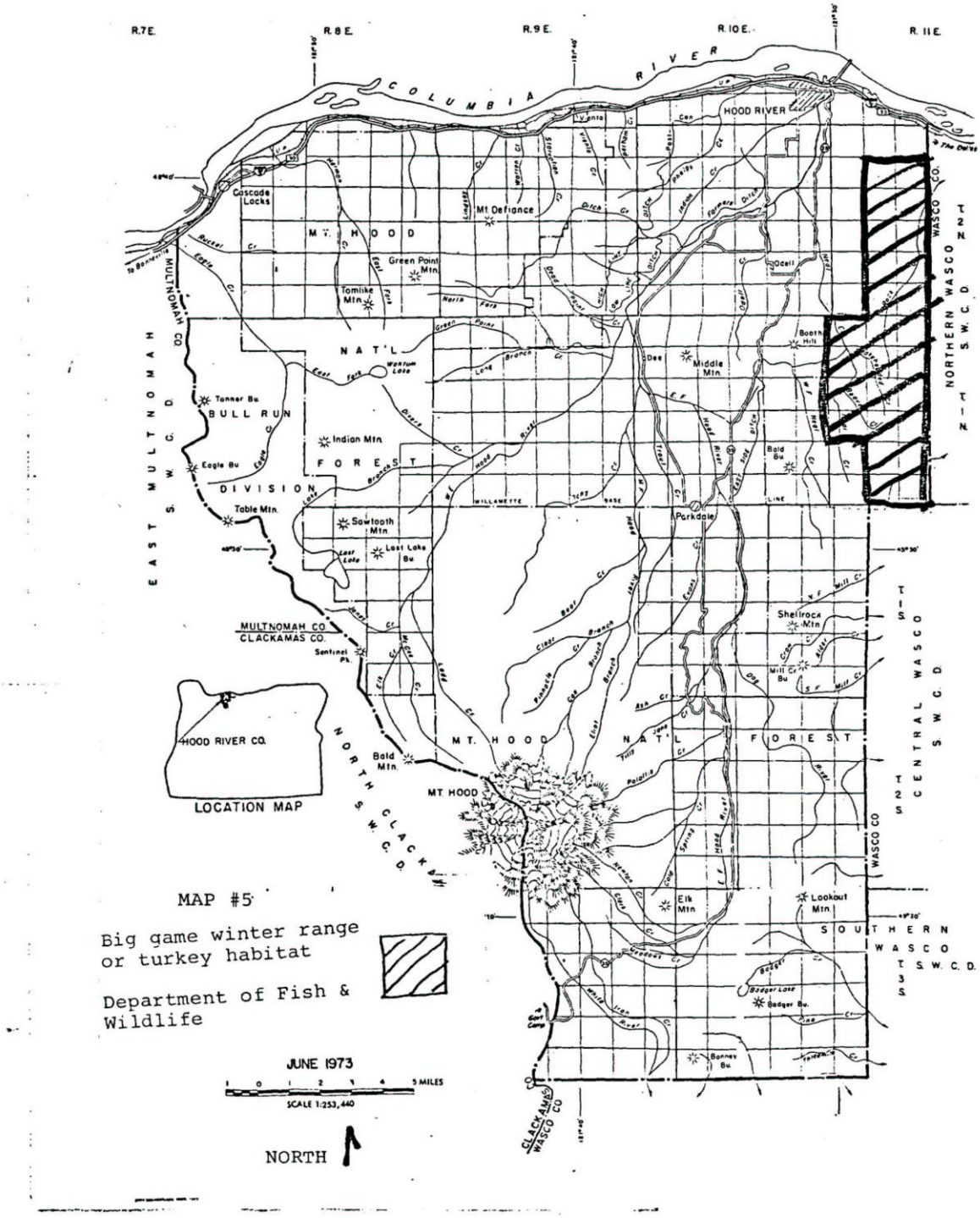
3. The Floodplain Combining zone has been updated to reflect standards of the Environmental Protection designation.

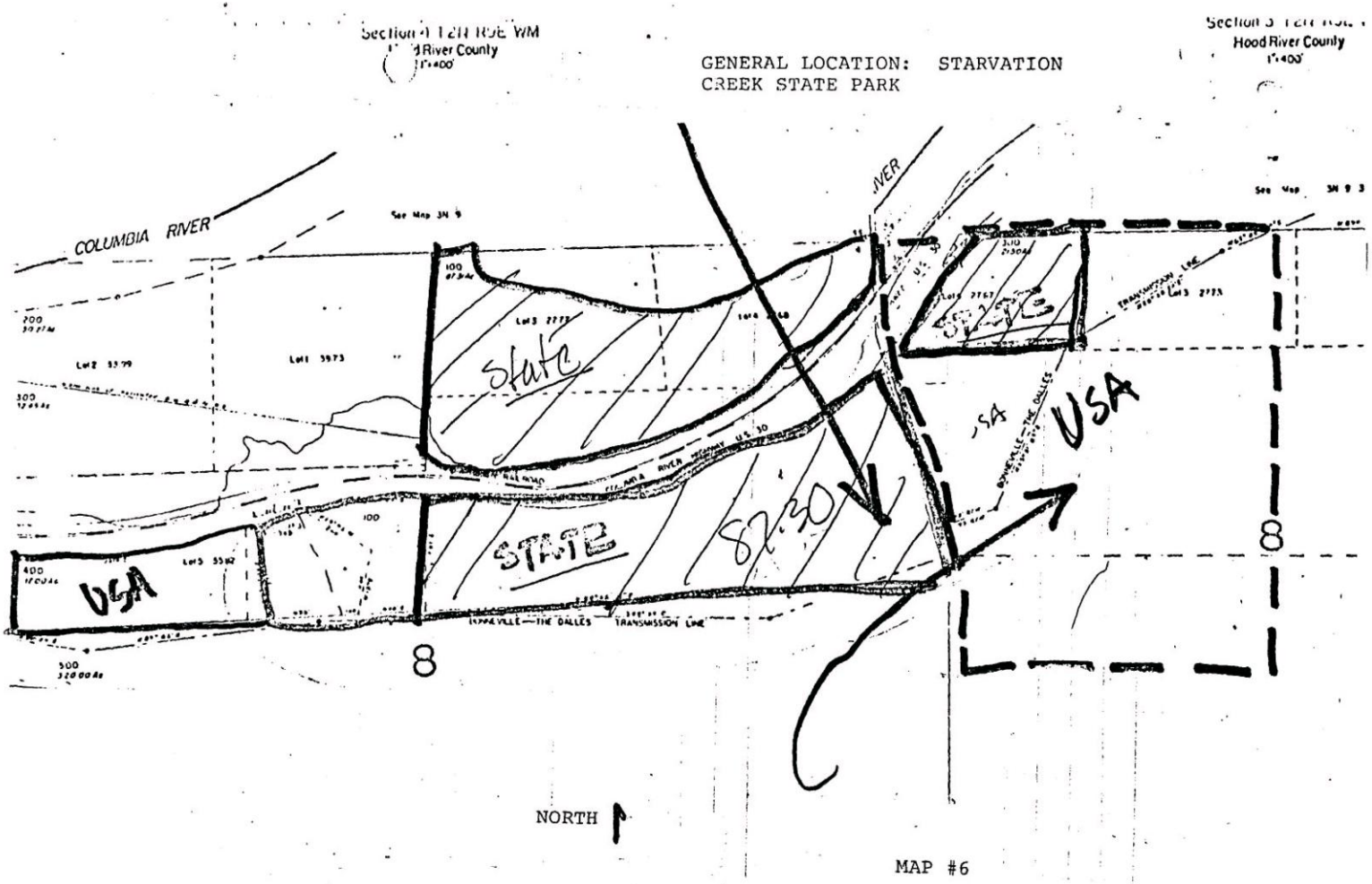

This area designated FARM
FR
RR-5
RR-5
FR
BOUNDARY
HOOD RIVER CITY & COUNTY WESTSIDE
MAP #1
SCALE: (feet) 0 1000 3000 500 2000 4000
N
BIG GAME WINTER RANGE
PRESENT CITY LIMITS
KEY
INLAND
URBAN
FOREST
RAVINE/FLOODPLAIN
100 YR. FLOODPLAIN BOUNDARY
ECOTONE
1) ANADROMOUS FISH POPULATIONS
2) RESIDENT
BACKWAT POND
MAP #1
DEER & ELK WINTER RANGE CITY/WESTSIDE


GOAL 5 - FISH & WILDLIFE AREAS AND HABITATS
COLUMBIA RIVER
R.9E. R.10E.
FR-GG
GH
FR
FR
MAP #2
DEER & ELK WINTER
RANGE CITY/WESTSIDE
- BIG GAME WINTER RANGE


COLUMBIA RIVER
T.R.10E.
FR-CG
GH
FR
FR
EFU
FR
EFU
Plan desig. FR
OAK GROVE
KEY
MAP #3
DEER & ELK WINTER
RANGE CITY/WESTSIDE
BIG GAME
WINTER
RANGE


LOT 3
IRON PIPE
WASHINGTON
OREGON
RUTHTON POINT
UGB
U.P.R.R.
COLUMBIA GORGE HOTEL
CUPOLA
LOT 3
PHELPS CREEK
26 27
33 34
27 26
34 35
NORTH
WYGANT STATE PARK
MAP #4
GENERAL LOCATION MAP -
RUTHTON POINT
COLUMBIA RIVER WATERLANDS
Port of Hood River
Project Coordination: Montagne & Associates
Graphics: S.R.G. Partnership PC
0 500 1000 2000
FEET
RIVER MILE
168
UPLAND FOREST
LOWLAND FOREST
PONDS

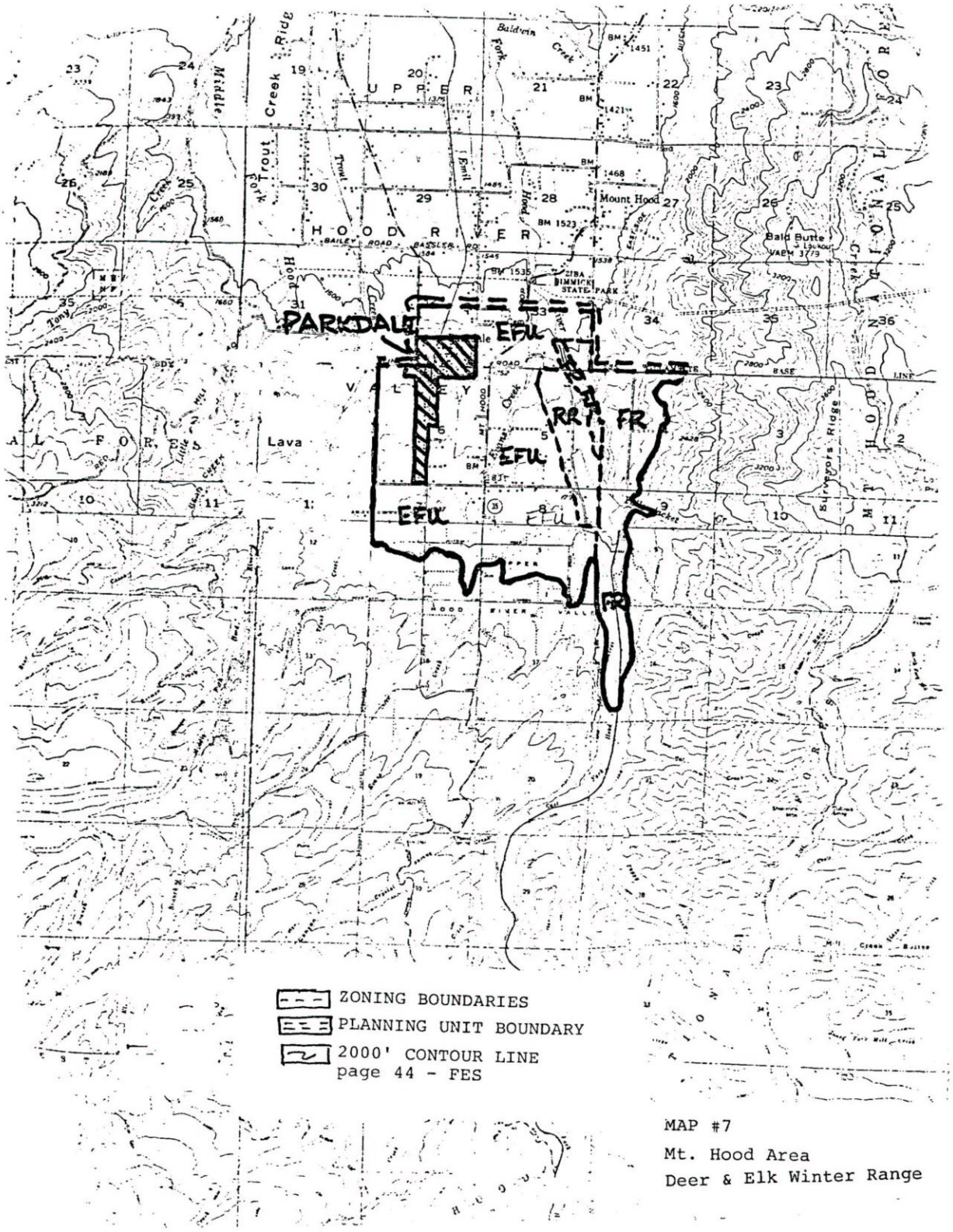

R.7E.
R.8E.
R.9E.
R.10E.
R.11E.
COLUMBIA RIVER
HOOD RIVER
Cascade Locks
Mt Defiance
M T. H O O D
Green Point Mtn.
Tomlike Mtn.
NAT'L
Middle Mtn.
Booth Hill
Tanner Bu.
BULL RUN
Indian Mtn.
FOREST
Eagle Bu.
DIVISION
Table Mtn.
Sawtooth Mtn.
Lost Lake Bu.
Parkdale
MULTNOMAH CO.
CLACKAMAS CO.
Sentinel Pk.
Shellrock Mtn.
HOOD RIVER CO.
LOCATION MAP
Bald Mtn.
MT HOOD
NAT'L FOREST
Elk Mtn.
Lookout Mtn.
Badger Lake
Badger Bu.
Bonney Bu.
EAST MULTNOMAH S.W.C.D.
NORTH CLACKAMAS S.W.C.D.
NORTHERN WASCO S.W.C.D.
CENTRAL WASCO S.W.C.D.
SOUTHERN WASCO S.W.C.D.
WASCO CO
MAP #5
Big game winter range or turkey habitat
Department of Fish & Wildlife
JUNE 1973
SCALE 1:253,440
NORTH



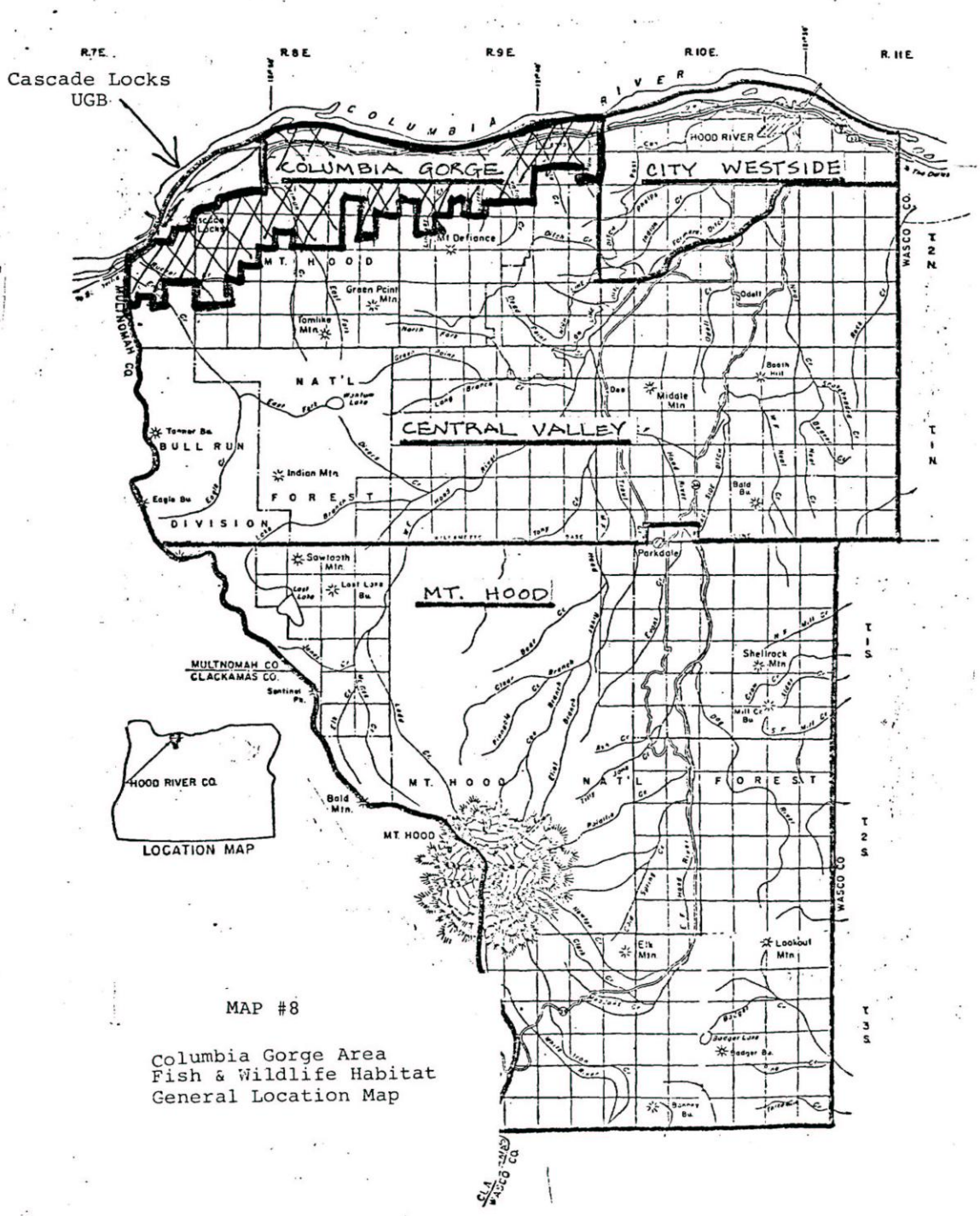
MAP #6

2N 9E NW¼ NW¼
Section 3

Larch Mountain salamander/water fall site (vicinity Starvation Creek State Park)



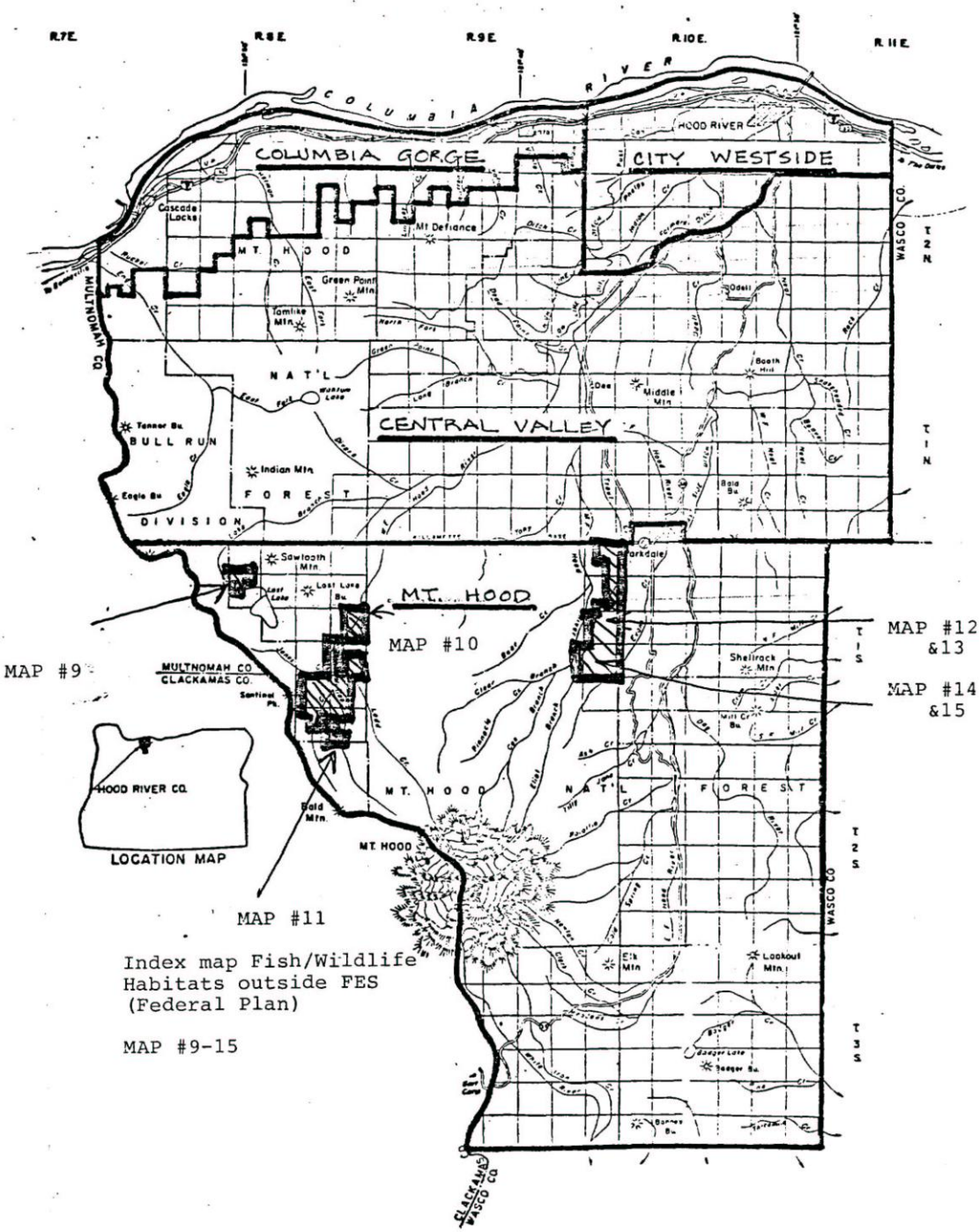
MAP #7
Mt. Hood Area
Deer & Elk Winter Range

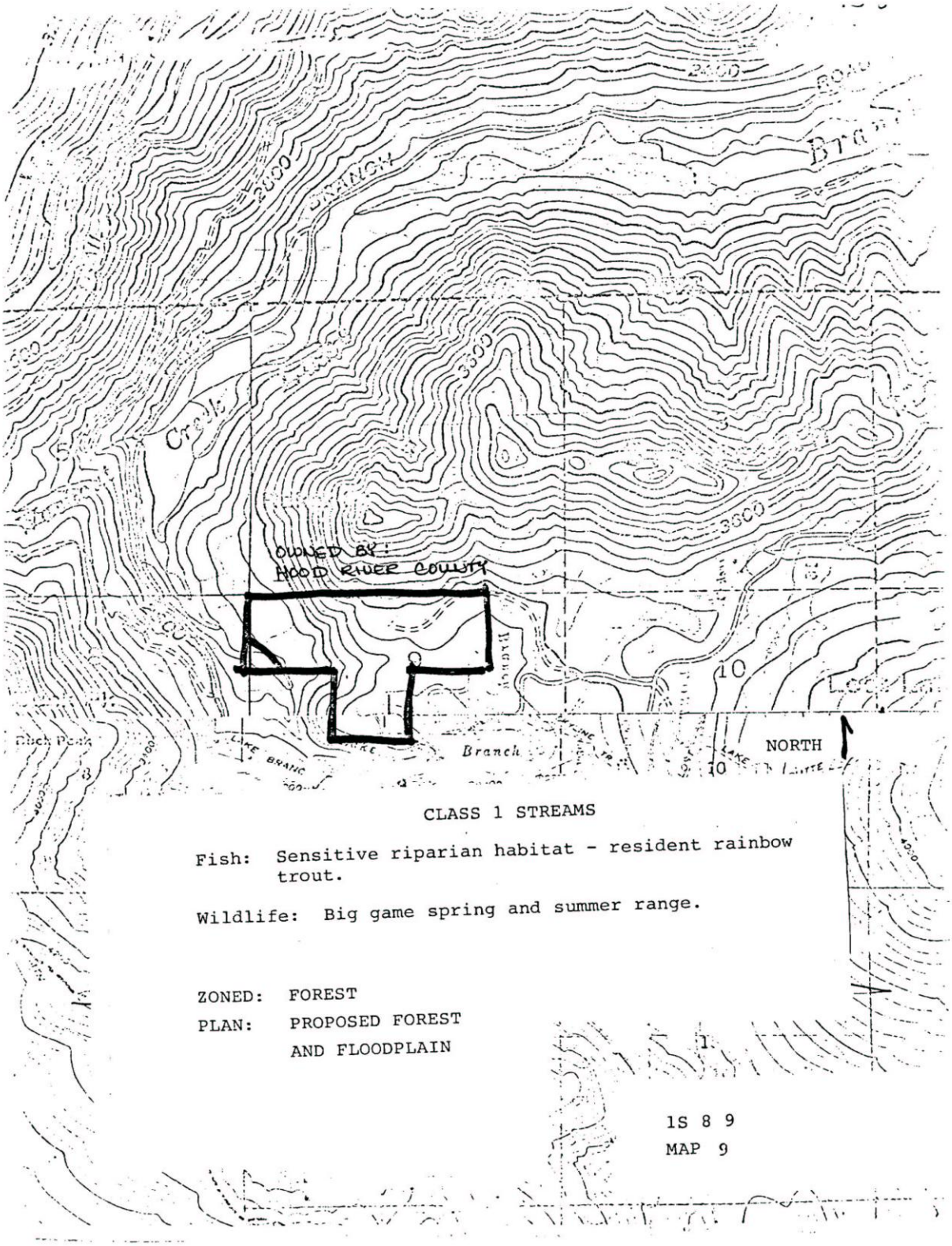


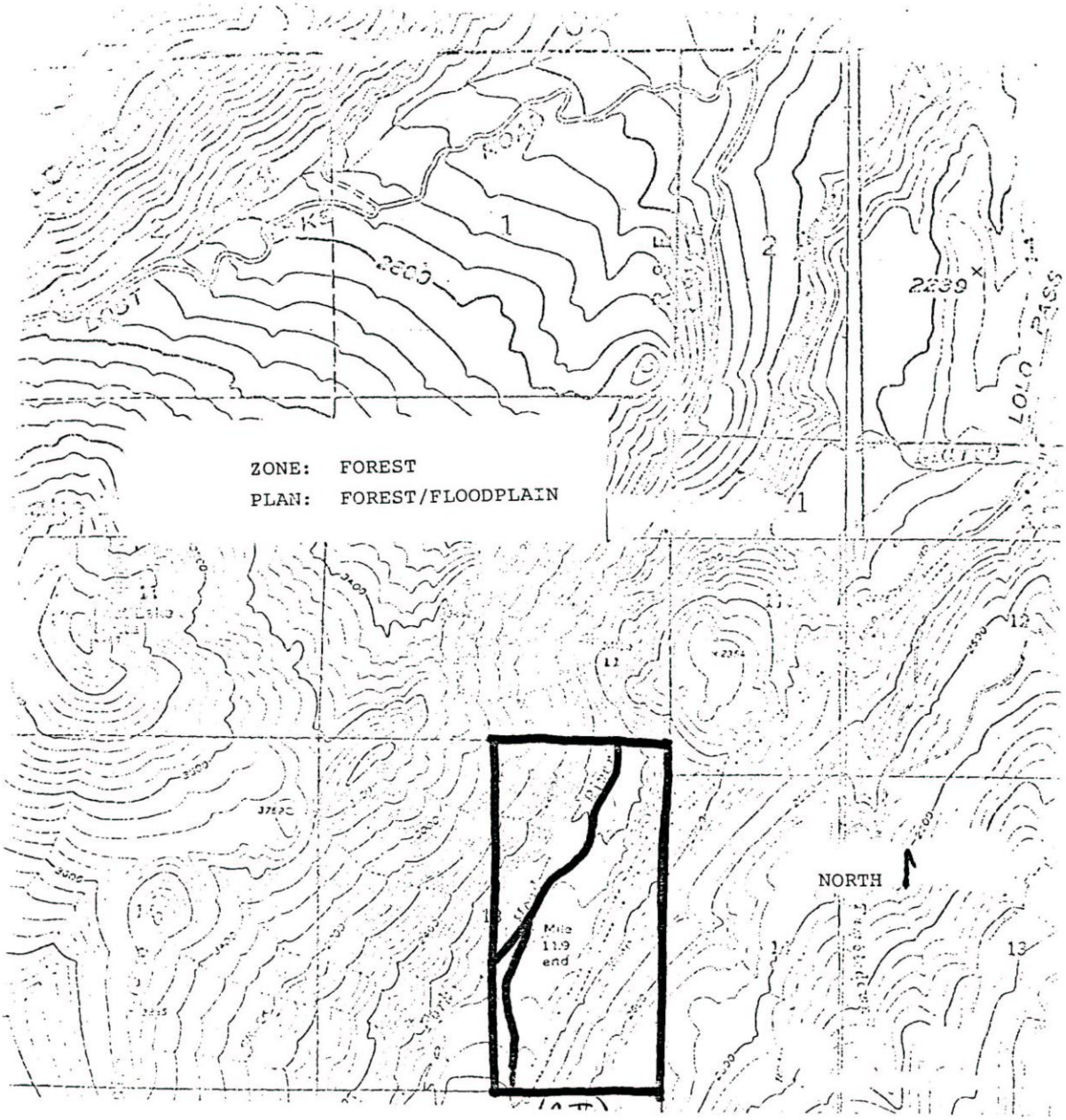
MAP #8

Columbia Gorge Area
Fish & Wildlife Habitat
General Location Map

Large scale map, entitled "Planning Area Boundaries" is available at the Hood River County Planning Department.


R.7E.
R.8E.
R.9E.
R.10E.
R.11E.
COLUMBIA RIVER
COLUMBIA GORGE
CITY WESTSIDE
HOOD RIVER
Cascade Locks
Mt Defiance
MT. HOOD
Green Point Mtn.
Tomlike Mtn.
NAT'L
CENTRAL VALLEY
Middle Mtn.
Tanner Bu.
BULL RUN
Indian Mtn.
FOREST
Eagle Bu.
DIVISION
Sawtooth Mtn.
Lost Lake Bu.
MT. HOOD
MAP #10
MAP #9
MULTNOMAH CO.
CLACKAMAS CO.
Shellrock Mtn.
MAP #12 &13
MAP #14 &15
HOOD RIVER CO.
LOCATION MAP
Bald Mtn.
MT. HOOD
NAT'L
FORIEST
MAP #11
Elk Mtn.
Lookout Mtn.
WASCO CO.
MULTNOMAH CO.
T2N
T1N
T1S
T2S
T3S
Index map Fish/Wildlife
Habitats outside FES
(Federal Plan)
MAP #9-15


OWNED BY:
HOOD RIVER COUNTY
NORTH
CLASS 1 STREAMS
Fish: Sensitive riparian habitat - resident rainbow trout.
Wildlife: Big game spring and summer range.
ZONED: FOREST
PLAN: PROPOSED FOREST AND FLOODPLAIN
1S 8 9
MAP 9



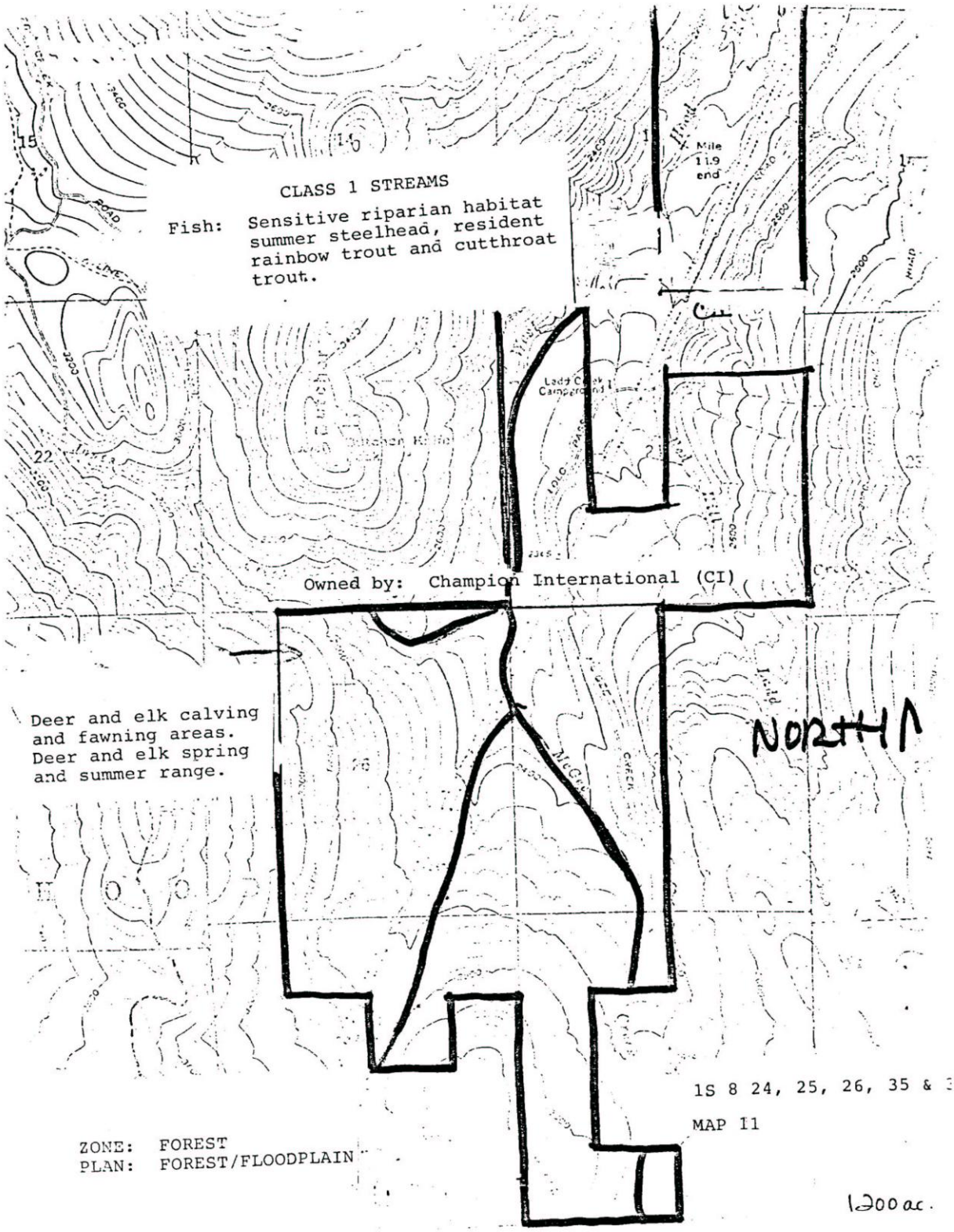
CLASS 1 STREAMS

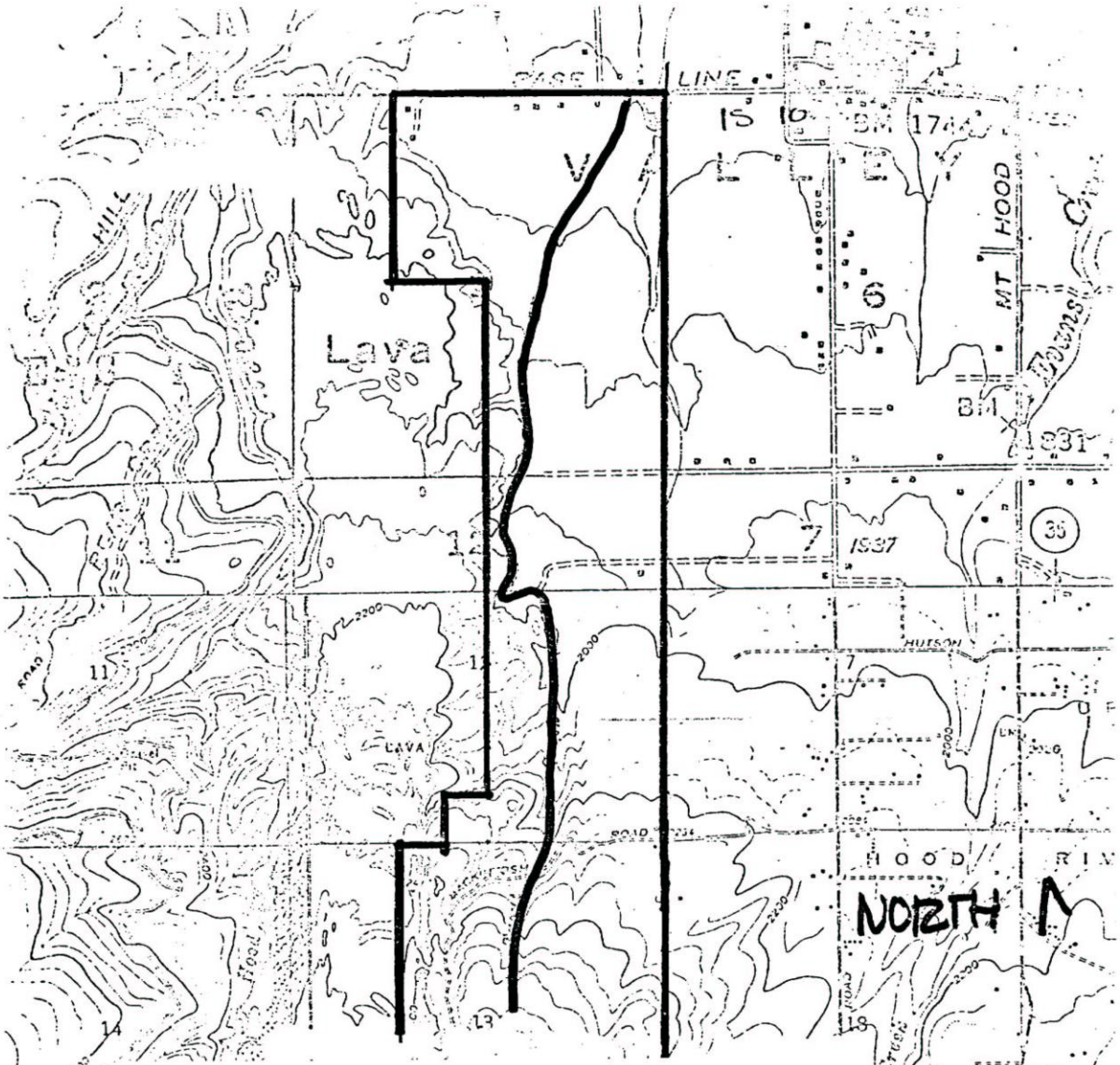
Fish: Sensitive riparian habitat. West Fork Hood River - significant population of summer steelhead, rainbow trout, and cutthroat trout.

Red Hill Creek - resident rainbow trout.

1S 8 13
MAP 10

Wildlife: Spring and summer range - deer and elk


CLASS 1 STREAMS
Fish: Sensitive riparian habitat summer steelhead, resident rainbow trout and cutthroat trout.
Owned by: Champion International (CI)
Deer and elk calving and fawning areas. Deer and elk spring and summer range.
NORTH
1S 8 24, 25, 26, 35 &
MAP 11
ZONE: FOREST
PLAN: FOREST/FLOODPLAIN
1200 ac.



CLASS 1 STREAMS

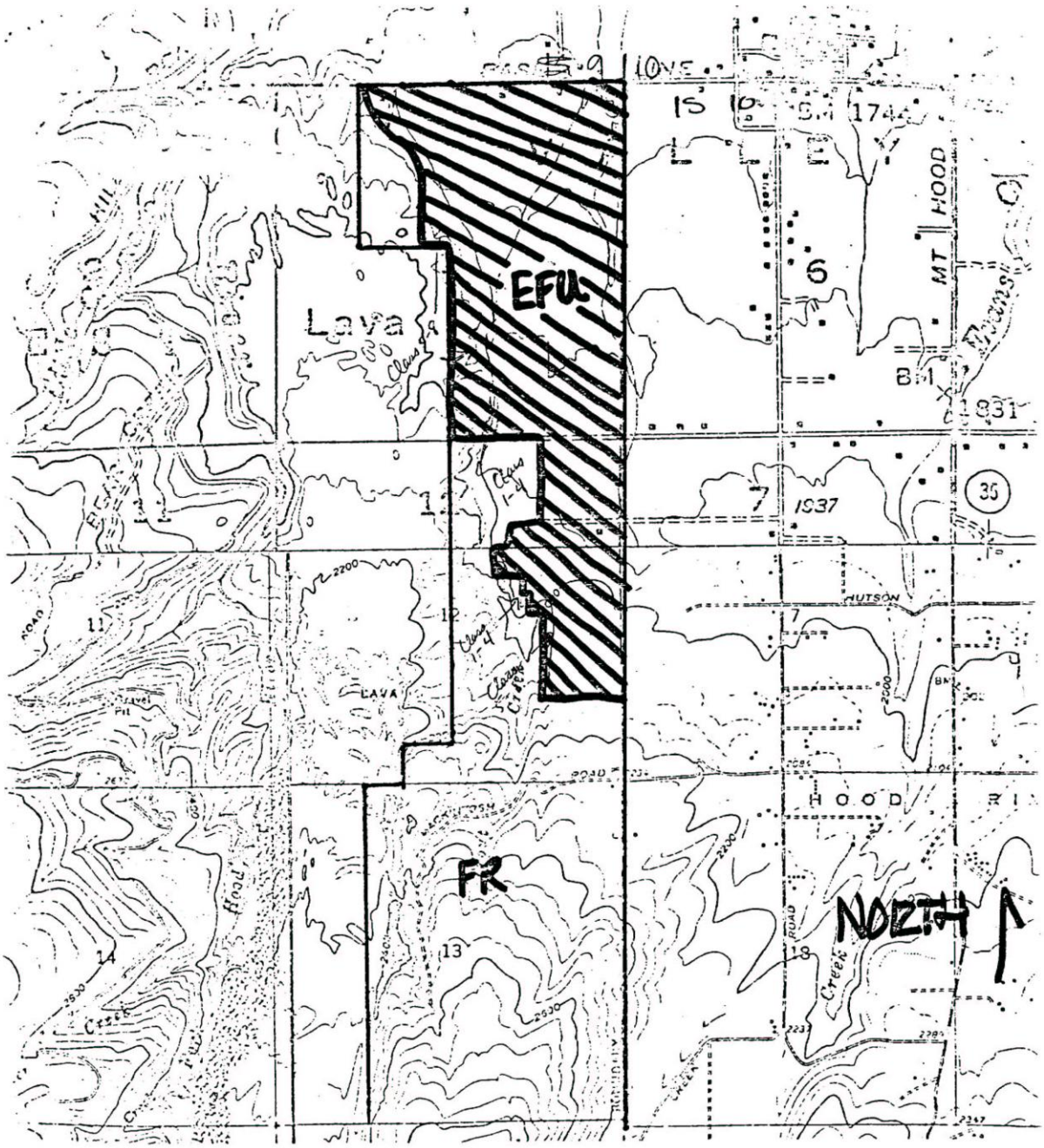
Fish: Sensitive riparian habitat resident rainbow and cutthroat trout.

Wildlife: Deer and elk spring and summer range.

1S 9 1, 12 & 13

MAP 12

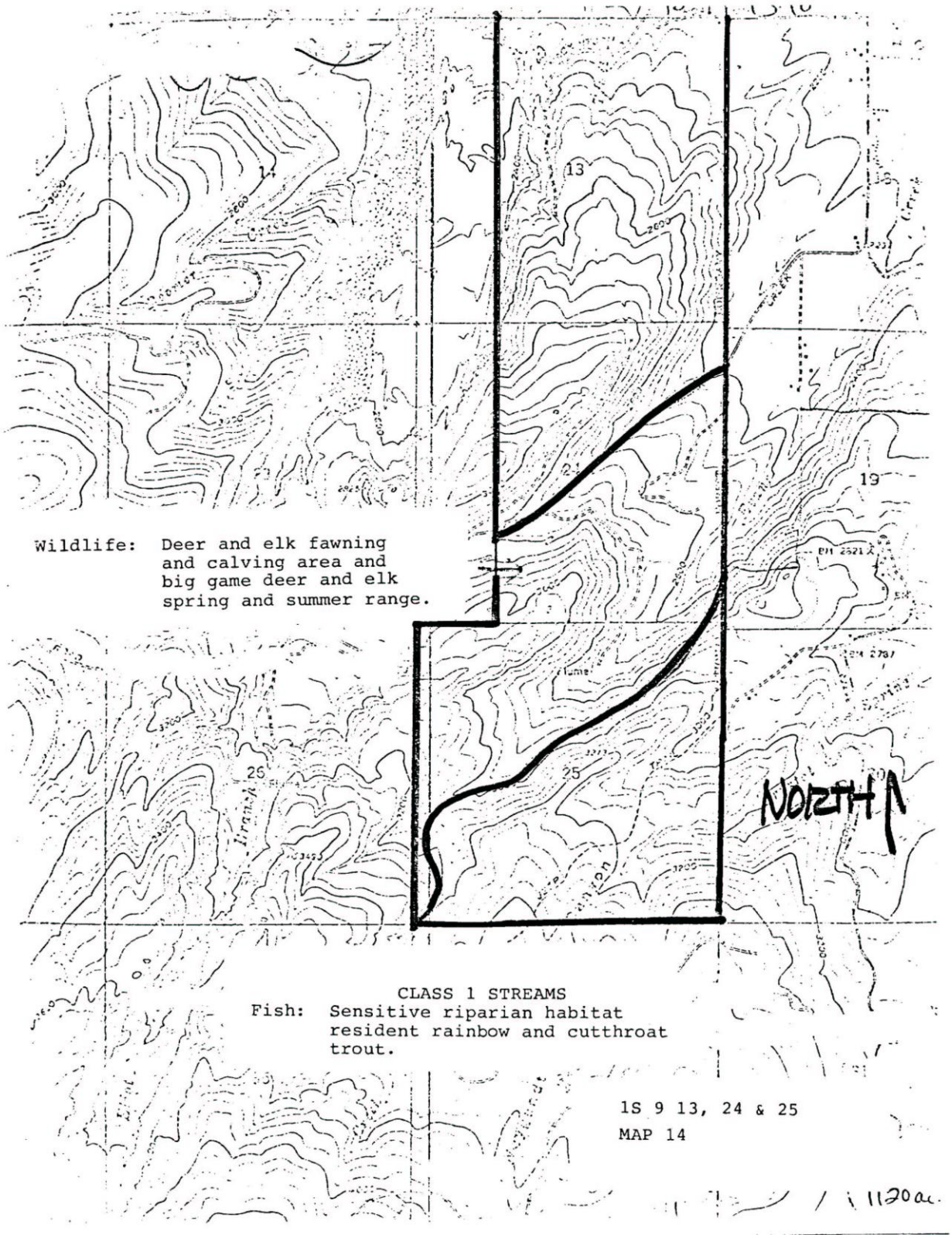
1210 ac.

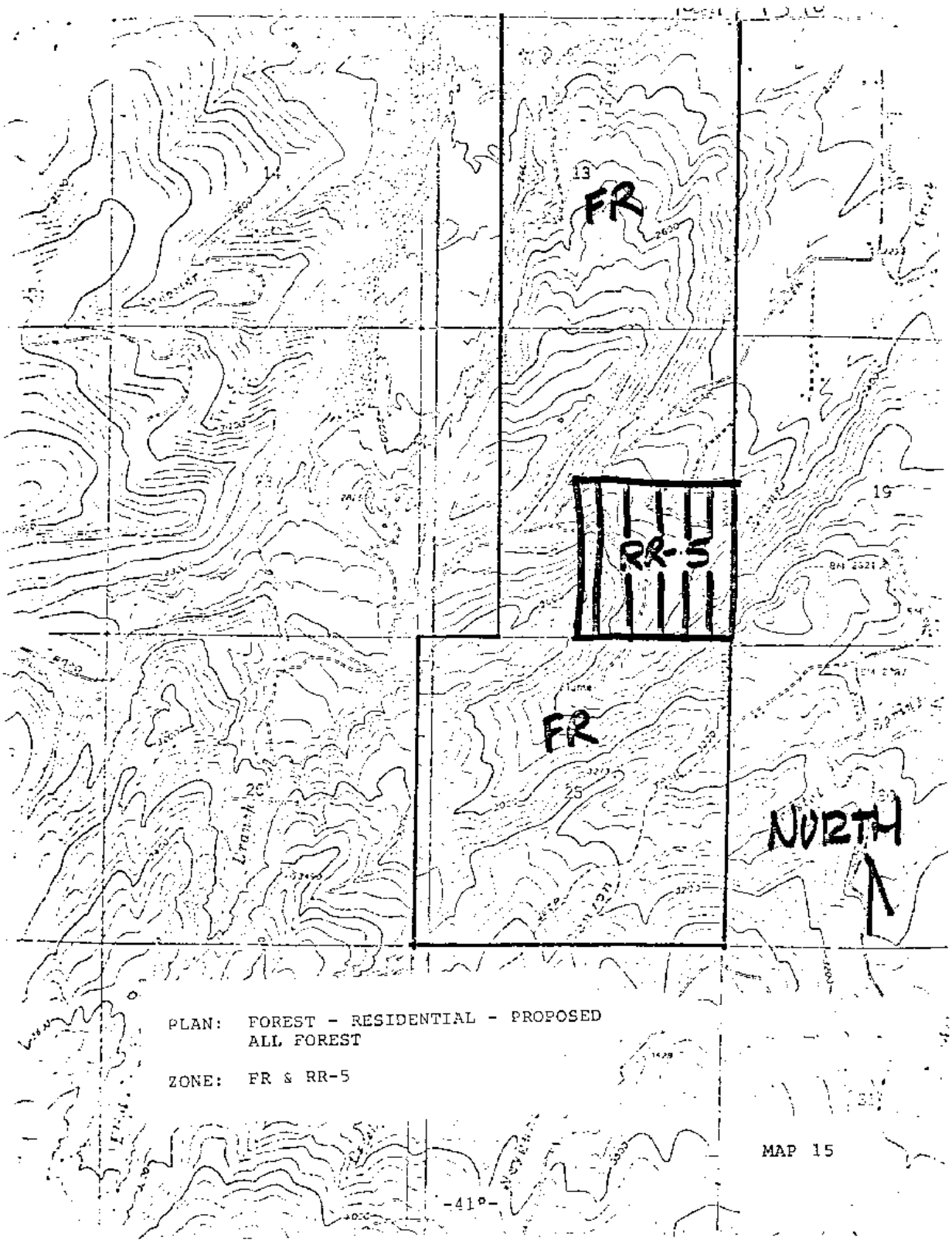


DESIGNATION: PROPOSED - FARM AND FORESTRY

ZONE: FR & EFU

MAP 13


Wildlife: Deer and elk fawning and calving area and big game deer and elk spring and summer range.
CLASS 1 STREAMS
Fish: Sensitive riparian habitat resident rainbow and cutthroat trout.
1S 9 13, 24 & 25
MAP 14
NORTH
13
19
25
25


FR
RR-5
FR
NORTH
PLAN: FOREST - RESIDENTIAL - PROPOSED
ALL FOREST
ZONE: FR & RR-5
MAP 15

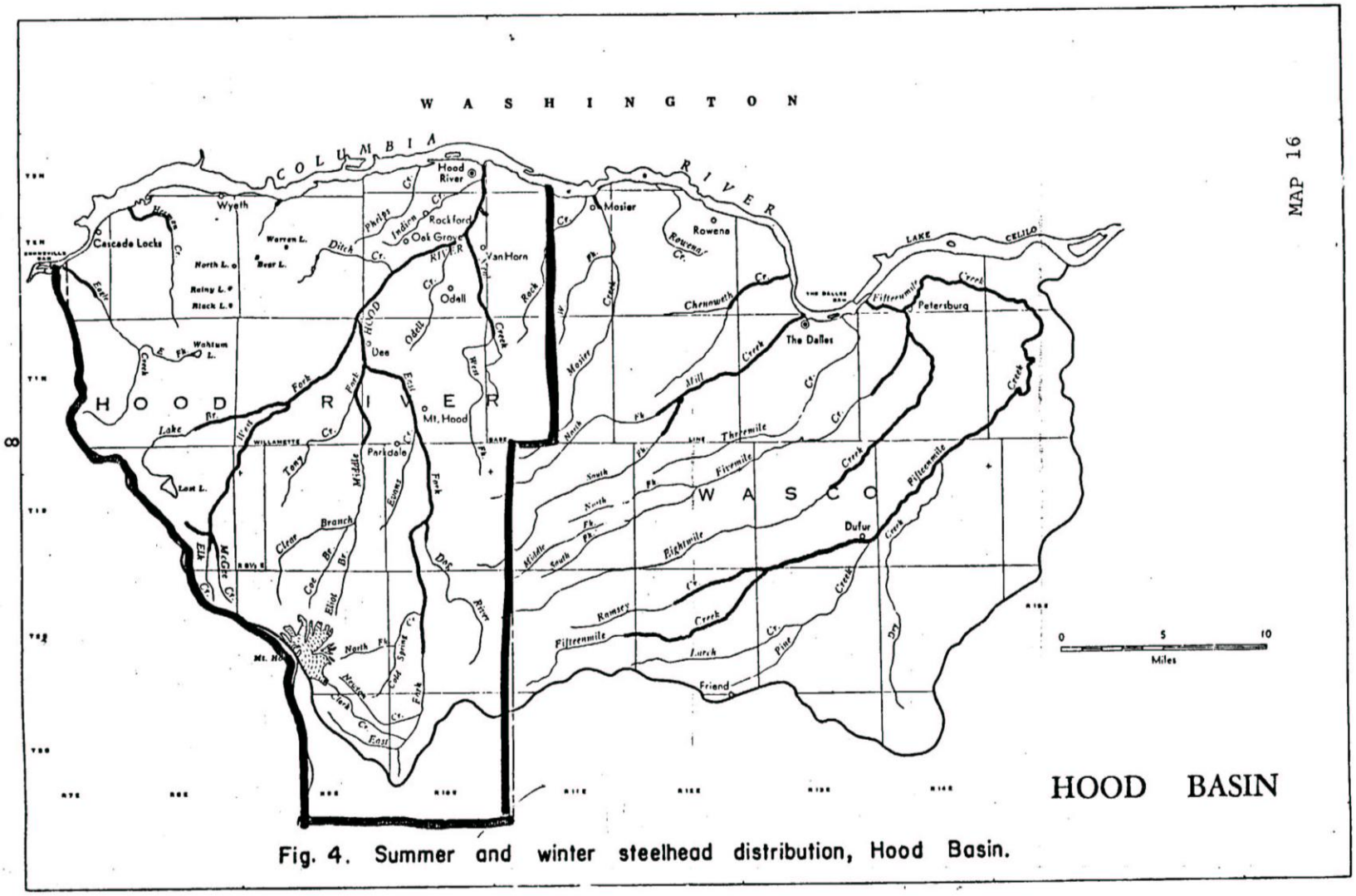


Fig. 4. Summer and winter steelhead distribution, Hood Basin.

Environmental Investigations - Hood Basin Supplement to the Fish & Wildlife Resources of the Hood Basin, Oregon a their Water Use Requirements, (December, 963.) Oregon State Game Commission (Portland, OR, 1973.)

APPENDIX "A"

NATURE CONSERVANCY DEFINITION

The term "Nature Conservancy" is used several times within the Goal 5 sections primarily discussing Fish and Wildlife Areas and Habitats and Ecologically and Scientifically Significant Natural Areas. The term "Nature Conservancy" is somewhat an abbreviation and refers to a more elaborate process and a specific document commonly called the "Blue Book" that was prepared in 1978 by the Oregon Natural Heritage Program of the Nature Conservancy for each County in the State. Basically, the "Blue Book" contains a summary of Natural Areas and other relevant information regarding Natural Sites in Hood River County. The "Blue Book" was prepared in fulfillment of a contract between the Nature Conservancy and the Land Conservation and Development Commission. If incorporated into the County's Comprehensive Plan, it will satisfy certain requirements of LCDC Goal 5.

The following is the formal title of the "Blue Book" which is available in the Hood River County Planning Department: "Oregon Natural Areas; Ecological Needs, Candidate Areas, Protection Programs; Hood River County Data Summary"; prepared by the Oregon Natural Heritage Program of the Nature Conservancy, April 1978.

Information in the document is continually being updated by the Nature Conservancy. Hood River County, per the LCDC request, has updated the above Goal 5 sections to include information available December 1982.

APPENDIX "B"

ADDITIONAL INFORMATION SUPPLIED BY THE NATURE CONSERVANCY

Segment B - RM 165-170

The greatest amount of riparian land occurs in Segment B. The majority of the land is in private ownership. Orchards have been planted at Ruthton Point, and urban areas exist along the cliff top from just south of the point to Wells Island. The easterly portion of the segment consists of the Port of Hood River light industrial and commercial development. This area is served by utilities and railroad. A sewage treatment plant is located on the west end of the development. A large parcel (approximately 60-70 acres) of land occurs as Wells Island in the central portion of the segment. This island and the area downstream to Ruthton Point is the most important portion of the entire study area from a natural resource standpoint.

Vegetation: The upland vegetation in Segment B is predominantly oak and oak-pine. This is interspersed with some fir and maple. An orchard has been developed on Ruthton Point. With the exception of this point, much of the upland has been developed for commercial and residential purposes, reducing its productive potential for wildlife.

The lowland forest is located from Ruthton Point to the "West Bay", including Wells Island. It is composed of large willow forests with large cottonwood forests occurring on the higher ridges. Lowland willow-cottonwood forests are found on the bank side of the "West Bay". The lowland forest and the numerous snags along the shore line contribute significantly to the total wildlife production of the area.

Wildlife:

Mammals - The most important terrestrial mammal habitat occurs from the east end of Wells Island to Ruthton Point and below the cliff. The residential areas support small mammals (ground squirrels, mice, voles, shrews, raccoon, etc.), but at a lower density than other, non-utilized areas.

The lowland area is of importance to aquatic furbearers (beaver, raccoon, muskrat, mink and otter). The lowland forest areas are the most important habitat zone for these animals in the entire study area. Although Hood River is not considered to be a major fur producing region of the Columbia River, major alteration or development of the lowland area around Wells Island and Ruthton Point would probably eliminate the major portion of the existing fur bearer population. Furbearers are harvested from this area each year.

Birds - The songbirds in this segment are associated with the river edge forests and Wells Island. The snags to the east of Ruthton Point represent important habitat for hole nesting birds. Oregon Wildlife Commission biologists reported an osprey nesting in this area last year. Both the osprey and bald eagle are sighted regularly in this area.

Segment B is important as a waterfowl production and nesting area. Canada geese nest on Wells Island, the only goose nesting habitat in the area. The Ruthton Point and Wells Island complex supports a resident population of these birds. The geese share the area with resident mallard, hooded merganser and wood duck. Migrating waterfowl, including Canada geese, mallards, pintail and scaup utilize the Wells Island-Ruthton Point area for shelter and feeding during the winter months. The water area from the eastern tip of Wells island to Ruthton Point is the most important section of the entire study area for waterfowl production and utilization.

Amphibians and Reptiles - The greatest number and variety of amphibians and reptiles are found in the lowland forests of Segment B. Salamanders, frogs, lizards and garter snakes commonly occur in these areas adjacent to the river. There are no rare or endangered species known to occur in this segment.

Fishes - The area of greatest importance to resident fishes and juvenile salmonids is the portion of Segment B lying between Wells Island and the shore (including West Cove) and extending westward to Ruthton Point (Figure 4). Comprehensive sampling has not been conducted in this area, but the presence of shallow areas, snags, and other structures, as well as a large protected area surrounded by lowland forest, all indicate this is very important as fishery habitat. The area is important as a food producing and rearing area for all species of warm water fish, juvenile downstream migrating forms of anadromous fishes (salmon, steelhead, cutthroat and shad) as well as rough fish and forage fish. Juvenile sturgeon feed in shallow, protected areas of the pool, suggesting they are present in this area. A sampling program conducted in West Cove captured juvenile sturgeon, juvenile chinook and coho salmon, black crappie and numerous rough and forage fish.

Ponds are located in three parts of Segment B: one on the east end of Wells Island; a second adjacent to the railroad grade at RM 167.5; the third adjacent to 80N at RM 169.8. The latter, called Button Ponds, are the most important to warm water fishes.

Hood River is an important migration route for adult and juvenile salmon, steelhead and sea run cutthroat trout. Coho salmon and fall chinook salmon spawn in the lower river between the upper highway bridge and the power house. (RM 0.8).

APPENDIX "C"

East Slopes Cascades Province
32 ha (80 acres)
T2N, R9E, S3,4 (parts of)
Ownership: State of Oregon

STARVATION CREEK STATE PARK
Hood River County
HR-24

DESCRIPTION

Starvation Creek State Park is a small area in the Columbia Gorge, sandwiched between Interstate 80N and the cliffs on the south side of the Gorge. Sheer columnar basalt cliffs rise 250m (800 ft.) along the south side of the Park. Starvation Creek flows down these cliffs as a waterfall in a narrow gorge.

ELEMENT OCCURRENCES

2.02.417 Larch Mountain salamander (Plethodon larselli)

This medium-sized salamander is characterized by reddish or salmon pink underparts and peculiarly stubby toes which have only one segment in the fifth toe. It is a lungless creature that breathes through its skin. It lives primarily on land but must keep its skin moist. It is found only between Troutdale and Hood River within the Columbia Gorge, usually in association with basaltic rock outcrops. Starvation Creek State Park is known to contain a good-sized population.

THREAT TO ELEMENT OCCURRENCES

The Larch Mountain salamander's extremely limited distribution poses a threat to its survival. Though current developments within the Columbia Gorge do not pose a threat, known habitats need to be closely watched to assure survival of the salamander's populations. The Oregon Department of Fish and Wildlife regulations prohibit the taking of this species without a special permit from the state; it is listed on the State's Protected Wildlife List.

DISCUSSION

The Larch Mountain salamander is listed under "Status-Undetermined" amphibians in the U.S. Fish and Wildlife Service's 1973 "Red Book", as a species of special interest in Oregon*, and as an unfilled rare and endangered vertebrate animal RNA cell*. It is the outstanding natural element identified at Starvation Creek State Park. The extent of its habitat at this park needs to be better defined and precautions need to be taken to maintain a healthy population within the park.

* Research Natural Area Needs in the Pacific Northwest, USFS, 1975.

GOAL 5 EVALUATION, FISH & WILDLIFE AREAS & HABITATS: WELLS ISLAND

A. Introduction: It was determined during the acknowledgment process that the City of Hood River's decisions would prevail within the Urban Growth Boundary including decisions regarding Wells Island. The following public hearings were conducted by the County regarding Wells Island, which resulted in the adoption of items discussed and listed below. Elements of the County Comprehensive Plan have been updated, reflecting these items.

1. County Planning Commission, May 8, 1985.

2. Board of County Commissioners, June 17, 1985 (Ordinance #136).

3. County Planning Commission, November 13, 1985.

4. Board of County Commissioners, February 3, 1986 (Ordinance #143).

5. The City of Hood River Council and Planning Commission conducted the appropriate hearings.

B. What the County Adopted: The County adopted the report entitled, "Comprehensive Plan & Zone Designations, Wells Island, February 11, 1985"; prepared for: City of Hood River, prepared by the Port of Hood River, Consulting Planner, Benkendorf & Associates and Consulting Wildlife Ecologists, BEAK, Lynn Sharp, Environmental Biologist. This report is attached to the County Background Report as APPENDIX "A". The County also adopted the following additional reports which appear as Appendices "B" and "C": Wells Island Wildlife Monitoring Program and Findings of Fact, Growth of Board Sailing in Hood River.

These reports must be reviewed for details regarding the Goal 5 Analysis for Wells Island. Specific sections adopted and included in elements of the County's Comprehensive Plan include:

1. County Background Report:

   a. Goal 5 Analysis: Pages 2-29 of the Benkendorf Report including Goal 5 analysis of the following elements: Fish & Wildlife Areas & Habitats, and Outstanding Views & Sites.

   b. Plan & Zoning Designations:

      (1) Designate Wells Island and the smaller Island in the Wells Island vicinity as Goal 5, 3C Sites (Limit Conflicting Uses).

(2) Plan and zone the western portion of Wells Island and the smaller island outside the City Limits and Urban Growth Boundary, Environmental Protection (EP) and Floodplain (FP).

c. UGB Revision:

(1) Leg 9 of the Urban Growth Boundary: Moves the Urban Growth Boundary east of the City Limits to a point between Wells Island and West Cove: At the south shore of the Columbia River, the Urban Growth Boundary turns due east and extends approximately 11,350 feet more or less along the low water line of the Columbia River to a point easterly of the City Limits line. Thence, north, approximately 3,750 feet more or less, to the Oregon-Washington state line.

(2) The County supports the City of Hood River's Plan and Zoning Designations of Open Space/Public Lands, and Tourist/Cultural Zone for that portion of Wells Island and the smaller islands within the City Limits.

2. County Policy Document: The following adopted strategy and policies are included in the County Policy Document primarily under Goal 5 - Fish & Wildlife Areas & Habitats or where noted:

a. Policies:

(1) Wells Island will be managed in order to conserve, enhance and interpret the natural values of the island and the Columbia Gorge while providing the public with opportunities to experience and learn from those values.

(2) The County supports the City of Hood River's Findings of Fact, Growth of Board Sailing in Hood River, as contained in the County Background Report under Goal 8 - Recreational Needs.

(3) The County supports the Wells Island Wildlife Monitoring Program which is included in the County Background Report under Goal 5 - Fish & Wildlife Areas & Habitats.

(4) Leg 9 of the Urban Growth Boundary revised as follows: (moves the Urban Growth Boundary east of the City Limits to a point between Wells Island and West Cove). At the south shore of the Columbia River, the Urban Growth Boundary turns due east and extends approximately 10,350 feet more or less along the low-water line of the Columbia River to a point easterly of the City Limits line. Thence, north, approximately 3,750 feet more or less

to the Oregon-Washington state line. (See County Plan and Zoning Maps.)

(5) The County designates Wells Island and the small island in the Wells Island vicinity as Goal 5, 3C sites (Limit Conflicting Uses).

(6) The County plans and zones the western portion of Wells Island and the smaller island outside the City Limits of Hood River and the Urban Growth Boundary Environmental Protection (EP) and Floodplain (FP).

(7) The County supports the City of Hood River's plan and zoning designations of Open Space/Public Lands and Tourist/Cultural (TC) for that portion of Wells Island and the smaller islands within the City Limits.

(8) The County recognizes that the City of Hood River sewer and water lines will be extended to only that portion of Wells Island in the City Limits. Extended sewer and water lines to be the minimum necessary to service only uses allowed in the City's designations of Open Space/Public Lands and Tourist Cultural. (Also appears under Goal 11 - Public Facilities & Services.)

b. Strategy: Wells Island will be managed as set forth in the City's and County's Background Reports. The following policies will govern the use of the island.

(1) Lost goose nesting habitat will be mitigated through the creation of a nesting island as described in Section 5B of the Background Report (Benkendorf Report, Appendix "A" to County Background Report).

(2) Because herons are sensitive to visual rather than audible disturbances, a portion of the island visible from the rookery will not be available for public access. Rather, the rookery will be visible from a viewing area. This is illustrated on the Management Plan.

(3) A long-term program to monitor nesting populations and breeding success of the heron rookery and Canada geese will be established and begin at least one year prior to any construction on the island.

(4) Access to the interpretive trail system will be guided by groups of not more than 15 persons between the end of the early nesting season and the end of the incubation and early rearing period for

herons and geese (approximately second week in May through end of June).

(5) Public access to Wells Island will be eliminated during the egg-laying and early incubation periods of the herons and geese (approximately early March through second week in May).

(6) The meadow areas of the island will be maintained in short grasses suitable for goose brooding.

(7) Construction relating to prescribed uses on Wells Island will be scheduled between August and January, as much as possible, to avoid disturbance to nesting geese and herons.

(8) Access to Wells Island will be limited to pedestrians, service and emergency vehicles.

(9) Structures on the island will be designed to be rustic in appearance with sensitivity to maintaining the scenic value of the island.

(10) Public facility extensions (particularly City sewer and water lines) will be minimally sized to serve only the uses described in Section 14A of the Background Report (Benkendorf Report).

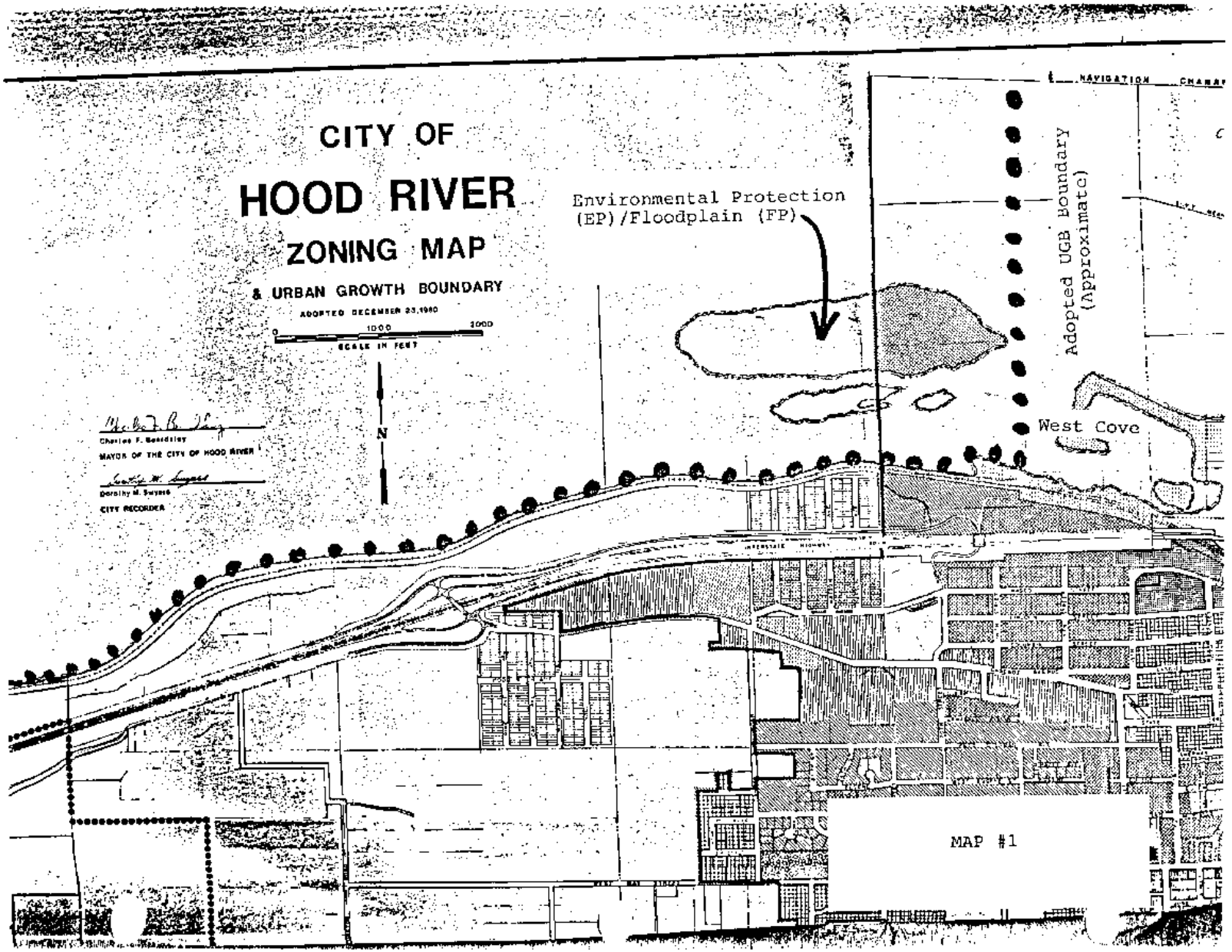
3. County Plan & Zoning Maps:

a. The County's Comprehensive Plan and Zoning Maps were included to show the Urban Growth Boundary as follows (see Map #1 attached to this report).

Basically, Leg 9 of the Urban Growth Boundary was moved east of the City Limits to a point between Wells Island and West Cove.

> "At the south shore of the Columbia River, the Urban Growth Boundary turns due east and extends approximately 10,350 feet more or less along the low-water line of the Columbia River to a point easterly of the City Limits line. Thence, north, approximately 3,750 feet more or less to the Oregon-Washington state line."

b. The County amended the Hood River County Comprehensive Plan and Zoning Maps and applied the following Plan and Zoning designations to the western portion of Wells Island and the smaller island outside the City Limits and Urban Growth Boundary: (see Map #1) Environmental Protection (EP) and Floodplain (FP).


CITY OF
HOOD RIVER
ZONING MAP
& URBAN GROWTH BOUNDARY
ADOPTED DECEMBER 23,1980
0
1000
2000
SCALE IN FEET
N
Charles F. Beardsley
MAYOR OF THE CITY OF HOOD RIVER
Dorothy M. Sayers
CITY RECORDER
Environmental Protection
(EP)/Floodplain (FP)
Adopted UGB Boundary
(Approximate)
West Cove
MAP #1

GOAL 5: ECOLOGICALLY AND SCIENTIFICALLY SIGNIFICANT NATURAL AREAS

A. Introduction:

Natural Areas are defined as land and water areas that have substantially retained their natural character or lands that, although altered in character, are important as habitats for plant and animal life, for the study of natural historic, scientific, or paleontological features, or for appreciation of natural features.

B. Goal 5 Evaluation Process:

The following sites are evaluated through the Goal 5 Process: Glacier Ranch, Crystal Springs Creek, Parkdale Lava Beds, Tanner Butte, Ruthton Point, Starvation Creek State Park, Chinidere Mountain, Rimrock Mountain, unnamed site at Fir Mountain, and Elk Meadows.

Both Ruthton Point and Starvation Creek State Park were previously analyzed in the Goal 5 Background Report entitled "Fish and Wildlife Areas and Habitats". For recommendations see that particular section. (Updated to include Nature Conservancy information, December, 1982.)[1]

1. Glacier Ranch/Crystal Springs Creek:

a. Location: Glacier Ranch, TlS, R10E SW¼ of Section 19; and SW¼ of Section 30; and Crystal Springs, TlS, R9E, Sections 13, 24, and 25. The 160 acres in TlS, R10E SW¼ Section 19 are in private ownership while the 160 acres in TlS, R10E SW¼ Section 30 are in public ownership (Hood River County). The majority of land in TlS R9E Sections 13, 24, and 25 is in public ownership (see Index Map, and Maps 1, 2, 3, and 4). The sites are discussed together per the Nature Conservancy's recommendation.

b. Quantity and Quality: A site report has been prepared by the Nature Conservancy which identified several natural elements on the site; see Appendix "B". Comments from the Hood River County Forester clarifying comments in the Nature Conservancy site report are noted in Appendix "C". It must be remembered that the Nature Conservancy can only recommend.

The Conservancy has also designated Section 13 as being part of the Parkdale Lava Beds and a site report has been prepared. For additional information see Natural Area Report Goal 5, Parkdale Lava Beds. The Commission recommends protection of the Lava Beds.

[1] See Appendix "A".

The Tollgate Road mentioned is the Old Cloud Cap Road that cannot be traveled by vehicle and presently has a piped waterline to Glacier Ranch on it. Hood River County also retains an easement on the road for forest management. The County supports the U.S. Forest Service's designation of Historic District for the Cloud Cap Inn-Tilly Jane Recreation Areas which include traces of the 1886-1899 Wagon Road and the 1926 Cloud Cap Road.

c. Conflicting Uses and Consequences: Approximately 40 acres in the SW¼ Section 19, TIS R10E is zoned RR-5, however the property owner supports downzoning to Forest. Also, through the Exceptions hearing process, the Planning Commission has recommended Forest planning and zoning for this specific area.

Concerns are raised that timber harvesting could adversely impact these natural areas.

Economic: Maintaining the natural amenities will provide additional areas for the public to visit therefore tourism will increase. Maintaining natural amenities could restrict harvesting thereby imposing an economic burden on property owners. Maintaining Forest zoning could provide to a lesser extent the same tourist attraction. If funds are available and the Nature Conservancy places a high priority on this area, they should approach affected property owners and purchase the land. If harvesting agreements are not adhered to by the County, the County tax payer will become involved in substantial litigation. It has been recommended that the County support the U.S. Forest Service Historic District for the Cloud Cap-Tilly Jane area which includes portions of the 1886-1899 and 1926 Cloud Cap Road and other natural amenities. Historic recognition in this area will generate increased tourism and revenue for Hood River County. County timber sales have been occurring in this area since 1950 and contracts have been signed for a timber sale harvest in 1984.

Social: Maintaining the site in a natural state could attract more people, however, maintaining the Forest designation will also attract people. Support of the Historic District around Cloud Cap Inn is a viable alternative for protection of the resource base and the Toll Road. It is also difficult to determine the actual location of the Toll Road especially through the SW¼; Sections of 19 and 30; TlS R10E; also the Toll Road has County easements to allow forest use of the road and a water line is along a portion of the road. The County Forester has clarified several points in the Nature Conservancy site report indicating necessity for additional evaluations.

Environmental: Maintaining natural systems will improve environmental quality. The Department of Fish and Wildlife states that the minimum

acreage requirements of the Forest Zone will assist in preserving habitats. Glacier Ranch owner feels natural elements are more common than stated in the Nature Conservancy Report. Glacier Ranch owner is managing property on a sustained yield basis and is philosophically oriented to protecting natural amenities and supports Forest zoning for the property. Within the area several timber sales have occurred since 1950, consequently the area might not be as natural as thought to be. There have been joint efforts between the County Forester and Glacier Ranch owner in protecting a spring within the area. The majority of lands in Sections 13 and 24, TlS R9E are County forest lands, as such they are being managed for forest purposes, the same for Section 25. there are provisions in the Forest Zone for building setbacks and protection of riparian vegetation. Within the Goal 5 Section, there are over 40 Goals, Policies, Strategies, etc., dealing with Natural Areas. Continual County coordination with the Nature Conservancy, County Forester and other special districts such as the Crystal Springs Water District through County referrals will also provide assistance. It has been recommended that the portion of lava beds in Section 13 be protected.

Energy: Maintaining natural amenities and systems does not require energy, however energy is consumed by individuals seeking natural areas. Short term energy consumption noted in harvesting and replanting. If harvesting is not allowed additional energy consumed in identifying and utilizing other forest resource sites further removed. Support for a Historic District will assist in protecting similar natural amenities and systems noted in the above location and deter energy consumption because the sites are generally consolidated in one area.

Recommendations are presented in C. below.

2. Parkdale Lava Beds Geological Areas:

a. Location: TlS R9E Sections 1, 2, 11-14 and 23; see Index Map, item #2. This location has been provided by the Nature Conservancy. The majority of lava beds described above are under jurisdictional boundaries of the Mt. Hood National Forest. However, within the seven sections dominated by ownership, there are approximately 840 acres of private lands as shown on Map #5 (Private Ownership - Portions of Parkdale Lava Beds). These private lands, however, are within what the U.S. Forest Service calls the Adjacent National Forest Boundary.

The area described as the Parkdale Lava Beds Geological Area does include Section 1, TlS R9E, which involves the Green property (see application #81-14). Because of the interrelated issues involved and as a remand from LUBA regarding the Green property, it will be discussed in

its entirety in a separate report (See Goal 5: Background Report: Green Pit; Site 27).

b. Quantity and Quality: Approximate acreage involved as designated by the Nature Conservancy, 4,480 acres however approximately 840 are in private ownership while the remainder, 3,640± acres are in federal ownership.

Those lava beds under federal ownership are classed as a Special Interest area by the Mt. Hood National Forest. Basically this means that they may be developed as a visitor information area, if funds allow. Also, the U.S. Forest Service considers the lava beds under their jurisdiction as a unique area at the present time because no development exists. Until finances become available, the management direction is to preserve and protect the area from any and all types of exploitation such as sand, rock or lava removal, or the removal of trees and other plants from the area.

The Nature Conservancy considers the Parkdale Lava Beds a unique geological feature. The Nature Conservancy has also prepared a site report; see Appendix "D" (2/2) and the geological feature is considered to be a site of relatively high priority because a field survey has been conducted and it has been found to contain an important element of natural diversity.

Proposed plan and zoning designations for private lands are Forest and Exclusive Farm Use (see report entitled "Undesignated Lands", available at the County Planning Department).

c. Conflicting Uses and Consequences: The Nature Conservancy states (see Appendix "D") that the spring area at the toe of the lava flow is in danger of disruption by rock crushing operations which may destroy the quality of the spring water. The U.S. Forest Service Management Plan is to preserve and protect the lava beds, primarily under Forest Service jurisdiction from all types of exploitation as previously stated. In the early '70s management direction was to determine the feasibility of acquiring private lands adjacent to the east side of the area.

Overall, the majority of the lava beds designated by both the Nature Conservancy and the U.S. Forest Service are under Federal ownership. The management direction of the U.S. Forest Service is to protect this geological feature from exploitation consequently conflicting uses will be mitigated on federal lands. Portions of the area designated by the Nature Conservancy are private lands. The majority of private lands are in farm use, however portions again are part of the lava beds. In both the Exclusive Farm Use and Forest zones, mineral extraction for other than forest uses is allowed only through a rezone to Surface Mining Combining

Zone. Through this process all affected agencies including the Nature Conservancy, U.S. Forest Service, DEQ,DOGAMI, etc., would be informed of the rezone request and their comments would be included through the hearing process. However, the Forest Zone permits outright sand, rock and gravel pits when used exclusively for forest or forest-related uses. The following is a discussion of consequences relating only to those private lands within the areas designated by the Nature Conservancy.

Economic: Maintaining the site as a natural geological feature will increase tourism and revenues to the County and the Community of Parkdale. Allowing surface mining will provide revenues to property owners of the resource and provide a readily available resource to those in the area. Extraction could cause an economic hardship to those relying on the spring water if termination or disruption is caused by extraction activity.

Social: Maintaining the lava beds will increase tourism and obviously bring additional people into the area. Additional people in the area could have positive (additional revenue, new blood, etc.) and negative (e.g., more traffic, trespassing, etc.) impacts. Allowing extraction will increase over a short period of time traffic, noise, dust, etc. resulting in more complaints by surrounding people, especially if water resources are negatively affected.

Environmental: Maintaining the lava beds will assist in maintaining natural systems and will have no negative effects upon the existing environmental quality especially water quality. Allowing mineral extraction would change the natural characteristics of the lava beds and allow over a short time period additional traffic, dust, noise, etc. All affected agencies would be notified regarding the Surface Mining Combining rezone request. Also a reclamation plan would be required to mitigate negative impacts. Impacts on water quality would also be addressed through this process.

Energy: Maintaining the lava beds as a natural area would provide an additional tourist attraction close to others in the Mt. Hood National Forest. Although energy would be consumed going to the area, less energy would be consumed because recreational sites are in close proximity. If water resources are negatively impacted, additional energy to establish new systems will be noted by those who have supplies interrupted. Maintaining the lava beds as a natural area requires no energy. Extracting mineral requires additional energy. An additional rock source in the Upper Valley will decrease hauling distances and energy consumption. If extraction is not allowed, additional energy will be consumed identifying other resource sites.

Recommendations are presented in C. below.

3. Tanner Butte, Mountain Goat Area, and Chinidere Mountain Area:

a. Location: TlN R7E; located on federal lands; The area is within the Mt. Hood National Forest boundary. Portions of the area are included in the Columbia Wilderness area established by Congress in August, 1984. The goats range from Tanner Creek to Eagle Creek with some straying as far as Mt. Talapus in Multnomah County. Area is located on federal lands wouth of the City of Cascade Locks and along the western boundary of Hood River County. See Index Map, Item #3.

b. Quantity and Quality: The area covers approximately 920 acres on Tanner Butte, Chinidere Mountain and Eagle Butte. The only mountain goat population was inventoried in 1982. Only one or tow have been sighted in recent years.

The area is one of two in Oregon where native mountain goats have been reintroduced. The State Department of Fish & Wildlife released goats in the 1970's to promote wildlife in areas proposed as wilderness by the U.S. Forest Service. As of October, 1985, a summer 1986 release of additional goats is possible because the population has decreased due to death and straying. The U.S. Forest Service will not allow the goat release without assessment of impacts upon other resources in the area, especially native plants. If the impacts are minimal, the goat release will occur. The area is also considered unique because it lies in the northwest end of a range of western juniper. The area was initially included in the Nature Conservancy inventory for the reasons above. The Conservancy now states that the mountain goat area, and species, are no longer considered significant.

Both Tanner Butte and Chinidere Mountain are within the boundaries of the Columbia Wilderness area and surrounded by federally owned land (wilderness and nonwilderness). The Columbia Wilderness (see Map #6) is a new designation, a specific management plan has yet to be adopted. The Columbia Gorge Ranger District indicates an interim plan will be developed in winter, 1985. Current protection is through general wilderness policies which include restrictions and road building. Fire suppression is conducted by low impact methods and areas disturbed by crews are rehabilitated. Trails are maintained for public use. Hiking, hunting and fishing are allowed.

See Section "C" below for recommendations.

4. West of Rimrock Mountain:

a. Location: TlS R10E Section 16; Index Map, item #4. This site is under state ownership. Site is located approximately two miles southeast of Parkdale and directly east of Highway 35 and the Hood River.

b. Quantity and Quality: At the request of the State Department of Forestry and Hood River County, the Nature Conservancy reviewed their data base in December, 1985. Dick VanderSchaaf, Public Lands Protection Planner for the Conservancy responded that "the forest-types present at the site are not endangered at this time on a regional level and are currently represented in the nearby Mill Creek Research Natural Area". Their records do not indicate any occurances or rare, threatened or endangered species at the site.

The following agencies support deletion of the site West of Rimrock Mountain from the County Plan: Oregon Natural Heritage, Natural Heritage Advisory Council and the State Forestry Department.

Vanderschaaf stated the presence of cheatgrass indicated the area had been disturbed and because of this disturbance cannot be recommended to be managed as a natural area. The following plan designations exist on the site: (1) Environmental Protection along the Hood River; (2) Primary Forest and Farm. Zoning designations are Environmental Protection (EP) and Floodplain (FP) along the Hood River, F-2 and EFU.

See Section "C" below for recommendations.

5. Unnamed Site at Fir Mountain:

a. Location: T2N R11E SW¼ Section 21; see Index Map, item #5. This site is identified by the Nature Conservancy and consists of private ownerships.

b. Quantity and Quality: This site contains approximately 160 acres. According to the Nature Conservancy this area contains what is commonly known as the Thompson Water Leaf (Hydrophyllum capitatum var. thompsonii) and is part of a habitat known as The Dalles Plateau, scrub oak ecosystem.[2] However the Thompson Water Leaf is no longer designated a rare plant. It is more common than previously believed. A detailed site report has yet to be prepared by the Nature Conservancy. This site, including sections to the north, south and west have also been designated as Big Game Winter Range Area or Turkey Habitat by the Department of Fish and Wildlife. The site is planned and zoned Forest. Also a portion of the area is planned and zoned Geologic Hazard (deep bedrock slide).

[2] Phone conversation, Jean Sidall, 6/25/82.

Conflicting Uses: It is felt that any conflicting uses are currently mitigated by the existing plan and zoning designations.

6. Elk Meadows:

a. Location: T3S R9E NW¼ Section 1; and T2S R9E SW¼ Section 36; see Index map, item #6. The site is under U.S. Forest Service ownership.

b. Quantity and Quality: Approximately 80 acres are involved in this site. The Nature Conservancy states the site contains the following natural systems: mountain hemlock, wet meadow, sedge and rush dominated, wildflower area and recreation/open space/scenic features. This site is an undisturbed alpine meadow with a peat substrata. The area is designated Wilderness by the Mt. Hood National Forest and is managed as a natural recreation area.

See Section "C" below for recommendations.

C. Recommendations:

1. Glacier Ranch/Crystal Springs Creek:

a. Include all above information in the County Background Document.

b. Add the following strategies to the County Policy Document in Goal 5 under Natural Areas:

(1) Designate Glacier Ranch TlS R10E SW¼ Section 19 and County ownership TlS R10E SW¼ Section 30 as 3B sites (Allow conflicting Uses Fully) and include in the inventory.

(2) Designate Sections 13, 24 and 25, TlS R9E as 3B sites (Allow Conflicting Uses Fully) and include in the inventory.

(3) Support plan and zone change from Rural Residential to Forest for the following areas: SW¼ Section 19, TlS R10E and SE¼ Section 24, TlS R9E.

(4) Continue to coordinate with the Nature Conservancy and other applicable State agencies and County special districts through the Planning Department permit referral process.

(5) Support efforts of the Nature Conservancy to directly coordinate with affected property owners.

2. Parkdale Lava Beds Geological Areas:

a. Include information discussed in B., 3., in the County Background Document.

b. Add the following Strategies to the County Policy Document in Goal 5, Natural Areas.

(1) Support the U.S. Forest Service designation of Special Interest for the Parkdale Lava Beds under federal ownership.

(2) Designate the Parkdale Lava Beds on private lands as 3A (Protect the Resource Site) and include in the inventory.[3] (Reasoning for the 3A designation is presented in the Goal 5 Background Report on Natural Areas - Parkdale Lava Beds Geological Areas and additional testimony presented to the Planning Commission, November 17, 1982.)

(3) The County do everything possible to negotiate a land exchange with Mr. Green and other similarly affected property owners in the area designated as the Parkdale Lava Beds, so that springs in the Lava Beds are not adversely impacted.

(4) Revise the Forest Zone to include provisions for protecting the Parkdale Lava Beds as required by the 3A designation.

(5) Prepare a separate report regarding the Green property due to remand from LUBA and extenuating circumstances such as Goal 5 requirements.

3. Tanner Butte, Mountain Goat Area, and Chinidere Mountain Area:

a. Add information in B., 3. above to the County Background Document.

b. Add the following Strategy to the County Policy Document, Goal 5, Natural Areas.

"Support the Mt. Hood National Forest designation of Columbia Wilderness area and associated wilderness administrative policies for the Tanner Butte and Chinidere Mountain Areas"

4. West of Rimrock Mountain:

a. Place information in B., 5. above in the County Background Document.

b. Add the following Strategies to the County Policy Document in Goal 5, Natural Areas, etc.:

[3] Applies only to the actual lava beds and not the entire sections as defined by the Nature Conservancy.

(1) Designate the Rimrock Mountain Goat Area a 1A site, the information available from the Nature Conservancy on location, quantity and quality indicates the resource site is not important and does not need to be included in the Plan Inventory. The Natural Heritage Advisory Council supports the Nature Conservancy's recommendation to delete the site from the County's Inventory.

(2) The area west of Rimrock Mountain 91S 10E 16, is not important enough to warrant inclusion in the Plan Inventory, therefore it is designated 1A (Do not include in the Plan Inventory).

(3) Designate the West of Rimrock Mountain site 1B (Delay Goal 5 Process) and include in the Plan Inventory.

(4) Further evaluate the site West of Rimrock Mountain through the Goal 5 Process when the Nature Conservancy completes a detailed site report. Evaluation to be completed during post-acknowledgment by December, 1984.

5. Unnamed Site/Fir Mountain:

a. Add information in B., 6., above into the County Background Document.

b. Add the following Strategy to the County Policy Document in Goal 5, Natural Areas, etc.:

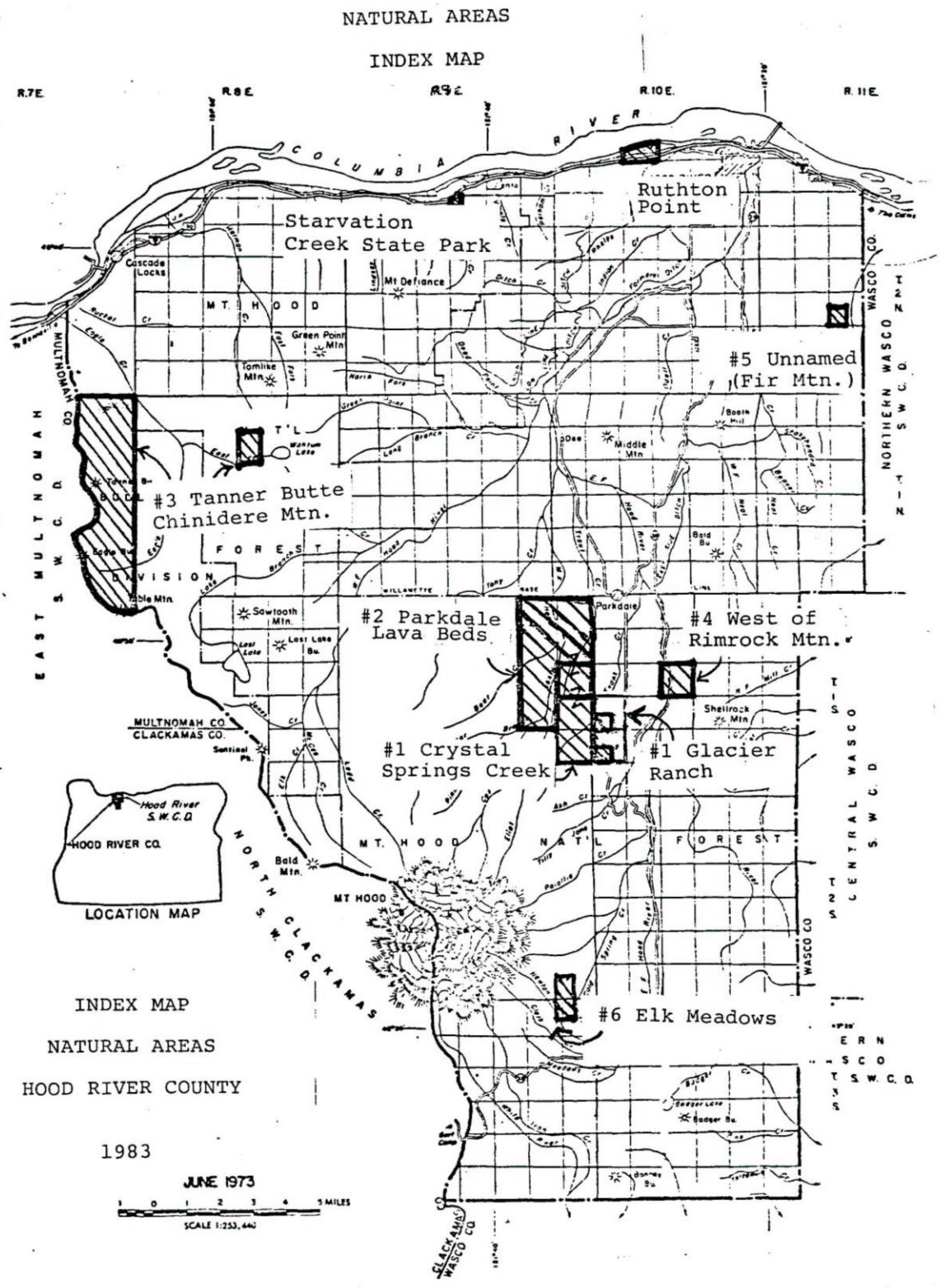
"The unnamed site at Fir Mountain (2N 11E SW¼ Section) is not important enough to warrant inclusion in the Plan Inventory therefore it is designated lA (Do Not Include in Plan Inventory)."

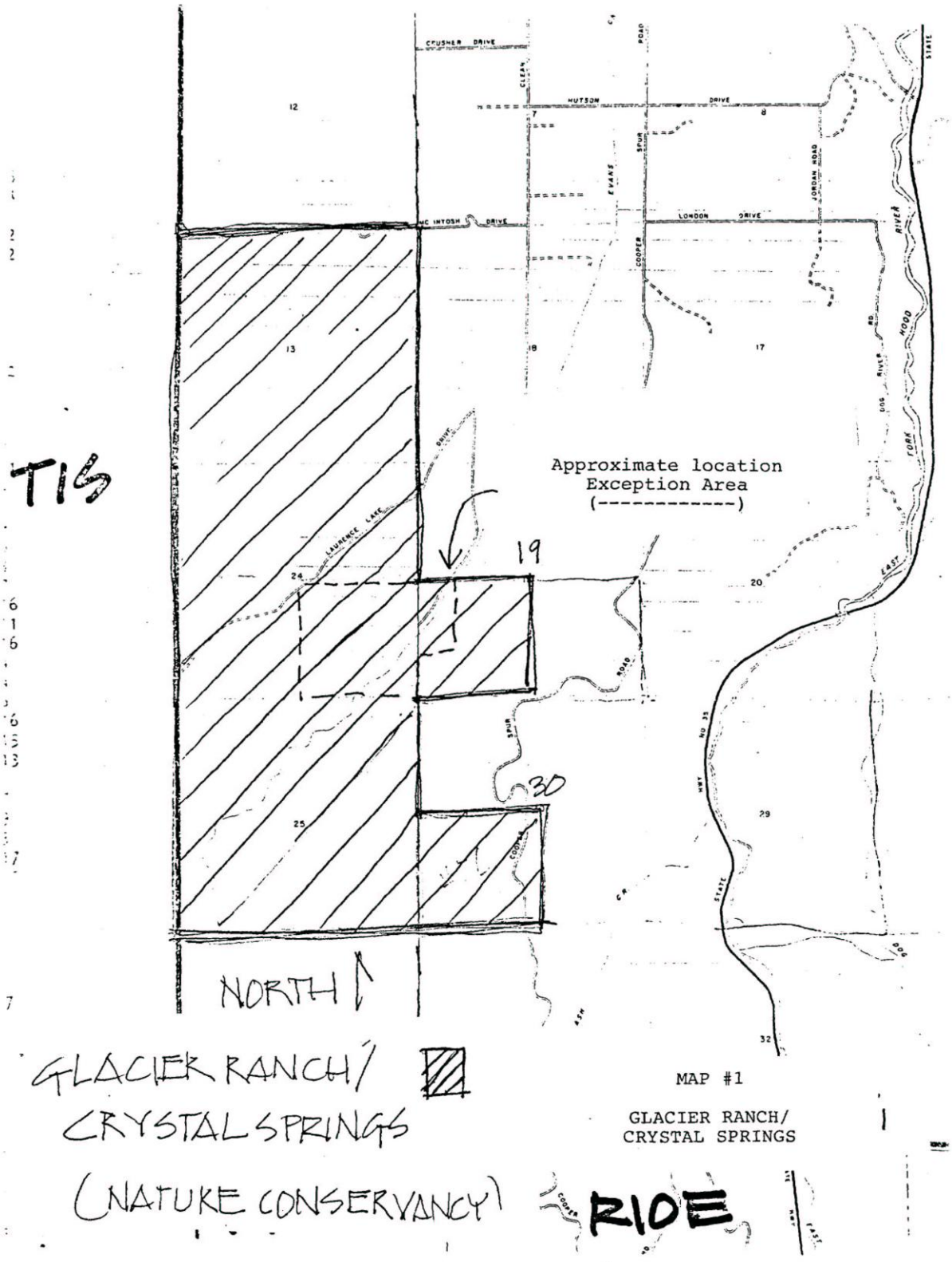
6. Elk Meadows:

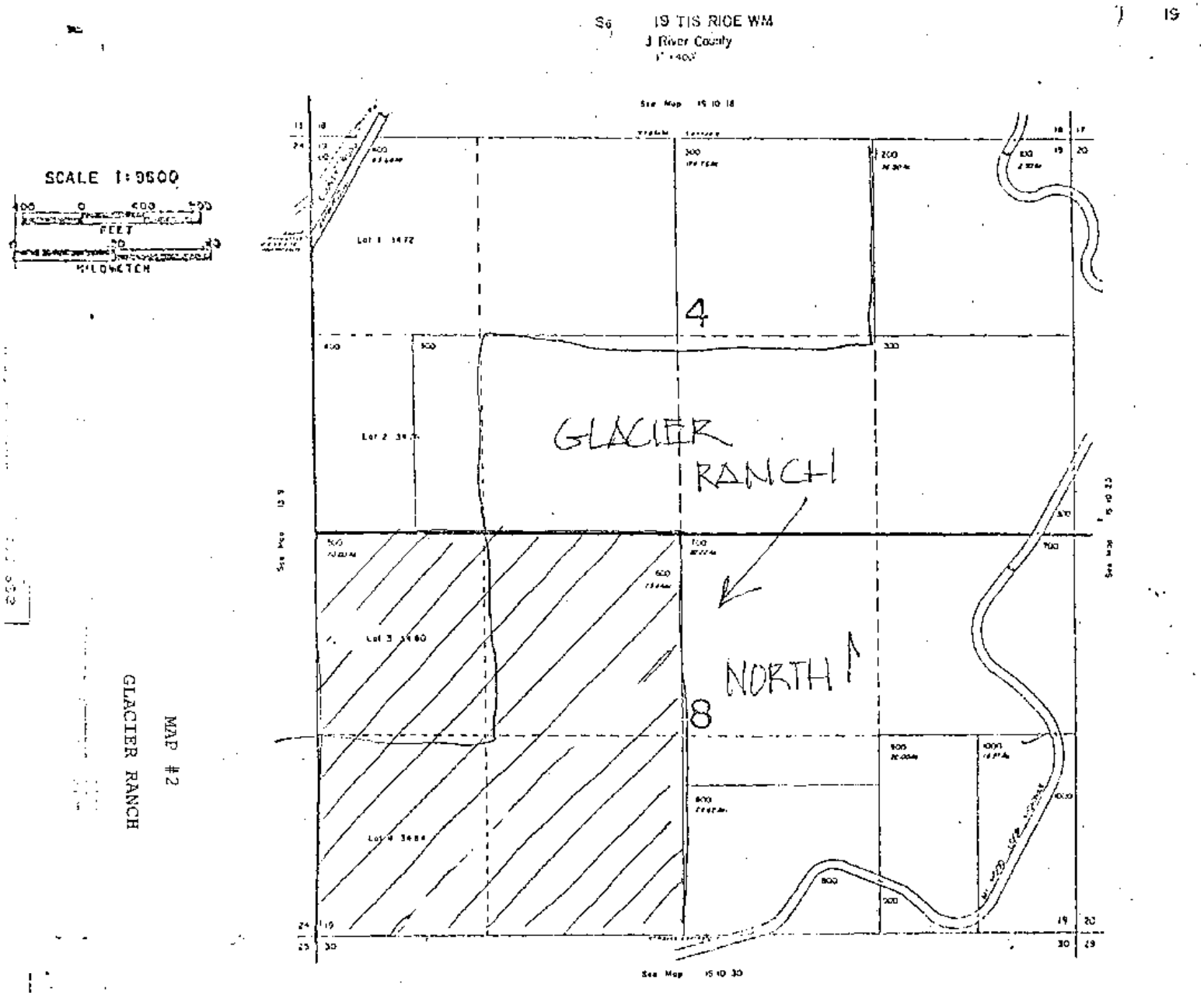
a. Add the information in B., 7., above into the County Background Document.

b. Add the following Strategy to the County Policy Document under Goal 5, Natural Areas, etc.:

"Support the Mt. Hood National Forest and its plan management designation of Wilderness for the Elk Meadows site."

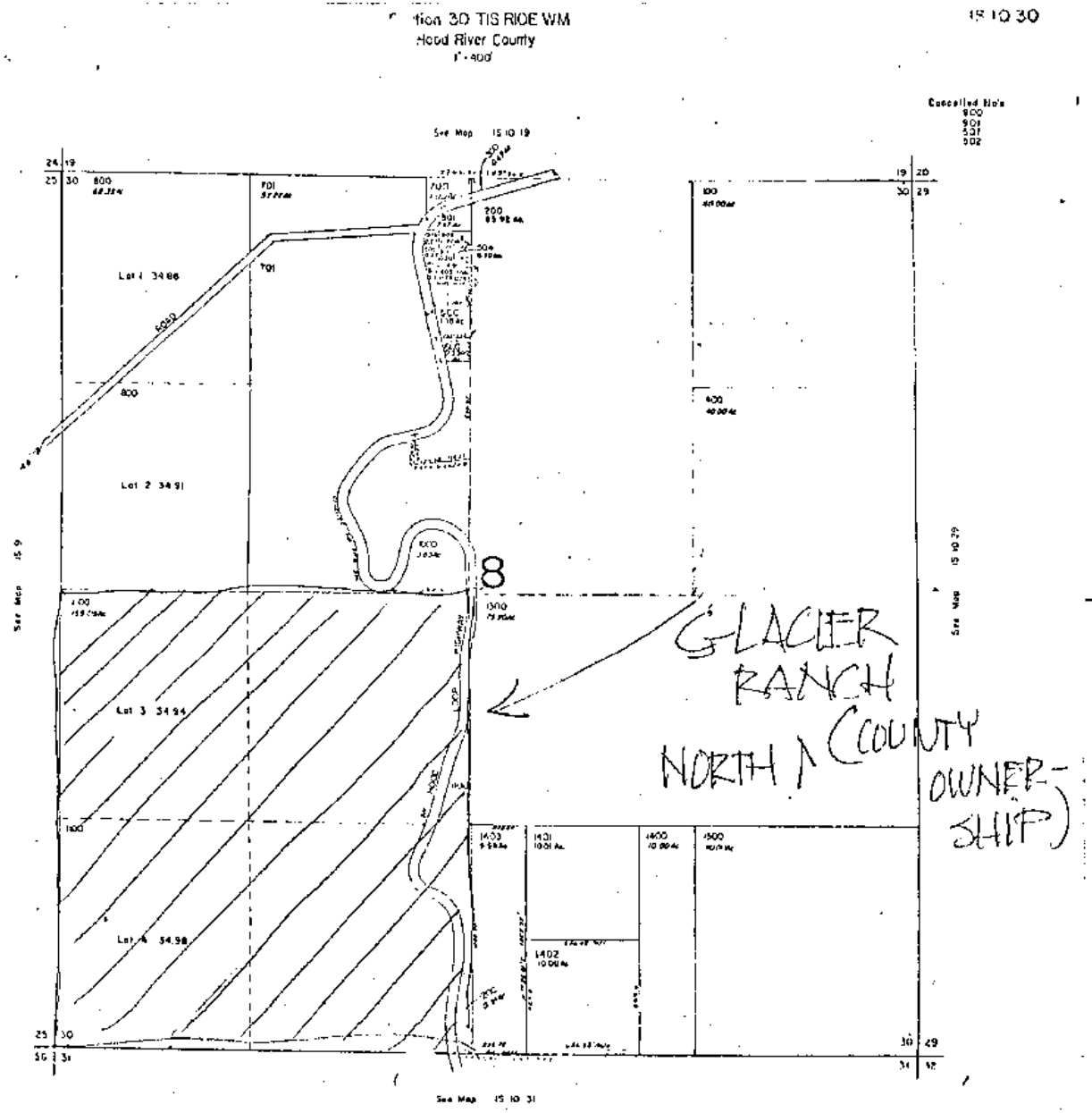

NATURAL AREAS
INDEX MAP
R.7E.
R.8E.
R.9E.
R.10E.
R.11E.
COLUMBIA RIVER
Ruthton Point
Starvation Creek State Park
Cascade Locks
Mt Defiance
MT. HOOD
Green Point Mtn.
Tomlike Mtn.
#5 Unnamed (Fir Mtn.)
Middle Mtn.
Bald Bu.
EAST MULTNOMAH S.W.C.D.
MULTNOMAH CO.
NORTHERN WASCO CO. S.W.C.D.
T'L
Wamic Lake
#3 Tanner Butte
Chinidere Mtn.
FOREST
DIVISION
Table Mtn.
Sawtooth Mtn.
Lost Lake Bu.
#2 Parkdale Lava Beds
Parkdale
#4 West of Rimrock Mtn.
MULTNOMAH CO.
CLACKAMAS CO.
Sentinel Pk.
Shellrock Mtn.
#1 Crystal Springs Creek
#1 Glacier Ranch
CENTRAL WASCO S.W.C.D.
Hood River S.W.C.D.
HOOD RIVER CO.
LOCATION MAP
NORTH CLACKAMAS S.W.C.D.
Bald Mtn.
MT HOOD
NAT'L FOREST
WASCO CO.
#6 Elk Meadows
INDEX MAP
NATURAL AREAS
HOOD RIVER COUNTY
1983
JUNE 1973
SCALE 1:253,440
CLACKAMAS WASCO CO.


T16
Approximate location
Exception Area
(----------)
19
30
NORTH
GLACIER RANCH/
CRYSTAL SPRINGS
(NATURE CONSERVANCY)
RIDE
MAP #1
GLACIER RANCH/
CRYSTAL SPRINGS

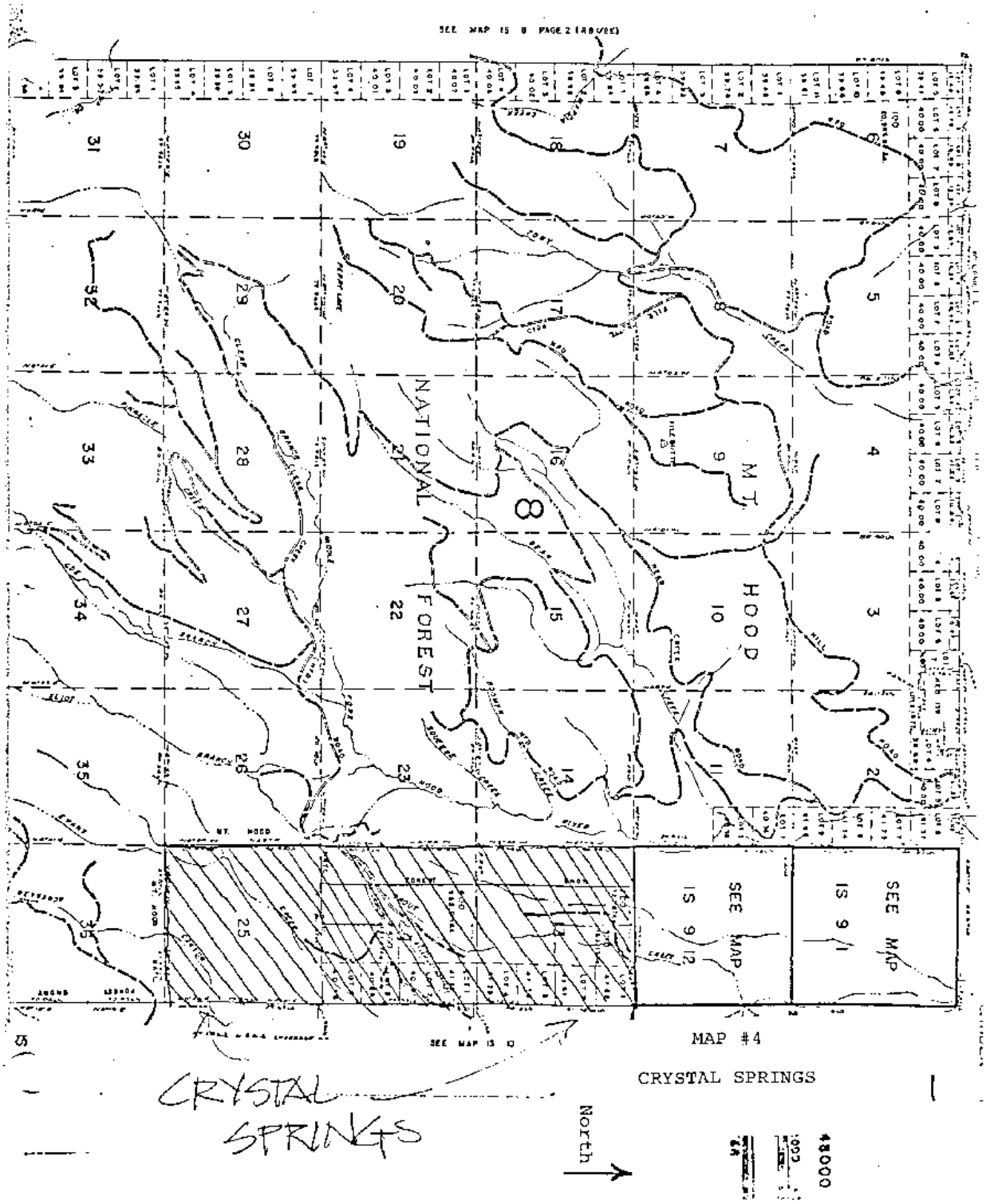


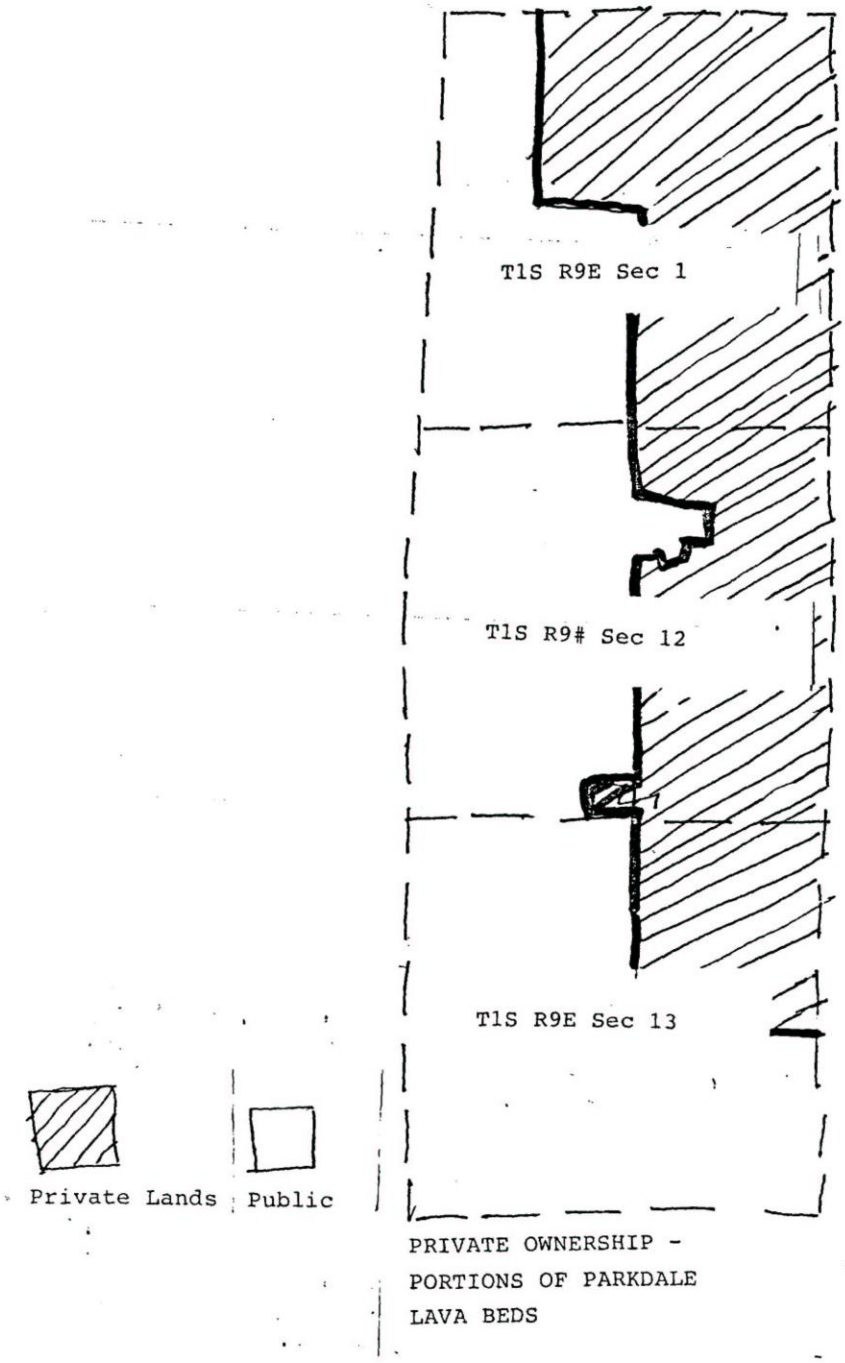
MAP #2

GLACIER RANCH



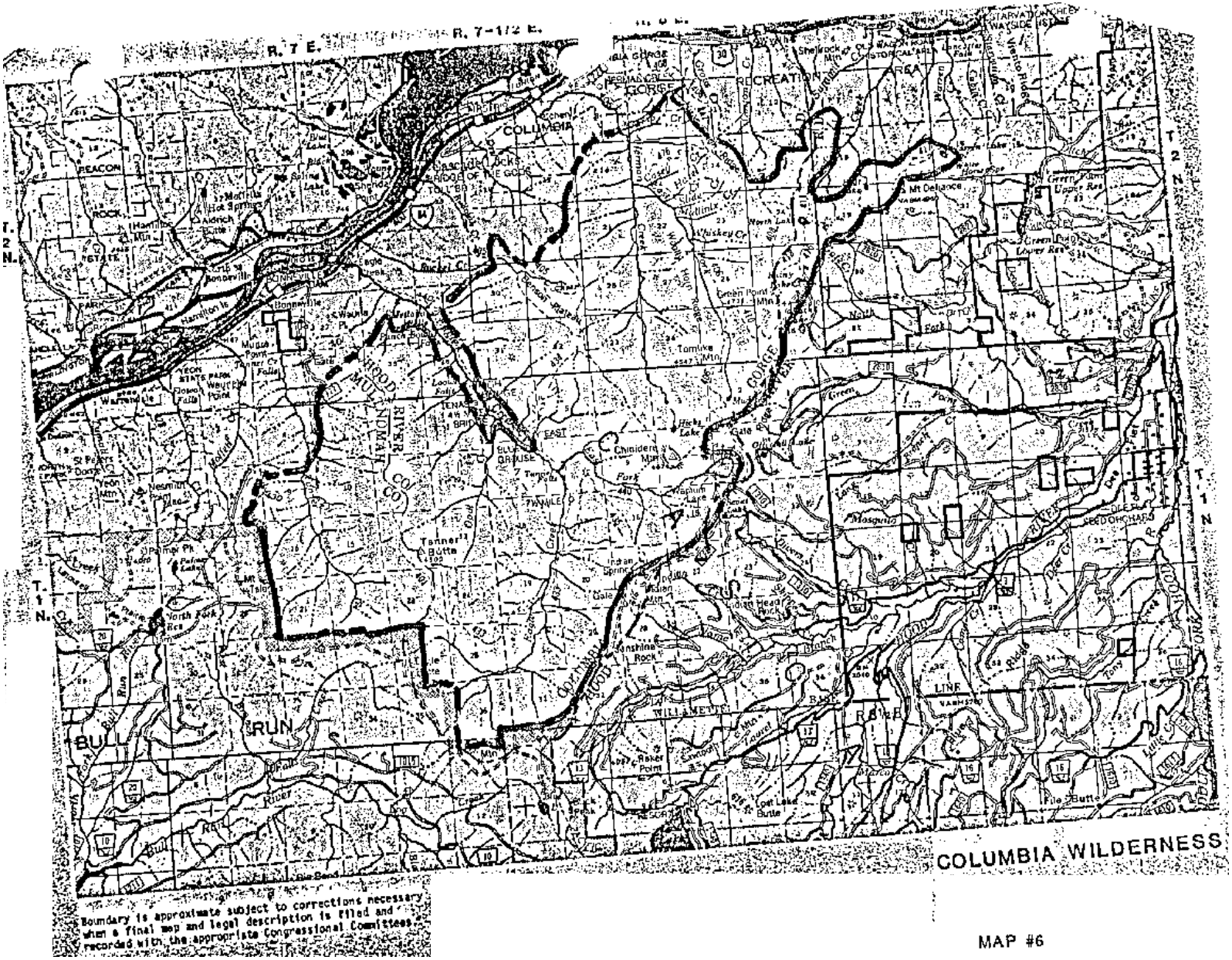
MAP # 3
GLACIER RANCH


SEE MAP IS 8 PAGE 2 (ABOVE)
NATIONAL FOREST
MT. HOOD
SEE MAP IS 9 12
SEE MAP IS 9 11
SEE MAP IS 10
MAP #4
CRYSTAL SPRINGS
CRYSTAL SPRINGS
North
48000



PRIVATE OWNERSHIP -
PORTIONS OF PARKDALE
LAVA BEDS

MAP #5


R. 7 E.
R. 7-1/2 E.
COLUMBIA
GORGE
RECREATION
AREA
COLUMBIA WILDERNESS
Boundary is approximate subject to corrections necessary when a final map and legal description is filed and recorded with the appropriate Congressional Committees.

MAP #6

APPENDIX "A"

NATURE CONSERVANCY DEFINITION

The term "Nature Conservancy" is used several times within the Goal 5 Sections primarily discussing Fish and Wildlife Areas and Habitats and Ecologically and Scientifically Significant Natural Areas. The term "Nature Conservancy" is somewhat an abbreviation and refers to a more elaborate process and a specific document commonly called the "Blue Book" that was prepared in 1978 by the Oregon Natural Heritage Program of the Nature Conservancy for each county in the State. Basically, the "Blue Book" contains a summary of Natural Areas and other relevant information regarding Natural Sites in Hood River County. The "Blue Book" was prepared in fulfillment of a contract between the Nature Conservancy and the Land Conservation and Development Commission. If incorporated into the County's Comprehensive Plan, it will satisfy certain requirements of LCDC Goal 5.

The following is the formal title of the "Blue Book" which is available in the Hood River County Planning Department: "Oregon Natural Areas; Ecological Needs, Candidate Areas, Protection Programs; Hood River County Data Summary"; prepared by the Oregon Natural Heritage Program of the Nature Conservancy, April, 1978.

Information in the document is continually being updated by the Nature Conservancy. Hood River County, per the LCDC request, has updated the above Goal 5 sections to include information available December, 1982.

APPENDIX "B"

GLACIER RANCH and
COUNTY LAND ADJOINING MT. HOOD NATIONAL FOREST

West Slope and Crest, Cascade Range Province
Acres undetermined . Hood River County
*Sec. 19 or 30, T 1S, R 10E HR 8 and 12
Sec. 13, 24, 25, T 1S, R 9E

DESCRIPTION

This mixed coniferous second growth forest stands on the north slope of Mt. Hood in a "weather shadow." Since it is in a transition zone between the west and east Cascade Provinces and the elevation is variable, a diversity of flora and fauna exists. Significant features include rare orchids, springs and the historic Toll Gate Wagon Trail.

NATURAL ELEMENTS

Class

VC Mixed conifer forest with large Douglas fir and large ponderosa pine dominating. A few 30 - 40 foot western red cedar and mountain larch scattered throughout. Grand fir and white fir are smaller and fairly abundant in the understory. Shrubs include hazelnut, vine maple and golden chinquapin. The herbaceous layer is very rich with some notable plants including the uncommon broad-lipped tway-blade and three other orchids reported on the site. Common plants include star-flowered solomon's seal, heart-leaved arnica, wild ginger, pine woods horkelia and vanilla leaf.

WH A small spring emerges from dense vegetation on the site.

AR The site has a rich variety of wildlife including black bear, elk, cougar, deer and mountain beaver. Elk are using the spring area as a wallowing place.

PS Three species of rare orchids are reported but unverified for the site. They are fairy-slipper orchid, mountain lady's slipper, and phantom orchid.

HV The old Toll Gate Trail goes through the site to Cloud Cap and the trail toll station is still intact. Vacationers from Portland used to take the steamer to Hood River and travel two days by wagon up to Cloud Cap on Mt. Hood.

DISTURBANCE

The forest is excellent second growth and was probably logged more than 100 years ago. The old toll road is grown over in many places, but it can still be seen. A few fire-scarred trees are present and the area may have burned out the understory 50 - 75 years ago. Otherwise the area is virtually undisturbed. No weedy species were observed on the site. Numerous signs read

* See Glacier Ranch/Crystal Springs and a. Location: for updated information.

"Wildlife Refuge - Keep Out." The trees are of harvestable age and logging may be under consideration.

NATURAL AREA QUALITIES

This second growth forest, owned by the county, is in excellent condition and the integrity of the area could be easily maintained since the site is bounded on one side by national forest and on another by Glacier Ranch. The ranch is managed as a tree farm and a living museum of natural history where native flora and fauna are protected and cultivated. The combination of natural and historic features on this site make it worthy of recognition.

USE COMPATIBILITY

Restricted use is recommended for the springs area only at the present time to protect the uncommon orchid found there. Other areas within the site may require restricted use if the other rare orchids are located. For educational purposes, a primitive trail could be maintained through the site, but usage should be restricted to small numbers to protect the fragile understory. The site is valuable for scientific study and as a haven for wildlife.

APPENDIX "C"

FORESTRY DEPARTMENT

KENNETH GALLOWAY, JR.
FOREST MANAGER

918 18th STREET
HOOD RIVER, OREGON 97031

PHONE: (503) 386-2616

March 3, 1983

TO: MIKE NAGLER

SUBJECT: SECTIONS 13, 24, 25 1S 9E AND SW¼ SECTION 30 1S 10E

Dear Mike,

In reference to Goal 5 at Glacier Ranch, there are several errors by the Nature Conservancy. They are detailed below as well as forest management activities of Hood River County.

Natural Elements: The stand is predominantly brush or patches of 175+ year old Douglas fir, Grand fir and Lodge Pole pine stands. There is a minimum amount of Western Hemlock, Red Cedar, Western Larch, Western White pine and least of all Ponderosa pine. The brush fields are a result of a fire in the early 1900's.

The Toll Gate road mentioned is the old Cloud Cap Road that cannot be traveled by vehicle and presently has a waterline to Glacier Ranch on it. As presently written Hood River County still retains an easement on this road for forest Management purposes.

Disturbances: In the 1950's a County Timber Sale was removed in section 13 - 1S - 9E and some roads were constructed. The wildlife signs by the best estimate were placed by Mr. Bob Lee on his property located in the NW ¼ of section 30-1S-10E. He trespassed on other owners including Hood River County with signs. These signs were removed from Hood River County land in the late 60's and mid 70's. (reference to District Attorney in 1970's on this matter). In 1977 Hood River County via purchaser removal, with a clearcut, removed Doe Creek timber sale from SW ¼, section 30 1S-10E and constructed the road the same year in the same area. In 1978 after the extremely high winds of that winter Doe Creek salvage was removed from the same area and SE ¼ of 25-1S-9E. In 1979 Hood River County though a timber sale started clearcut removals in section 13 and 24 with Elk timber sale. Logging was completed in 1980. Also in 1978, 79 and 80 Hood River County removed blowdown and beetle killed timber in section 13, and 24 through assorted smaller timber sales. In 1981 Hood River County removed a timber sale from SW ¼ section 30-1S-10E and SE ¼ section 25-1S-9E with the Evans Creek Timber Sale the main haul road was extended to the inner part of section 25-1S-9E With this sale we

cooperated closely during sale preparation, road construction, and logging with Mrs. Kate McCarthy to minimize impact to the water system mentioned above.

There has been minimal if any change in the water source. In 1984 the Jaguar timber sale will be removed from the SW ¼ of section 30-1S-10E. This sale was sold in 1982.

Reforestation activities started in 1978 with site conversion in section 13-1S-9E. This has continued each year with areas being planted to Douglas-fir each year. Chemical applications to a brushfield with adequate number of trees per acre have occurred each spring and fall since 1980 to all of the area mentioned above.

The Glacier Ranch is not the only neighbor other than the U.S.F.S. a check of the records will indicate this gross misstatement.

In conclusion this total area is being actively managed taking into consideration water, and wildlife. This includes removal of a renewable resource so it can be re-established and also take nonproductive or under productive, yet capable land of producing conifer forest growing into forest for management.

Sincerely,

Kenneth Galloway, Jr.
County Forest Manager

KG/pb

East Slopes Cascades Province
404.7 ha (1000 acres)
TIS, R9E, parts of S1,2,11-14,23
Ownership: U.S. Forest Service managed area
(Special Interest-Geological)

PARKDALE LAVA BEDS
Hood River County
HR-16

DESCRIPTION

The Parkdale Lava Beds are a rough, quite young (240 years) lava flow near the town of Parkdale, Oregon. The elevation varies sharply from 549-884m (1800-2900 ft.). The area is managed as a Special Interest Area by the Mt. Hood National Forest.

ELEMENT OCCURRENCES

6.01.000 Geologic--Lava Flow

The Parkdale Lava Beds are a relatively undeveloped area; only a few trails, camping, and picnic facilities are planned by the Forest Service. Hiking is extremely difficult on the rugged surface. Bare rock comprises over 90% of the surface area with only a few scattered trees and shrubs along gullies and ravines where moisture collects. These trees are often deformed by the strong winds and extreme conditions on the lava fields. Species present include: Chinquapin (Castanopsis sp.), vine maple (Acercircinatum), Oregon white oak (uercus garryana), and Ceanothus sp. Trees include small Douglas fir, white pine, and ponderosa pine. The rock is porous and springs emerge at the toe of the flow, outside the boundaries of the Special Interest Area. Ranchers and orchardists use this water.

THREAT TO ELEMENT OCCURRENCES

The Special Interest Area is protected as a managed area. The spring area at the toe of the lava flow is in danger of disruption by a rock-crushing operation which may destroy the quality of the spring water.

DISCUSSION

The Parkdale Lava Beds are a possible candidate to fill RNA cell need EC-17* "low elevation recent lava flow with representative vegetation". The vegetation, however, may not be sufficiently developed on the flow to match this need. Cryptogam species may be very common and diverse, but seed plant cover is very low at present. The plant community fits loosely into Roach's classification type of Psendotsugetum-abietum grandis according to species composition**.

* Research Natural Area Needs in the Pacific Northwest, USFS, 1975.
** Natural Vegetation of Oregon and Washington, USFS, 1973.

APPENDIX "D" (2/2)

HOOD RIVER COUNTY

REF. NO.	SR	REFERENCE NAME	LOCATION T-R-S	PS	ELEMENT NO.	VO	ELEMENT NAME
HR-8		Glacier Ranch	1S, 10E 19, 30	3	3.02.000 4.11.110 6.05.000	V V V	Lilium washingtonianum Cold spring Research/education potential
HR-12		Crystal Spring Creek	1S, 9E 13, 24, 25	3	1.05.630 4.11.110	V V	Mixed conifer Cold spring
HR-13		Elk Meadows	3S, 9E NW¼ 1 2S, 9E SW¼ 36	3	1.05.310 1.25.117 3.04.700 6.06.000	V V V V	Mountain hemlock Wet meadow, sedge dominated Wildflower area Recreation/open space/scenic features
HR-16	+	Parkdale Lava Beds Geological Area	1S, 9E 11-14, 23	2	6.01.000	V	Geologic feature
HR-17		Tanner Butte Mountain Goat Area	1N, 7E	3	2.02.809	V	Mountain goat
HR-20		Ruthton Point	3N, 10E 28	3	1.05.621 2.02.636 5.14.500	V V V	Ponderosa pine-Douglas fir forest Osprey Waterfowl wetland
HR-21		Wells Island and Cove	3N, 10E 26	3	1.05.913 4.04.450 5.14.500	V V V	Wetland forest River island Waterfowl wetland
HR-24	+	Starvation Creek State Park	2N, 9E NW¼ NW¼ 3	2	2.02.417 4.04.460	V V	Larch Mountain salamander Waterfall
HR-25		Colorado Gorge, Chinidere Mountain	1N, 8E W½ 10	3	3.04.100	NV	Western juniper, northwest periphery of range
HR-26		West of Rimrock Mountain	1S, 10E 16	3	1.05.621 1.05.630 1.05.911 1.05.913	V NV V V	Ponderosa pine-Douglas fir forest Mixed conifer Oregon white oak/grassland Wetland forest

KEY: SR=Site Report

PS=Protection Status
1-preserved
2-legally protected
3 -unprotected

VO=Verification of Occurrence
V –verified
NV-not verified

VICTOR ATIYEH
GOVERNOR

The Natural Heritage Advisory Council

1445 STATE STREET, SALEM, OREGON 97310 PHONE 378-3805

OREGON STATE
LAND BOARD

VICTOR ATIYEH
Governor

NORMA PAULUS
Secretary of State

CLAY MYERS
State Treasurer

September 3, 1982

Ms. Wendy S. Ott
Assistant Planner
Hood River County Planning
and Community Development
Hood River County Courthouse
Hood River, OR 97031

Dear Ms. Ott:

As mentioned to you by Mr. John A. Mills, a member of our Council, we delayed until now in responding to your letter of July 9 regarding "West of Rimrock Mountain" pending an inspection of the area by Mr. Mills and myself. On August 27 we did visit the area, taking with us information on the site from files of The Nature Conservancy. Although time did not allow a complete inspection of the area, we saw enough to confirm the general nature of the assessment made by Lynn Cornalius of TNC in July of 1977. The site represents a number of plant communities which show little if any disturbance by man. This was most unexpected to me considering the status of surrounding lands. It is the kind of site we want to see preserved as Natural Heritage Conservation areas.

The elements found here are not unique to this one site, but the site could represent the most outstanding assemblage of these particular elements on the eastern slopes of the Cascades in northern Oregon -- all in one section.

While I cannot speak for the State Land Board, I can say that like the Natural Area Preservation Advisory Council that preceded us, we are very much interested in this site.

Sincerely,

David B. Marshall

David B. Marshall
Chairman

VICTOR ATIYEH
GOVERNOR

Department of Land Conservation and Development

1175 COURT STREET N.E., SALEM, OREGON 97310-0590 PHONE (503) 378-4926

July 7, 1983

Mike Nagler, Director
Planning and Community Development
Room 101, County Courthouse
Hood River, OR 97031

Dear Mike:

I have received the four packets of information on natural area zones, the Dillard property, historic structures, and the historic preservation ordinance.

The two proposed natural area zones look good. They clearly represent the Goal 5 Rule's (3A) and (3C) program options with respect to the Parkdale Lava beds. As you know, the County's draft ESEE analysis and other information available to me leads me to believe that alternative 1 representing the (3A) option is the appropriate choice for this particular area and more specifically, is necessary for compliance with Goal 5. Either zone looks fine for the remaining natural areas.

Regarding the Dillard property, the Commission's October 15, 1981 report on the County found that the rezoning of specific parcels after plan submittal is a quasi-judicial action not properly subject to the Commission's review in an acknowledgment request. Because of the small (2.86 acres) size of the parcel and existing restaurant thereon, this area may be considered to be committed to nonforest use. The decision as to the most appropriate nonresource planning and zoning for the area is a local matter. The requirements of LUBA case 81-093 regarding "alternatives" and "compatibility" are based on the County's taking of a "needs" as opposed to a "committed" exception for the area. There is adequate information available in the material submitted to me to show commitment for the area. Therefore, the County needs to do no more work on this matter. If you would like me to address the County's "needs" findings, I can do that as well, although the result is the same.

The information on historic structures and the historic preservation ordinance look fine--good work!

Sincerely,

Katherine Handwerg

Katherine Handwerg
Plan Reviewer

cc: Brent Lake

KH:af
4659B/3B

GOAL 5: OUTSTANDING SCENIC VIEWS AND SITES

A. Introduction: The following scenic views and sites are noted throughout the County: (1) City/Westside: Columbia Gorge, Indian Creek and Hood River Gorges; (2) Central Valley: Viewpoint, Hanel's Mill; (3) Mt. Hood: Mt. Hood and visual resource areas. Scenic roads: Cloud Cap, Highway 35, Old State Highway and Bennett Pass Road; and (4) Columbia Gorge: the Columbia River Gorge.

Possible uses that could conflict with maintenance of these views are discussed individually below.

1. Columbia Gorge, City/Westside area is zoned Columbia Gorge Overlay, which permits all the uses in the base zone as long as certain limitations on use are met. These include vegetative buffers, setbacks, mining and forest practices where not visible and/or using only careful management methods. Possible conflicts include: feedlots or other high intensity commercial agricultural enterprise, clear-cutting, high density residential development, and utility facilities. The majority of the Gorge area in the City/Westside is zoned FR or EFU within the Columbia Gorge Overlay Zone, which have large lot sizes and all uses listed above are either allowed with a Conditional Use Permit, subject to limitations of the Columbia Gorge Overlay Zone, or are not permitted at all (high density residential developments and clear cutting). Any potential conflicting uses are governed by strict limitations which will not seriously affect the scenic values of the Gorge (see Maps #1 and 2).

2. Indian Creek and Hood River Gorges: These areas are designated Environmental Protection and Forest and are zoned FR with an FP Overlay. Possible conflicts include: removal of riparian vegetation (forestry); sand and gravel extraction, commercial utility facilities, or dense recreational development. Plan strategies (County Policy Document) recognize the special visual qualities of these areas and ensure their protection by calling for strict enforcement of the Oregon Forest Practices Act and policies for the Environmental Protection Designation say that only selective cutting within 100 feet of the stream is permitted. Low intensity uses that do not require excavation, and utilities that do not substantially alter the stream flows are also permitted. Policy states that these areas are to be maintained for their scenic recreational and water uses.

   The Floodplain Combining Zone has been updated to include provisions regarding selective cutting of timber, building setbacks, etc. (see Maps #1 and 2).

3. The Viewpoint near Hanel's Mill is located approximately one mile north of Neal Creek Road. It is a large paved turnout on the west side of the Highway that is well marked when traveling from the north. At the viewpoint is a location map that explains the detour of Highway 35 made necessary by flooding in 1980 and points out how to get to campgrounds which are located along the detour. The site is located on State property.

The viewpoint offers excellent views of both Mt. Hood and Mt. Adams as well as an expanse of the Upper Hood River Valley. The area is mostly wooded hillsides, with orchards in the Valley below. The Plan designates the area as "Farm" and it is zoned EFU. No conflicting uses are identified, as only agricultural and forest practices or uses compatible with these practices are allowed in the area. Also, the County has adopted Land Use Designations and Standards to protect the viewpoint; see Map #3.

To protect the public interest in, and access to, outstanding scenic views and sites such views and sites should first be inventoried. If no conflicting uses are identified, such views and sites should be managed so as to preserve their original character. The Citizen Advisory Group has identified the site called "The Viewpoint" approximately one mile north of Hanel's Mill on State Highway 35 as possessing an outstanding view.

4. The Mt. Hood area and visual resource area: Most of the area is either not given a County designation because it is federal land or is designated and zoned Forest. The designations given in the FES include: wilderness, environmental protection, wilderness study, roaded and unroaded recreation, developed recreation and general forest. Descriptions of the uses in these designations and policies associated with them are given on pages 134-141 of the FES.

   The County's Policies, Strategies, etc., regarding federal land management plans are noted under Goal 2 - Federal Lands. No conflicting uses are noted; see Map #4.

5. Scenic Roads in the Mt. Hood Area: All these roads are shown on the map on page 73 of the FES and Map #4.

   a. Cloud Cap Road goes from Clear Creek Road to the Cloud Cap-Tilly Jane Recreation Area and Historic Site, passing through the Cooper Spur Recreation Area. I t is a fairly wide, winding gravel road approximately 10 miles long. There are several viewpoints with spectacular views of Mt. Hood-Inspiration Point, one of the viewpoints, offers a view of a waterfall as well as the mountain. There are no conflicting uses to its use as a scenic road (2A site).

   b. Highway 35 is the major highway that runs around the south part of Mt. Hood. It follows the East Fork of the Hood River and offers views of Mt. Hood and Mt. Hood National Forest. No conflicting uses are identified (2A site).

   c. Old State Highway is also called Clear Creek Road and runs south from Parkdale and joins Cloud Cap Road and Highway 35. All along this road are views of Mt. Hood as the landscape changes from orchard use to

forest. Although this road is used for logging to a certain extent, no conflicts to its designation as a scenic road are noted (2A site).

d. Bennett Pass Road is a very narrow winding road that comes off of Highway 35, goes by Bennett Pass and rejoins the highway approximately 10 miles to the south. This road is used by logging trucks which possess a problem for sightseers, especially those in larger recreational vehicles. Signs posted at both entrances onto the road warn travelers of the adverse road conditions.[1]

6. The Columbia Gorge is a magnificent scenic watergap with steep rock faces and forested slopes that have developed over centuries of natural weathering. Its value is both scenic and economic, for it is the great beauty of the Gorge which attracts tourists that bolster the local economy. Although much of the Gorge is under state and federal ownership, the County is interested in protecting this natural asset on those lands under its jurisdiction.

It is extremely difficult to isolate any one or even several scenic views and natural areas within the boundaries of the Columbia Gorge area. The landscape exhibits a wide variety of scenic features including peaks, ridges, cliffs, plateaus, rock outcrops, talus slopes, creeks, waterfalls, lakes and stands of trees varying from groups of old growth to large areas of young saplings. The ever changing hues of light playing upon the fickle moods of the Columbia River offer the Columbia Gorge traveler a captivating experience not easily matched.

The Columbia River Gorge Commission of Oregon has prepared a Resource Management Program for the Gorge, after much coordination with local, state and federal agencies, and private interests. This program is a coordinated set of guidelines for the use of the Gorge, which begins at the confluence of the Sandy River and ends at the mouth of the Deschutes River. It is recommended that local government implement these guidelines.

The Columbia Gorge area of concern, as determined, is shown in general on Maps #1, 2, and 5.

For additional information regarding Public Attitudes on Land Use in the Gorge, see Appendix "A".

B. Conclusions and Observations: Findings:

1. The Columbia River Gorge area consists of special qualities, namely: a unique and diverse beauty, significant fish and wildlife habitat, diverse recreational opportunities, hydroelectric power generation, a significant transportation corridor, and tourism attraction.

[1] U.S. Forest Service personnel (Parkdale Ranger Station) conversation 7/1/82.

2. Because of the overall high scenic quality of the Columbia Gorge it is impossible to isolate specific scenic areas.

3. The entire Columbia Gorge is considered by many to be of great scenic value.

4. The Citizen Advisory Group will need to help identify outstanding views and sites.

5. Where conflicting uses have not been established or needed, management guidelines may be written for the protection of outstanding views and sites.

6. Adopt recommendations proposed in B.

C. Recommendations:

1. Add the above information to the County Background Document.

2. Add the following Strategies to the Countywide Policy Document under Goal 5, Outstanding Scenic Views and Sites:

   a. The County has identified uses that conflict with the following scenic views and sites and will designate them as Scenic Resources within the Plan: (1) City/ Westside Planning Area; Columbia Gorge, Indian Creek and Hood River Gorges; (2) Central Valley Planning Area; "The Viewpoint"; and (3) the Mt. Hood Planning Area; Mt. Hood and Visual Resource Areas (on federal land) and the following Scenic Roads: Cloud Cap, Highway 35, old State Highway (Clear Creek road) and Bennett Pass Road.

   b. Support the U.S. Forest Service designation of Cloud Cap, Bennett Pass, Highway 35 and Old State Highway within the Mt. Hood Planning Area as Scenic Roads on both private and federal lands. They shall be designated in the Plan as Scenic Roads and the County will develop implementing measures to protect "Scenic Roads" under the County's jurisdiction by December, 1984.

3. The Planning Commission has developed and adopted an Environmental Protection Plan designation and an Environmental Protection Zone. The Floodplain Zone has been updated to include Environmental Protection criteria. Adopt the above designation and ordinance revisions.

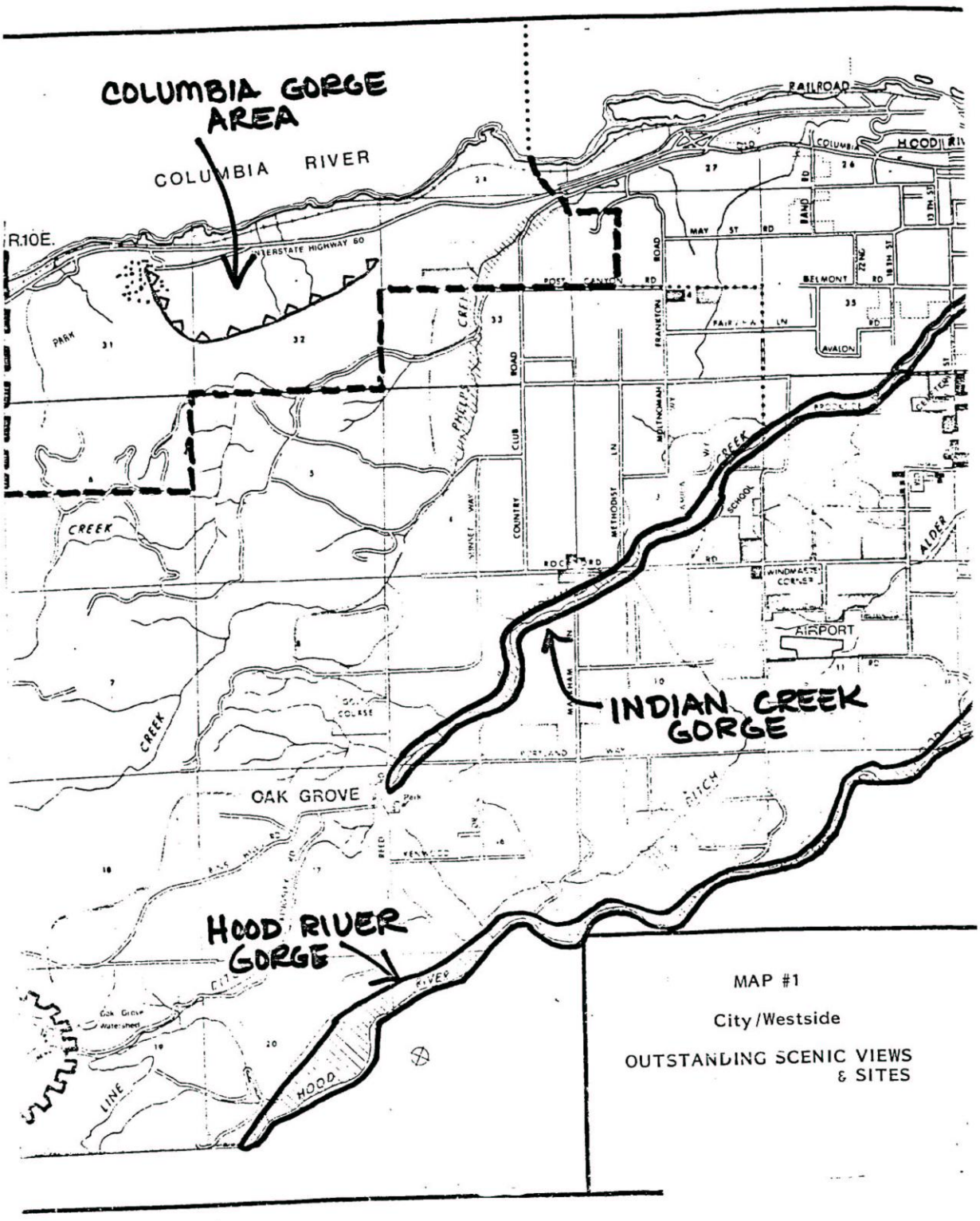
GOAL 5: OUTSTANDING SCENIC VIEWS & SITES:

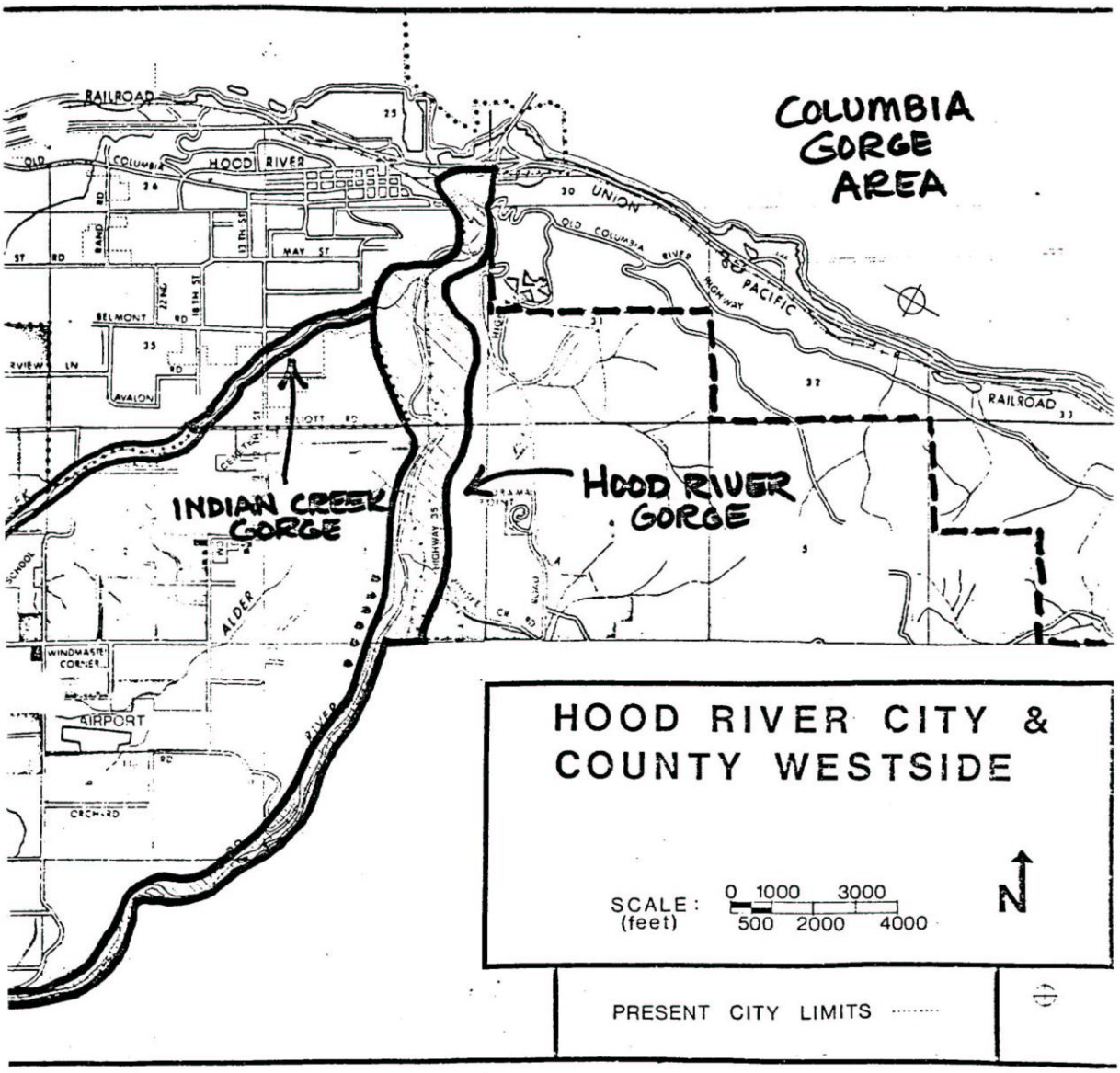
For details regarding Wells Island, see Goal 5 Evaluation, Fish & Wildlife Areas & Habitats; Wells Island, in this County Background Report, the County Policy Document and the County Plan & Zoning Maps. Also, see the following Appendices in the County Background Report:

1. Appendix "A", Comprehensive Plan & Zone Designation, Wells Island.

2. Appendix "B", Wells Island Wildlife Monitoring Program.

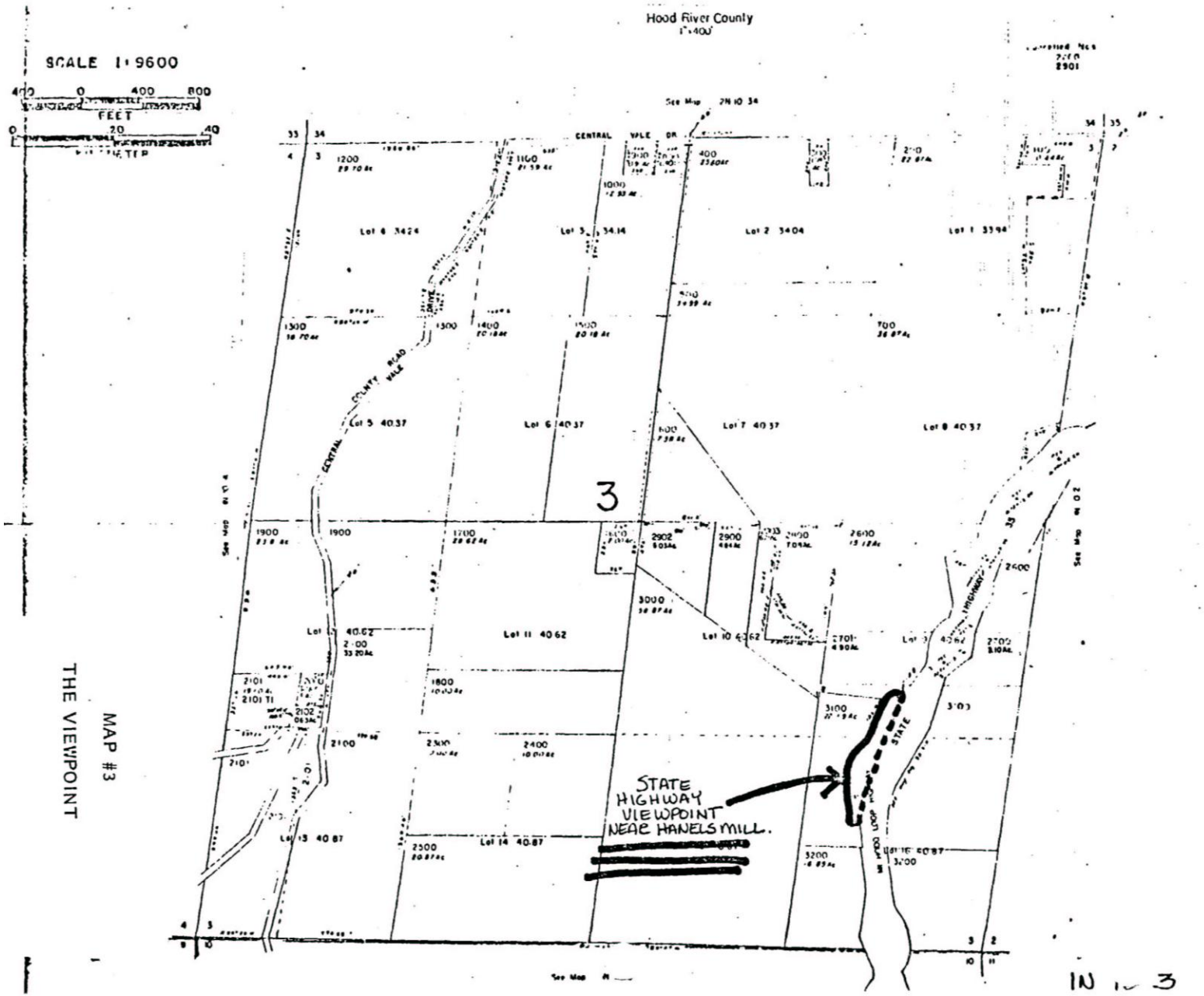
3. Appendix "C", Findings of Fact, Growth of Board Sailing in Hood River.

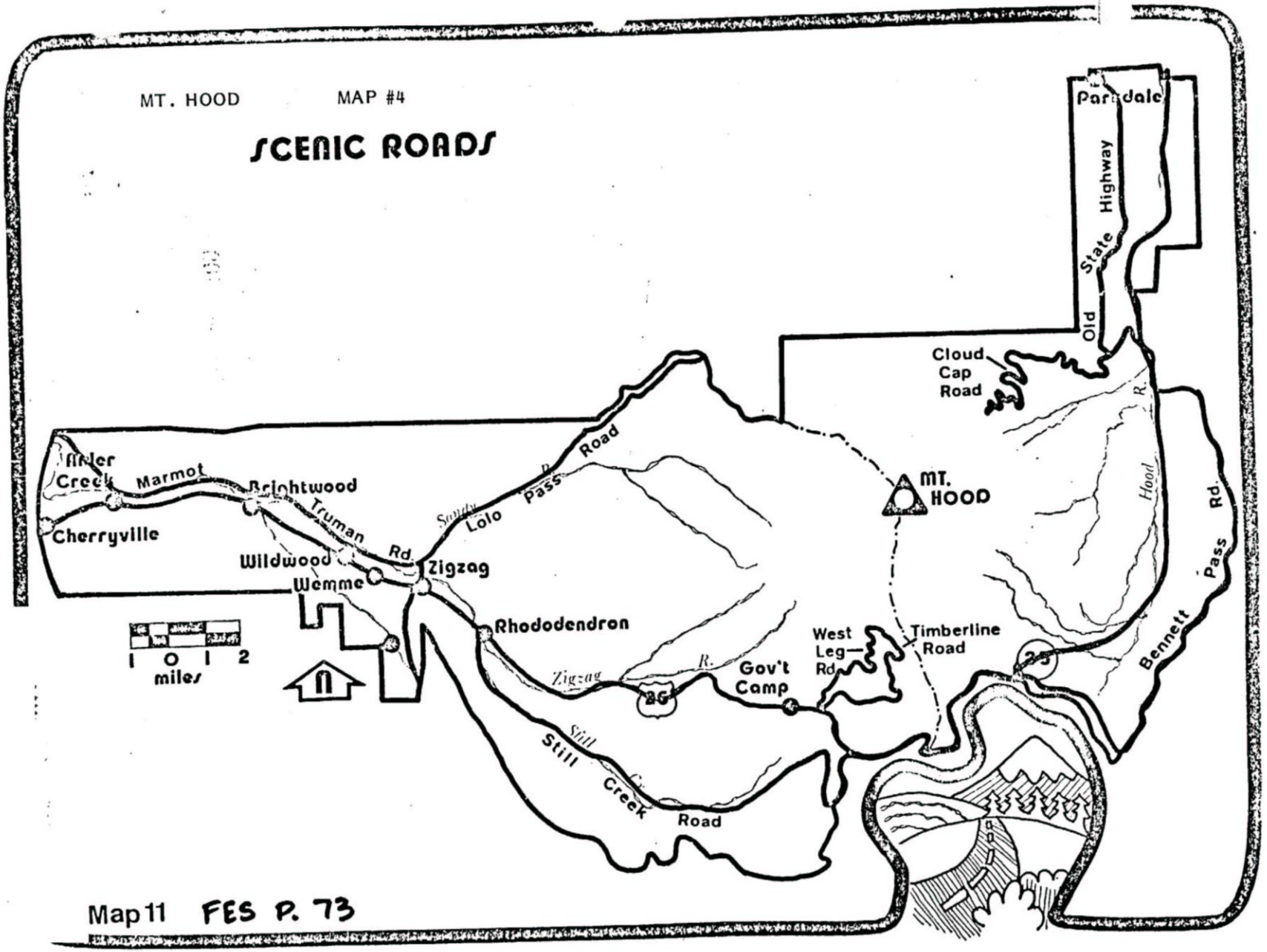

COLUMBIA GORGE AREA
COLUMBIA RIVER
R.10E.
INTERSTATE HIGHWAY 80
RAILROAD
INDIAN CREEK GORGE
HOOD RIVER GORGE
OAK GROVE
AIRPORT
MAP #1
City/Westside
OUTSTANDING SCENIC VIEWS & SITES

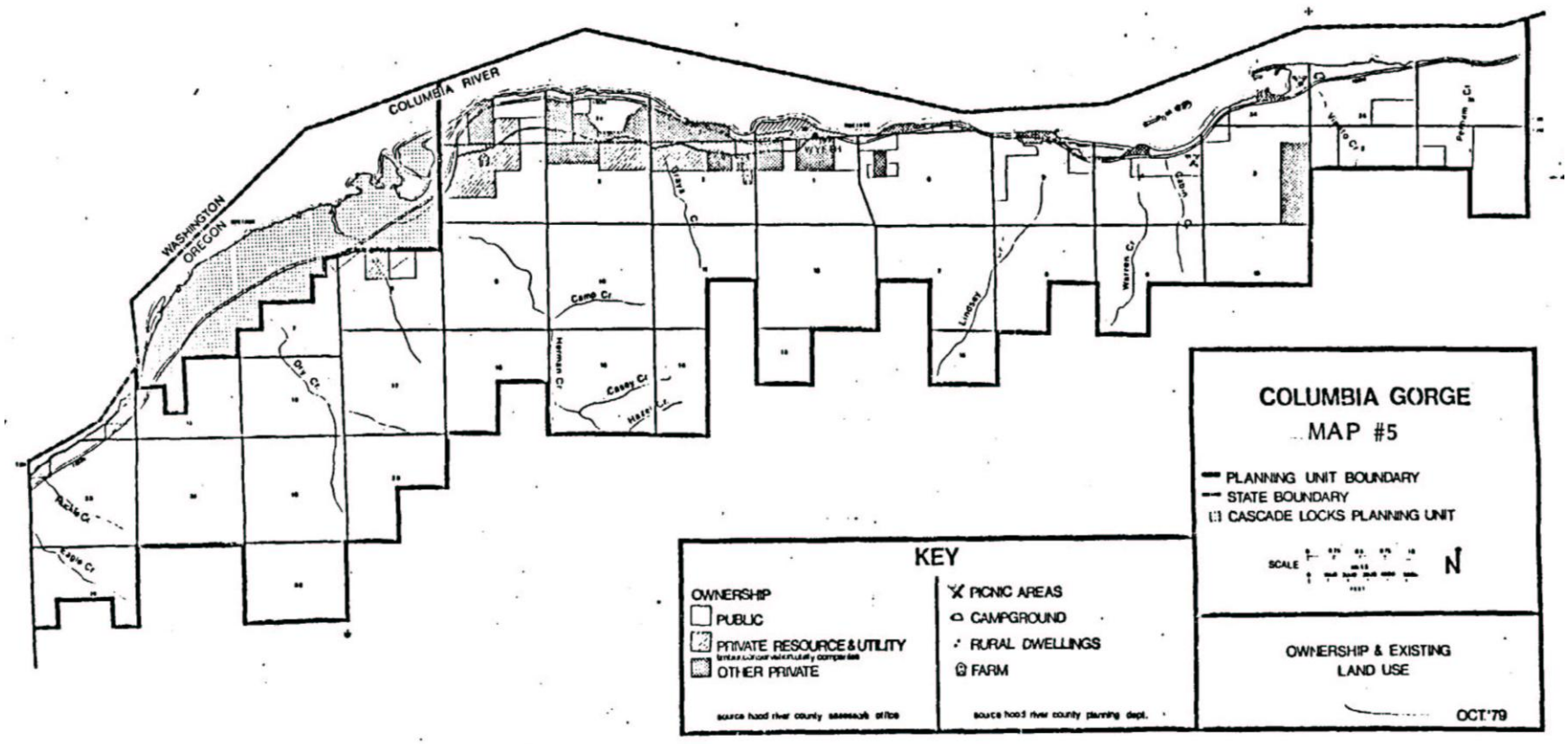


MAP #2

OUTSTANDING SCENIC VIEWS & SITES


Hood River County
SCALE 1:9600
FEET
THE VIEWPOINT
MAP #3
STATE HIGHWAY VIEWPOINT NEAR HANELS MILL.
3


MT. HOOD
MAP #4
SCENIC ROADS
Parkdale
Old State Highway
Cloud Cap Road
MT. HOOD
Hood R.
Bennett Pass Rd.
Timberline Road
West Leg Rd
Gov't Camp
26
Rhododendron
Zigzag
Zigzag R.
Still Creek Road
Lolo Pass Road
Zigzag
Wemme
Wildwood
Truman Rd.
Brightwood
Marmot
Cherryville
0 1 2
miles
Map 11 FES P. 73



A larger scale map is available for review in the Hood River County Planning Department.

APPENDIX "A"

PUBLIC ATTITUDES ON LAND USE IN THE GORGE:

RESULTS OF COLUMBIA GORGE QUESTIONNAIRE

The Planning Staff has just finished tallying the returns from the Columbia Gorge Questionnaire which was distributed to all Hood River County households several weeks ago. The following information summarizes the results of the survey.

Four hundred sixty-eight questionnaires were returned to the Planning Department which represents about 7.8% of the total number distributed. Areas showing the higher return rates were Cascade Locks, Odell and the Westside area. The area breakdown is as follows:

AREA	NUMBER OF HOUSEHOLD RETURNS
City of Hood River	123
Cascade Locks	61
Odell	51
Parkdale	32
Mt. Hood	21
Pine Grove	23
Westside Area	125
Dee	10
Other and Unidentified	22

Fifty-five percent of the County as a whole were opposed to the expansion of residential housing outside the urban growth boundaries of Hood River and Cascade Locks. Eighty percent of the Parkdale respondents were opposed to the residential expansion, but only 43% of the Cascade Locks returns were opposed. Only 46% of the Hood River returns were opposed as well. The households located furthest from the Gorge were the ones most likely to be against residential housing expansion.

COLUMBIA GORGE QUESTIONNAIRE ANALYSIS

One question asked "If housing is permitted, which type should be allowed?" The responses to this question revealed no clear pattern. Most people who answered this question seemed to favor low density housing; 122 people thought single-family dwellings on five acre lots could be permitted; 119 people thought single-family dwellings on 20 acre lots could be permitted; 104 people thought single-family dwellings on 2½ acre lots would be all right. Fewer people favored single-family dwellings on ½ acre lots or in planned unit developments (cluster-type housing).

Seventy-six percent of the returns said the County should approve the State or Federal acquisition of private lands in the Columbia Gorge for scenic protection and/or recreational opportunities if the landowner desired to sell voluntarily. Eighty-four percent of the Westside area respondents were in favor compared to 58% in favor for the Cascade Locks households. All areas gave a favorable response to the question.

Those people who answered "yes" to the question about County approval of government acquisition of private lands for scenic protection and/or recreation opportunities were also asked to answer an additional question. This question asked what should be emphasized in management of the acquired lands - scenic protection or recreation use. A clear majority of the people responding to this question favored a management strategy that would emphasize both scenic protection and the provision of recreation opportunities.

All area respondents overwhelmingly favored scenic protection/open space as the most appropriate land uses for the Columbia Gorge area. In general, outdoor/forest/recreational, rural residential and farm were the next preferred choices.

The respondents generally placed commercial and light industrial as the least appropriate land uses for the Columbia Gorge.

GOAL 5: WATER AREAS, WETLANDS, WATERSHEDS AND GROUNDWATER RESOURCES

A. Introduction:

The following is an inventory of water areas, etc., in Hood River County including the Goal 5 analysis of several sites.

B. General:

The City/Westside area has one existing source of community domestic water, the Oak Grove Watershed. This spring and watershed supplies domestic water to the Oak Grove area. The spring is located on private land, although the surrounding watershed is located on public (County and U.S. Forest Service) lands to the west. Until it is proven that the source of recharge is not related to the surrounding watershed, the County is desirous of protecting the watershed of this and other potential domestic water sources.

The Oak Grove Spring has a water right application approved by the Oregon Water Resources Department to withdraw .33 cfs (cubic foot/second) of water. The spring is located in the northwest quarter of Section 19, Township 2 North, Range 10 East, Willamette Meridian. The spring serves slightly over 70 domestic water customers at present. There exists an adequate quantity of water to meet the anticipated domestic needs of Oak Grove area residents for the planning period.

Cold and Laurel Springs provide domestic water for the City of Hood River and most Westside residents. These springs are located outside of the City/Westside area in the southwest quarter of Section 30, Township 1 North, Range 9 East, Willamette Meridian. The springs are located near the confluence of Laurel Creek and the Lake Branch of the West Fork Hood River. There is a water right filed with the Oregon Water Resources Department for 25 c.f.s. of water from these springs. Two and one-half million gallons of water per day are delivered to the City of Hood River from these springs. While it is anticipated that the capacity of Cold and Laurel Springs is adequate for the domestic water needs of the City/Westside area for the planning period, some adjustments in the water distribution system may be necessary to meet high water demands during the summer months.

Crystal Springs serves the domestic water needs of that portion of the City/Westside area east of the Hood River. These springs are also located outside of the area, in the East Fork Hood River drainage. Crystal Springs are in the northwest quarter of Section 29, Township 1 South, Range 10 East, Willamette Meridian. There is a water right filed for 6.15 c.f.s. of water from the springs. The capacity of Crystal Springs is adequate for the anticipated domestic water needs of the area served by the Crystal Springs Water District.

There are five water districts that serve the domestic water needs of Central Valley residents. These water districts obtain their domestic water from the following sources: Cold and Laurel Springs (SW¼ of Section 30, TlN R9E, Willamette Meridian), Odell

Spring (NW¼ of Section 35, T2N R10E, Willamette Meridian), Parkdale Cold Springs (NW¼ of Section 7, TlS R10E, Willamette Meridian), Crystal Springs (NW¼ of Section 29, TlS R10E, Willamette Meridian) and a diversion from Tony Creek (in Section 25, TlN R9E, Willamette Meridian). Crystal Springs and Parkdale Cold Springs are located outside the Central Valley area. The Oregon Water Resources Department has a record of water rights filed from water districts for the following amounts of domestic water. Cold and Laurel Springs: 25 c.f.s. reserved. Crystal Springs: 6.15 c.f.s. reserved. Odell Springs: 1.0 c.f.s. reserved. Parkdale Cold Springs: 1.5 c.f.s. reserved. Tony Creek diversion: 0.03 c.f.s. reserved. (Source: District Water Master records, The Dalles, 1978.)

The few residences that are in the Columbia Gorge area rely on streams and wells for their domestic water needs. There is no domestic water district in the area. However, the City of Cascade Locks has a permit from the Mt. Hood National Forest for a water withdrawal facility on Dry Creek.

The lakes one acre and larger within the Central Valley area are: Bear Lake (4 acres), Black Lake (7 acres), Green Point Lower Reservoir (13 acres), Green Point Upper Reservoir (32 acres), Hicks Lake (2 acres), Mud Lake (1 acre), North Lake (8 acres), Ottertail Lake (2 acres), Rainy Lake (10 acres), Scout Lake (3 acres), Wahtum Lake (57 acres), Warren Lake (4 acres). As the result of the May, 1978 vote that approved the merger of the Hood River and Farmers Irrigation Districts, the chances that the Green Point Lower Reservoir dam will be enlarged are improved. Enlargement of this dam will enlarge the lower reservoir to the point that Green Point Lower Reservoir and Green Point Upper Reservoir will be merged. The increased storage capacity of the new enlarged reservoir will augment irrigation supplies for lands within the new combined irrigation district (called the Farmers Irrigation District).

The volume of groundwater in the Columbia Gorge area is undetermined at this time. Tapping into this groundwater by wells is presently very limited. Much of the groundwater comes from surface streams upslope that percolate into the permeable stony soils at the base of these steep slopes.

Groundwater resources are little developed in Hood River County because most domestic and irrigation water in the County currently comes from springs off Mt. Hood and surface stream flow. If wells are not concentrated in any one area, there should not be a problem with groundwater depletion. The present concern of the State Water Resources Department is that contamination of groundwater by septic tank drainfields and/or improper well drilling and installation be prevented.

An intensive groundwater survey in Hood River County is being initiated with the aid of a grant from the Land Conservation and Development Commission. The results of the survey should enable a reliable estimate of groundwater resources in the County to be made.

A 1915 Act of the Oregon Legislative Assembly (ORS 538.200 - .210) placed a restriction on the use of water from streams with waterfalls in the Gorge. The following streams are withdrawn from appropriation or condemnation, and may not be diverted or have their flow interrupted except in the limited cases outlined in ORS 538.210: Eagle, Ruckle, Herman, Summit, Lindsey, Spring, Warren, Cabin, Starvation, and Viento Creeks.

Undisturbed riparian lands (riparian means literally "on the banks of") along the Columbia River are important fish and wildlife habitat areas. Lower Herman Creek is an important anadromous fish spawning area.

There are no significant wetland areas within the County.

For additional or related information see Goal 6, Air, Water and Land Resources Quality. Furthermore, some water areas inventoried above are further discussed below through the Goal 5 process.

C. Conclusions and Observations: Findings:

1. There are five sources of domestic water for Central Valley residents. The capacity of these domestic water sources is considered adequate for the planning period.

2. The watersheds of existing and potential major sources of public domestic water need to be protected from encroachment by uses that would affect the quality or quantity of water produced.

3. There is a need to designate all watersheds that are existing or potential major sources of public domestic water supply.

4. Intensive development within designated watersheds that would adversely affect the quantity and quality of water produced should be prevented. One possible course of action in this regard is to authorize the Planning Commission to consider all development within 800 feet of an existing or potential withdrawal point of public water supply, and other sensitive areas within the watershed, as a conditional use. Unless approved by the County Sanitarian and Planning Commission, residential development without sanitary sewers should probably be prohibited in these areas. Where necessary restrictions within a watershed preclude any reasonable and economic use of the land, the land should probably be in public ownership.

5. There are 12 lakes and reservoirs one acre or larger in size within the Central Valley area.

6. Groundwater resources are little developed in Hood River County. Contamination of groundwater can cause future problems.

7. There are no significant wetland areas within the County.

8. There is no domestic water district within the Columbia Gorge area.,

9. There is a state law that restricts the use of water from streams that have waterfalls in the Columbia Gorge.

10. The use of groundwater in the Gorge is limited at the present time.

11. Riparian areas along the Columbia River that remain relatively undisturbed are often locations that are important for fish and wildlife habitat.

D. Goal 5 Process:

Water resources analyzed primarily within the Mt. Hood area through the Goal 5 process include: (1) springs; (2) groundwater; (3) watersheds; (4) wetlands; (5) streams; and (6) lakes.

1. Springs:

a. Locations: See Maps #1-7.

b. Quantity and Quality: There are four significant springs in the Mt. Hood area: Crystal Spring, Parkdale Cold Spring, McIsaac Springs, Lava Springs and Rogers Spring. Lava Springs and Rogers Spring will be discussed separately.

Crystal Spring is located on the northeastern slopes of Mt. Hood and emerges from lava rock at a flow of approximately 2,100 gallons/minute or 3.0 million gallons/day. The spring flows into Crystal Springs Creek and then into the East Fork Hood River.[1] Parkdale Cold Spring is located about ¼ mile south of Parkdale along Trout Creek. Minimum flows during heavy demand times were estimated to be 700 gallons/ minute or one million gallons/day.[2] McIsaac Springs issues out of the lava beds approximately 1½ miles from Parkdale. Water flows estimated at 20 gallons/ minute.[3]

Crystal Spring: Water quality is considered excellent.[4] The Crystal Springs Water District confirms that tests reveal the water quality to be good.

[1] Oregon State Water Resources Board, Water Resources, Supply and Quality Study, Hood River County (Salem, OR, June, 1965, page 2).
[2] Ibid, page 3.
[3] Bob McIsaac, 6/24/82 conversation.
[4] Water Resources, page 3.

Parkdale Cold Spring: Water is potable; is susceptible to pollution from orchard spray, livestock, wastes or urban developments.[5] McIsaac Springs: Water quality is fine according to Health Department tests.

c. Conflicting Uses and Consequences (Crystal, Parkdale and McIsaac): Logging and farm activities, and activity in connection with roads building and extraction of aggregate materials and septic drainfields are potential conflicting uses according to the Crystal Springs Water District and Parkdale Water District. The following is a discussion of consequences relating to Crystal, Parkdale and McIsaac Springs.

Economic: (on resource) Explosive or pollution causing activities could damage both quality and quantity of springs. (on conflicting use) Presence of springs may limit "productive" use of some forest lands nearby and some surface mining activities.

Social: (on resource) Springs provide water for several rural areas and could possibly serve more in the future. Any damage to the spring would affect many. (on conflicting use) See "Economic" above.

Environmental: (on resource) If springs are damaged or polluted, significant water sources could be made unavailable, causing hardship and economic loss to water users. (on conflicting use) See "Economic" above.

Energy: (on resource) If water resources are negatively impacted, additional energy to establish new systems will be noted by those who have water supplies interrupted. Maintaining the lava beds and forest lands as natural areas requires no energy. (on conflicting use) Extracting minerals or timber requires over a short time basis additional energy. An additional rock source in the Upper Valley will decrease additional hauling distances and consequently energy consumption. If extraction of minerals or harvesting of timber is not allowed, additional energy will be consumed in identifying other mineral or forest land sites.

d. Mitigating Measures: Mitigating measures to protect water resource sites include: (1) the preservation of the Parkdale Lava Beds as a 3A site (Protect the Resource Site) will assist in protecting a primary source of springs in the Mt. Hood area (primarily McIsaac, Lava Springs, Rogers Springs); (2) existing Plan policies prohibit buildings or surface disposal systems in the surface drainage basin of Crystal Spring, and the area east of the spring to Highway 35, or 1,200 feet, whichever is closer, except those which provide for protection and maintenance by Crystal Springs Water District; (3) the Plan stipulates that the Planning Commission will hear as a Conditional Use Permit all proposed development within 800 feet of an existing or potential withdrawal point of public water supply; (4)

[5] Ibid.

the Parkdale Spring and surrounding lands are zoned Exclusive Farm Use thereby preventing high density development around or adjacent to the springs, while Crystal Spring site and lands within its basin are zoned Forest; (5) the source of Parkdale Spring is located on a 5 acre parcel under the ownership of the Parkdale Water Company while Crystal Spring is located on a 35± acre site owned by the Crystal Springs Water District; (6) McIsaac Spring is located on a 2.75± acre parcel under McIsaac ownership and operation, and is bordered by lava beds to the west and farm land to the east; (7) the preservation of the lava beds will protect this site; (8) the County has several Policies, Strategies, etc., for protecting water quantity and quality.

e. Recommendations:

The Parkdale Lava Beds and ESEE consequences to water resources have been discussed under Goal 5 - Ecologically and Scientifically Significant Natural Areas - Parkdale Lava Beds. See that section regarding policies for protection of the Lava Beds.

Commensurate with those policies, etc., the following additional recommendations are made to be included in the County Policy Document:

(1) Designate the identified sources of Crystal Spring, Parkdale Cold Spring, and McIsaac Springs as 3A sites (Protect the Resource Site) and include in the County's Inventory.

(2) Develop and adopt a Natural Area designation and zone to be applied to 3A (Protect the Resource Site) designated sites. This ordinance to be submitted as a compliance item.

2. Ground Water:

a. Location, Quality and Quantity: According to the "Hood Basin" study there appears to be a large amount of groundwater resources in Hood River County.[6] No detailed studies have been done to date because surface water and supplies from springs are adequate to serve all needs.

Most of the water used for consumptive purposes in the Mt. Hood area comes from springs or wells. Crystal Spring, source of water for Crystal Springs Water District is located in the area (see map in Springs Section). Use of this and other springs is described in the section on Springs. Quality of all wells and springs tested in this area is good according to the Health Department. Map #8 shows the groundwater geology of the Hood River portion of the Hood Basin. Most of the area is andesite, basalt and

[6] State Water Resources Board, Hood Basin, (Salem, Oregon, April, 1965), page 38.

pyroclastic for which yield capabilities are unknown. Gravel, sand, silt, and Columbia River basalt formations have yield capabilities that range from high to low.

Table 17 in the Hood Basin Study (page 42) indicates that in a representative sampling of high yield wells in the Parkdale area, the average yield was 18.5 gallons per minute and the average well depth was 58 feet.

References discussing ground water capabilities of the Parkdale Lava Beds include: (1) Hood River County Board of Commissioners and Planning Commission Records re: appeal filed by Paul Klindt, et. al. from Planning Commission Decision to Approve Application of Jack and Melvin Green Zone Change to Surface Mining Combining Zone (#81-14); (2) A Reconnaissance of the Ground Water Resources of the Hood River Valley and Cascade Locks Area, Hood River County, Oregon, State Engineer, Salem, Oregon, May, 1966; and (3) oral and written testimony regarding Planning Commission hearing November 17, 1982, and the Commission December 15, 1982 deliberation session.

These sources are available in the Hood River County Planning Department. Due to their length they will not be discussed here. The Planning Commission is recommending that the lava beds be protected.

The report referenced in (2) above was done in conjunction with the State Engineer's Office and the State Water Resources Board and indicates that the lava flow could contain large supplies of groundwater and that it provides an excellent recharge area as most of the precipitation percolates down to supply the underlying groundwater reservoir.[7] The springs that are found around the edge of the flow (Lava Springs, Rogers Spring, McIsaac Spring) are caused by the overflowing of the groundwater reservoir.[8] Discussion with personnel from U.S.G.S. and State Water Resources Department conform that the water yielding capability of the Parkdale lava flow appears to be quite large, but that in-depth study on the flow has not yet been done.

b. Conflicting Uses and Consequences: The conflicting use analysis and recommendations, on springs above, discusses conflicting uses of groundwater supplies in the Mt. Hood area. The Planning Commission has recommended that the lava beds, probably the source of the major springs in the Mt. Hood area, be protected.

c. Recommendations:

[7] Sceva, Jack E., A Reconnaissance of the Ground-Water Resources of the Hood River Valley and the Cascade Locks Area, Hood River County, Oregon (State Engineer, Salem, Oregon, May, 1966), page 14.
[8] Ibid.

Include the above information in the County Background Report, and include the following in the County Policy Document:

(1) Designate the Parkdale Lava Beds as a 3A site (Protect the Resource Site) and include in the Inventory.

(2) Recommend that the State Water Resource Board or other appropriate agency conduct a study to identify the location of the actual water flow within the Parkdale Lava Beds.

(3) Support all research or studies that will assist in determining the water flow pattern in the Parkdale Lava Beds.

3. Watersheds:

a. Watersheds: General:

(1) Location, Quality and Quantity: ¾ of the land in the Mt. Hood area lies within the Hood River Basin - the southern ¼ of the County is in the Deschutes River Basin and is drained by the White River (see Map #9). The average annual water yield from streams and springs supplies water for about 19,000 acres in the County as a whole, and allows about 1,250,000 acre feet of surface outflow.[9]

Most of the streams originate from timbered slopes of Mt. Hood, being fed by glacial melt water. The West, Middle, and East Forks of the Hood River and their branches are the main streams that drain the area.[10] There are 585 miles of perennial streams and 110 miles of intermittent streams in the Hood River County portion of the basin.[11]

The major water usage in the Mt. Hood area is for irrigation and other agricultural uses, and domestic recreational use. About 3,000± acres in the Mt. Hood area are currently irrigated and approximately another 2,000± acres could be irrigated.[12] Estimated consumption of water for the entire Hood River County portion of the basin was 46,000 acre feet in 1965.[13]

(2) Conflicting Uses and Mitigating Measures: Potential conflicting uses in the basin may include forestry practices, pollution from agricultural sprays and septic systems, and surface mining uses.[14]

[9] State Water Resources Board, Hood Basin, (Salem, Oregon, April, 1965).
[10] Ibid, page 2.
[11] Ibid, page 3.
[12] Middle Fork Irrigation District and Water Master Office Estimate, 1/18/83.
[13] Ibid, page 34.
[14] Ibid, page xiv.

None of these uses pose a great threat to water resources in the Mt. Hood area. Much of the watershed lies within the Mt. Hood wilderness, where timber removal is generally forbidden. Water sampling done by the Health Department on springs and other resources of domestic water in the Mt. Hood area show them to be of good quality. Parkdale is served by a sanitary district which reduces the amount of septic systems needed in the area. Conflicting between surface mining and water supplies use on the lava beds has been discussed previously. Conflicting uses are generally limited by current resource designations (i.e., Forest, Agriculture, Environmental Protection, and Floodplain) and federal ownerships.

b. The Dalles Municipal Watershed:

(1) Location, Quality and Quantity: Approximately 11,000 acres of The Dalles Municipal Watershed lies within the Mt. Hood area (see Map #10). This area is managed by The Dalles Municipal Watershed Comprehensive Management Plan (December, 1972).

(2) Conflicting Uses and Mitigating Measures: The Dalles Watershed Plan strictly regulates uses that can be permitted in the watershed. Some limited timber harvesting is permitted, no off-road vehicle usage is permitted and livestock grazing is not permitted on federal lands. The County has no jurisdiction over any of the lands in the watershed, as they are all federally owned.

c. Crystal Spring and Parkdale Watersheds:

(1) Location: See Map #11 and Maps #1, 3, and 5, Mt. Hood.

(2) Quantity and Quality: See detailed discussion under Springs above.

Both watersheds are identified on the Comprehensive Plan Map. Additional research and coordination will be necessary to further identify in detail the actual boundaries and acreages involved.

(3) Conflicting Uses and Consequences: Also see discussion under Springs. Furthermore, County Forest lands occupy a portion of the Crystal Spring Watershed Basin. The County is assisting in providing protection of the watershed but harvesting is allowed.

Existing County Policies, etc., also provide assistance in mitigating conflicting uses.

d. Recommendations: Include the above information in the County Background Report and include the following in the County Policy Document.

(1) Support The Dalles Municipal Watershed Comprehensive Plan.

(2) Support the U.S. Forest Service Management direction that assists in preserving and protecting The Dalles Municipal Watershed.

(3) Include the following under the Conditional Use section of the Forest and Exclusive Farm Use Zones and add on as a condition in the Floodplain Zone:

> "All *development within 800 feet of a withdrawal point of public water supply."

(4) Include the following provision under Site Development Standards in the Exclusive Farm Use and Forest Zones, and as a condition in the Floodplain Zone:

> "No buildings or subsurface disposal systems will be allowed in the surface drainage basin of Crystal Springs and that area east of the springs to Highway 35 or 1,200 feet whichever is closer; except for protection and maintenance by Crystal Springs Water District."

(5) Coordinate with both the Parkdale Water Company and Crystal Springs Water District in further identifying watershed areas.

4. Wetlands:

a. Riverine Habitat:

(1) Location, Quality and Quantity: According to report entitled "Classification of Wetlands and Deepwater Habitats of the United States"[15] "riverine" habitats can be considered a type of wetlands - riverine referring to river channels. These areas consist of the rocky and unconsolidated shore and areas that are usually covered with water along most streams. See 5., Streams, for additional comments.

* DEVELOP OR DEVELOPMENT: To bring about growth or availability; to construct or alter a structure, to conduct a mining operation, to make a physical change in the use or appearance of land, to divide land into parcels, or to create or terminate rights of access.

[15] Fish and Wildlife Services, U.S. Department of Interior, (December, 1979) page 5.

(2) Conflicting Uses and Consequences and Mitigating Measures: The East Fork of Hood River has been designated Environmental Protection and zoned Forest and Floodplain in the Mt. Hood area to protect riparian and rivarian habitats from conflicting uses such as forestry (which is also regulated by the Oregon Forest Practices Act) and surface mining.

Effects of surface mining and forestry on the resource could include disturbance of riparian vegetation and habitats and lowering of stream quality and aesthetic values.

Anyone removing over 50 cubic yards of material from the bed or banks of streams must obtain a permit from the Division of State Lands. During the permit process, agencies such as the Department of Fish and Wildlife and the County are able to respond. Conditions may be placed on the operation to alleviate or limit the conflicting uses.

Mineral extraction and intensive recreational development is not allowed and only selective cutting is allowed in areas designated Environmental Protection. Also provisions recommended for inclusion in the Floodplain Zoning District include requirements for building setbacks, protection of riparian vegetation and selective cutting. The Floodplain Zone has also been revised to include conditions and criteria listed in the Environmental Protection designation. Additional measures that mitigate conflicting uses include the Forest Practices Act and both the Exclusive Farm Use and Forest Zones are revised to include provisions for building setbacks from streams and protection of riparian vegetation.

The Hood River Soil and Water Conservation District is in the process of developing a Sedimentation Control Ordinance. Until such time as it is completed, the proposed revisions to the Floodplain, Exclusive Farm Use, and Forest Zones will assist in mitigating problems to a certain extent.

See 5., Streams, below for additional comments.

b. Elk Meadows: The Nature Conservancy identifies Elk Meadows as a wetland. The site is discussed and recommendations are made under Goal 5, Natural Areas.

c. Recommendations: Include the following in the County Policy Document:

(1) Designate the East Fork of the Hood River as a 3C Site (Limiting Conflicting Uses) and include in the Inventory.

(2) Adopt the revised Floodplain Ordinance which includes criteria for building setbacks, protection of riparian vegetation and other applicable criteria from the Environmental Protection designation.

(3) Adopt the revised Exclusive Farm Use and Forest Zones which include provisions for protection of riparian vegetation and building setback requirements.

(4) Support the Soil and Water Conservation District in completion of the Sedimentation Control ordinance (to be completed during post-acknowledgment, by December, 1984).

(5) If specific wetlands are identified in future inventorying processes, the following standards shall apply and if deemed necessary, ordinances shall be developed to include these standards:

(a) Wetlands, floodplains and steep slopes are considered environmentally critical areas, and unsuitable for most forms of land development. The public objectives of a regulatory program designed to protect these land areas are: (i) the protection of public safety by reducing the risk of landslides, flooding and fire; (ii) the prevention of nuisance-like uses by controlling erosion, runoff, and water pollution; and (iii) the reduction of public costs by preserving water quality and public water supplies.

(b) Activities considered compatible with wetlands include: conservation of soils, vegetation, water and wildlife; low intensity outdoor recreation which is dispersed and directed; research and educational workshops on a request and permit basis; and utility easements and standard roads or driveways, which occur on peripheral areas and where alternative alignments are impractical. Activities considered incompatible include: construction, filling, damming, excavation, grading and removal of vegetation.

(c) Development permitted on lands bordering wetlands will maintain the same runoff coefficient and erosion equilibrium as if they were undeveloped. Pier construction, elevated pedestrian boardwalks, sediment catch basins, semi-impervious surfacing, under-structure parking, bridging of natural drainageways, and retention of

vegetation in areas not intended for improvement are applicable methods of site design.

(d) Public agency acquisition and management of private wetlands is felt to be too costly and impractical in most circumstances, but will be a consideration in cases of large ownership parcels or abutting private and public ownerships.

(6) If specific wetland areas are identified in the future, more precise characterization of these wetlands and assessment of long-term management needs shall be identified through the Goal 5 process. This could include a better definition of the values associated with these areas as unique biological/botanical communities and monitoring of impacts created by peripheral intensive development.

5. Streams:

a. Location: See Map #9.

b. Quantity and Quality: Streams in the Mt. Hood area in the Hood Basin include: Hood River, east, middle and west forks; Dog River, Evans and Cold Springs; North Fork Cold Spring Creek; Newton, Clark and East Fork Clear Creeks; Clear, Coe and Eliot branches of the Middle Fork Hood River; Tony, Elk, McGee Creeks; and Lake Branch of West Fork Hood River.[16] Significant streams in the Deschutes Basin portion of the Mt. Hood area include White River and its tributaries, which provide water for one of Mt. Hood's major ski areas.

Mt. Hood FES shows an annual yield for the East Fork Hood River at Mt. Hood of 196,000 acre feet (page 34). According to the Water Master's Office, 1/80 cubic foot per second can be diverted for irrigation, which on the approximately 3,000 acres that are irrigated in the Mt. Hood area, is equivalent to approximately 1,700 gallons per minute from streams in the area. These streams include: Middle and East Fork Hood River, Clear, Eliot, Evans, Griswell, and Pinnacle Creeks.

Due to time constraints, the Water Master's Office records could not be combed to extract a complete water rights records summary for water resources in the Mt. Hood area. The water rights on significant withdrawal points in the unit are mentioned in the Central Valley analysis.

Oregon's Statewide Assessment of Non-Point Source Problems, (DEQ, August, 1978) shows that all major streams in this area are relatively free

[16] State Water Resources Board, Hood Basin, (April, 1965) page 1.

of any significant amounts of pollution. Only a stretch of the East Fork Hood River was shown as having some problems with several forms of non-point source pollution, including sedimentation and severe withdrawal problems. Many of the major streams had severe sedimentation and some streambank erosion. Probably the most significant water quality issue in streams in the area is water withdrawal in the summer months, which is only temporary; and sedimentation, some from glacial till and some from other natural and man caused activities, such as logging and farming.

c. Conflicting Uses and Consequences: Severe stream withdrawal in the summer months is probably the most severe conflict, which affects both the resource and the users.

Economic: Economic cost involved for both the public and land owner by adherence to implementing measures for protecting water quality. Economic cost could occur through obtaining water from other sources when water supplies become low. Cost borne by property owner if sedimentation erosion, etc., are not controlled and resource base (timber, agricultural lands) wash away.

Social: Social consequences can include the loss of recreational and aesthetic pleasures caused by the lowered water levels. Hydro projects on the river can contribute to the lack of water flowing downstream at any one time and can be adversely affected by it, resulting in a lowering of amounts of energy produced. Hydro projects are reviewed through a hearing by the County only after numerous referrals to affected agencies such as the State Department of Fish and Wildlife, State Water Resources Department, Water Master, Nature Conservancy, etc.

Environmental: Low water tables and resulting elevated water can adversely affect fish spawning, rearing and passage. Also siltation and runoff from either glacial, forest or agricultural sources adversely affects spawning grounds and can lower water quality standards in general. Control of natural processes is costly and in some cases impractical. However, the County has revised and recommends for adoption several measures discussed below to assist in mitigating adverse impacts.

Energy: Hydro projects are a viable energy resource, however, continual depletion of water could reduce amounts of energy produced. Reduction of water quality and quantity could require additional energy consumption in seeking other sources for hydro, recreation, or fish and wildlife use.

Because Hood River County is based on an active and productive agricultural and forestry economy, agricultural and forestry uses must be permitted outright. Many of the problems associated with streams are naturally occurring and cannot be helped.

d. Mitigation of Conflicting Uses: Mitigating measures include: (1) provisions for building setback and riparian protection are being proposed for the Floodplain, Exclusive Farm Use and Forest Zones; (2) the majority of lands along the streams identified including the East Fork are planned and zoned for resource use (i.e., Floodplain, Forest, Farm, Environmental Protection); (3) the Soiland Water Conservation District is in the process of developing a Sedimentation Control Ordinance; (4) forest harvesting done in accordance with the Forest Practices Act, which County policy supports, will assist in minimizing the adverse effects on streams; (5) education by the Soil and Water Conservation District on methods of controlling erosion or disposing of waste will assist; (6) hydro projects for generating power for public use by sale, geothermal resource, mining, plants for storage and processing of forest products and feedlots are conditional uses in the Farm and Forest Zone; (8) existing Plan policies prohibit any use which would degrade water quality below State standards, and support protection of all stream sides, major river corridors and floodplain for natural scenic and low intensive recreational purposes; and (9) additional provisions for protection of water sources are being proposed for both the Exclusive Farm Use and Forest Zones.

Additional recommendations include; (1) establishing minimum flow requirements for all affected streams could lessen the impacts dramatically but could cause new problems; (2) the Valley's need for water will certainly grow so either other water sources must be utilized or measures implemented to conserve existing water; (3) providing closed water systems (pipes as opposed to open ditches) for irrigation companies could conserve large amounts of water; (4) other conservation techniques can be practiced by both irrigation and domestic water users to help prevent severe water withdrawal; and (5) education of adjacent property owners on methods of disposing of wastes and preventing erosion will aid the situation.

e. Recommendations: Include the above information in the County Background Document and include the following in the County Policy Document:

(1) Designate inventoried stream sites 3C (Limit Conflicting Uses) and support proposed revisions to the Floodplain, Exclusive Farm Use and Forest Zones.

(2) Provide assistance to the Soil and Water Conservation District in completing the Sedimentation Control Ordinance (post-acknowledgment item, by December, 1984).

(3) Support Soil and Water Conservation District educational programs specifically those identifying methods of controlling erosion and disposing of waste.

(4) Support all methods which provide assistance in maintaining and preserving water quality and quantity.

6. Lakes:

a. Location: See Map #12.

b. Quantity and Quality: There are five major lakes (greater than five acres in surface area) in the area. These are: Badger, Boulder, and Jean Lakes; Laurance Lake Reservoir; and Lost Lake. All are on Mt. Hood National Forest Lands.

Badger - surface area, 45 acres; volume 600 acre feet.
Boulder - surface area, 14 acres; volume 160 acre feet.
Jean - surface area, 5 acres; volume 50 acre feet.
Laurance - surface area, 125 acres; volume 3,550 acre feet maximum.
Lost Lake - surface area, 230 acres; volume 18,880 area feet maximum.

Other lakes in the unit with less than 5 acres that were not surveyed (by the U.S. Department of Interior, Geological Survey, 1975) are Dollar, Oval and Teacup Lakes.[17]

According to U.S. Forest Service personnel, the water quality in all these lakes is excellent.[18]

c. Conflicting Uses: None. All in Mt Hood National Forest. All designated "Forest".

d. Recommendations: Include the above information in the County Background Report and include the following in the County Policy Document:

(1) Support the Mt. Hood National Forest designations and management direction that protects the quality and quantity of lakes-on federal lands.

E. Goal 5 Process: Rogers Spring and Lava Springs:

[17] Shulters, M.V., Lakes of Oregon, Hood River, Multnomah, Washington and Yamhill Counties, (Volume 3, U.S. Department of the Interior; Geological Survey, (1975) pages 17-21.
[18] Phone conversation, Mt. Hood National Forest, Hood River Valley Ranger Station, 6/24/82.

The actual name of "Lava Springs" varies from "Lava Springs" to "Lava Bed Springs" according to different sources, however for brevity "Lava Springs" will be used.

Rogers Spring and Lava Springs are discussed together because it is presumed that both have the same water source.[19]

1. Location: See Maps #1, 2, and 7; Rogers Spring, TlS R10E Section 1; and Lava Springs, TlN R10E Section 31; or 1½ miles west of Parkdale in the general vicinity of the Parkdale Lava Beds.

2. Quantity and Quality: Lava Springs: Minimum flow during heavy use times was at least 1,600 gallons per minute or 2.3 million gallons per day.[20] Rogers Spring: Flows are estimated at 900 gallons per minute. Both springs issue from the Parkdale Lava Beds.[21] According to State County Health Department, quality for both springs is good, as the water filters through lava formations before surfacing.[22]

3. Conflicting Uses and Consequences: Conflicting uses include surface mining and agricultural septic waste infiltration. The issues of surface mining have been discussed during the course of the Planning Commission and Board hearings on the Zone Change (#81-14) to allow surface mining on the Parkdale Lava Beds.

   Additional information regarding protection of these water resources was presented at the November 17, 1982, Planning Commission hearing and the Commission recommendation to the Board of Commissioners was to protect these sites and particularly the lava beds.

   Overall conflicting uses and mitigating measures have been identified and discussed in the above Springs section (i.e., discussion of Crystal Spring, Parkdale Cold Spring, McIsaac Spring, etc.).

   The following Strategy has been added to the County Policy Document:

   > "Designate the source of Rogers Spring and Lava Springs as 3A sites (Protect the Resource Site) and include in the Inventory."

F. Plan Policies - Sedimentation and Protection of Wetlands:

The Sedimentation Control Ordinance was discussed with the LCDC Staff. The alternatives of updating the Floodplain, Exclusive Farm Use, and Forest Zones to include provisions for building setbacks from streams, and to provide protection for riparian

[19] Oregon State Water Resources Board, Water Resources, Supply and Quality Study, Hood River County (Salem, Oregon, June, 1965), pages 6 and 7.
[20] Ibid.
[21] Ibid.
[22] Ibid.

vegetation were agreed upon. The County will review the Sedimentation Control Ordinance when completed by the Soil and Water Conservation District.

The implementation of Plan policies to protect wetlands is discussed above in Section 4, Wetlands.

The following has been added to the County Policy Document.

> "Review and take action on the Sedimentation Control Ordinance being prepared by the Soil and Water Conservation District."

G. Update Floodplain Zone:

The Planning Commission has updated the Floodplain Ordinance to require that development, including dikes and fills in designated areas of flood hazards be reviewed for compliance with the Plan's policies on water resources.

The revised Floodplain Ordinance adopted by the Planning Commission December 15, 1982, and recommended to the Board, includes provisions for compliance with the Plan's policies regarding water resources, building setback requirements, protection of riparian vegetation, etc.

H. Severe Summer Withdrawal - East Fork:

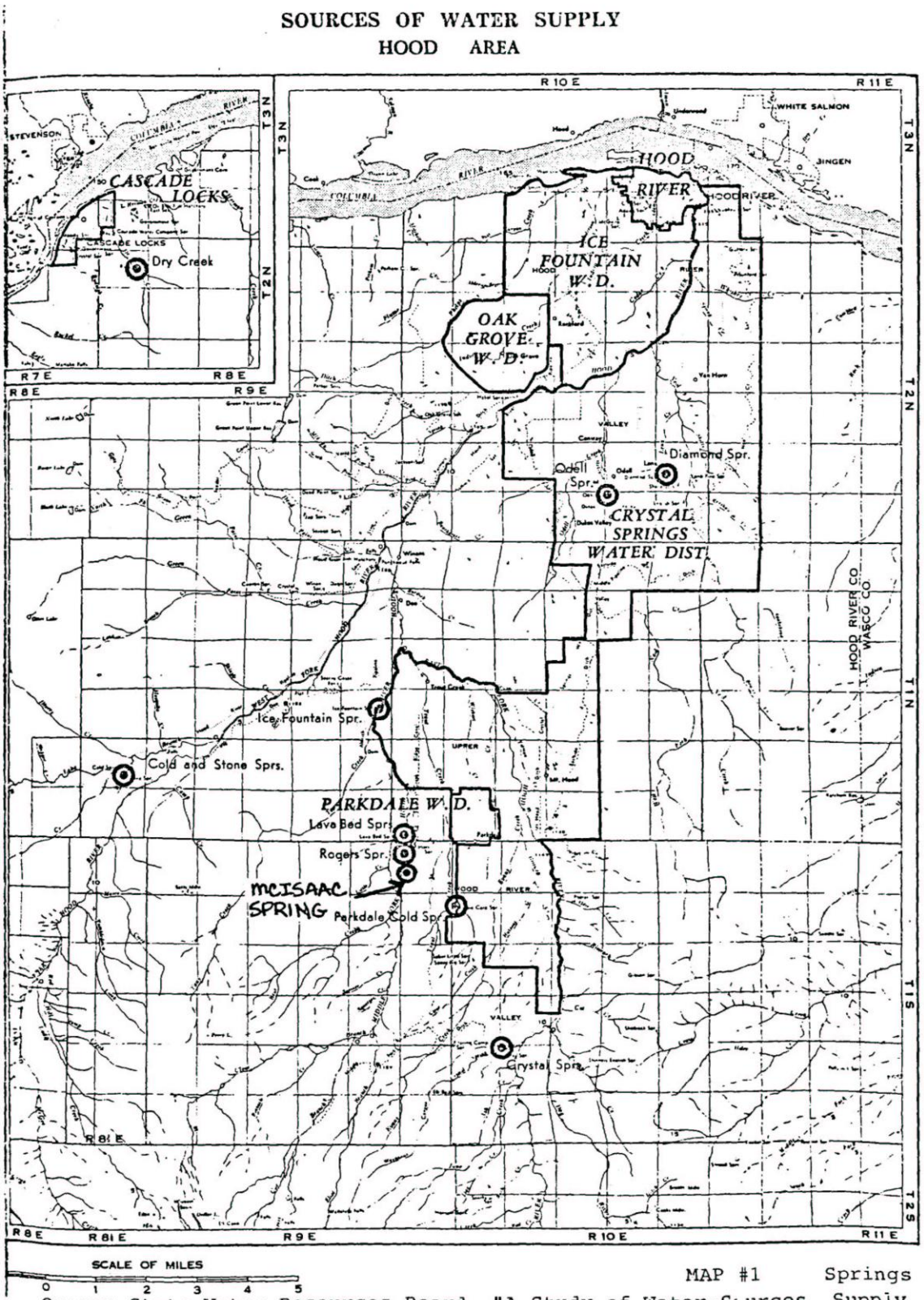
As stated previously, establishing minimum stream flows on the East Fork could possibly alleviate the problem of severe stream withdrawal. The State Water Resources Board is the agency responsible for establishing the minimum flows. They will not establish minimum flow requirements if water use exceeds the stream capacity.[23] However, as water rights are abandoned, establishing a minimum stream flow could become a possibility.[24]

Other recommendations to resolve the conflicts (as noted in streams section above) are closing the water systems (pipes instead of ditches), conservation in general and obtaining new water sources (i.e., wells, storage reservoirs, etc.).

The following Policy has been added to the County Policy Document:

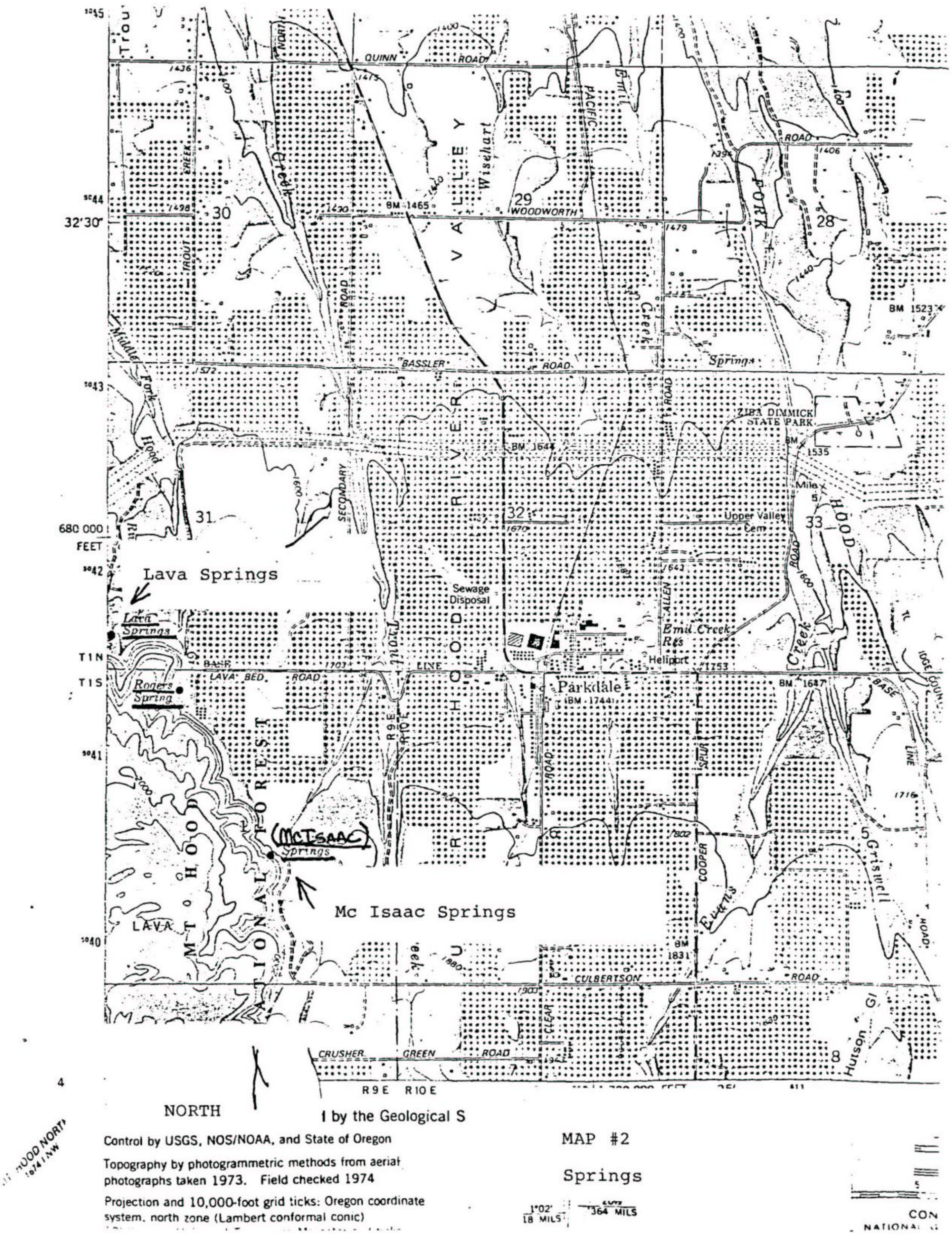
> "Support programs that assist in maintaining minimum stream flows on the East Fork of the Hood River above Parkdale."

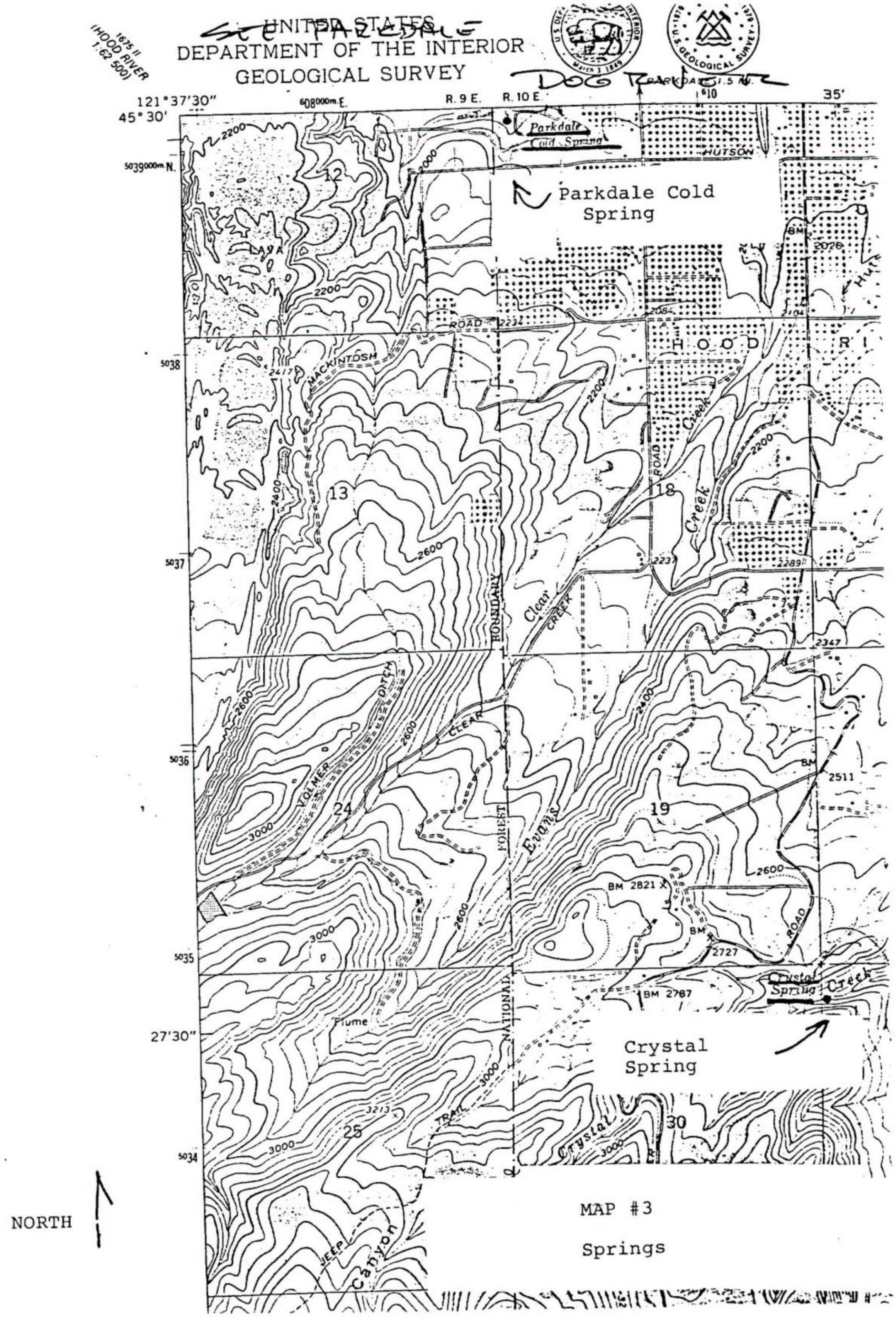
[23] State Water Resources Department, conversation, 1/19/83.
[24] Ibid.

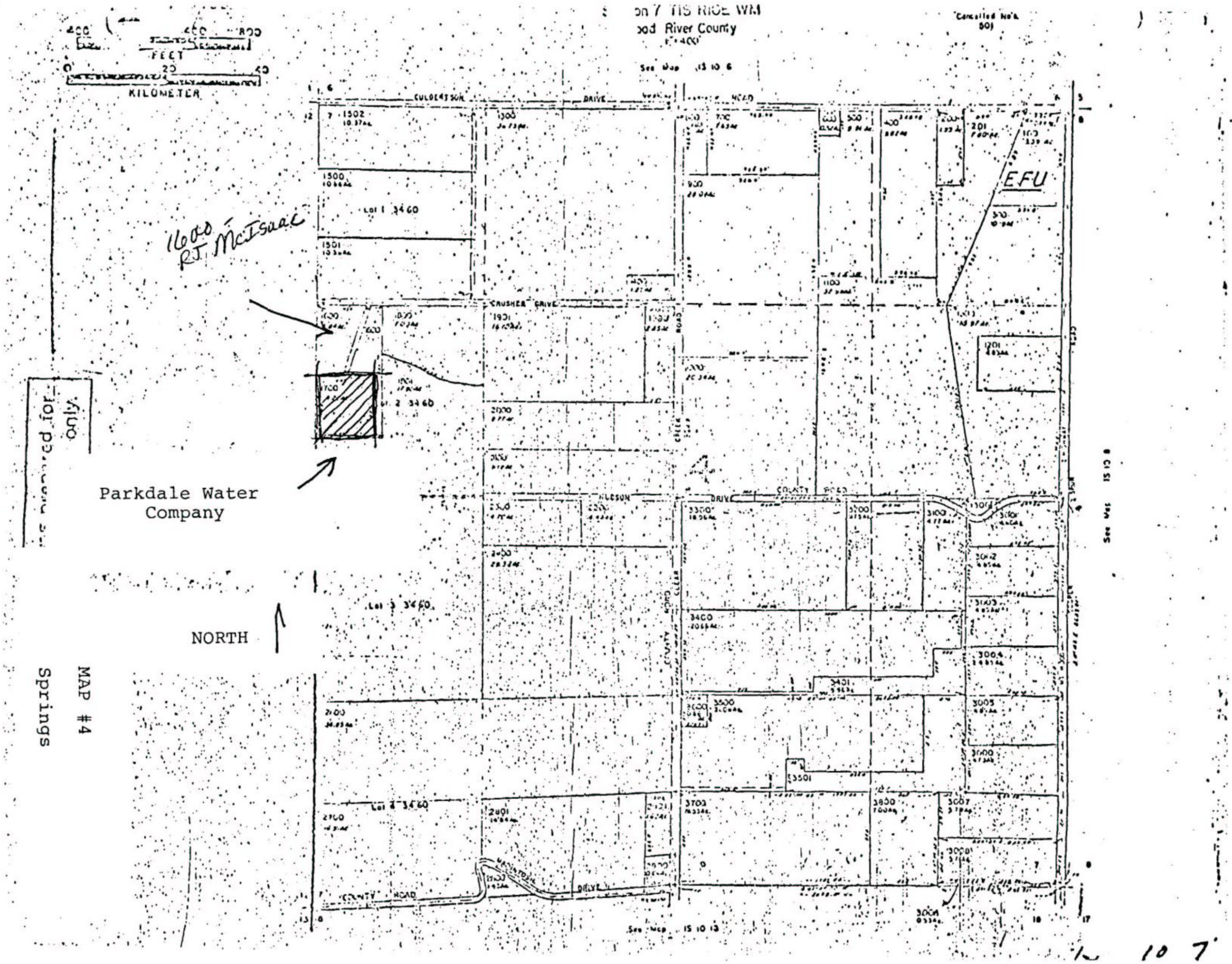


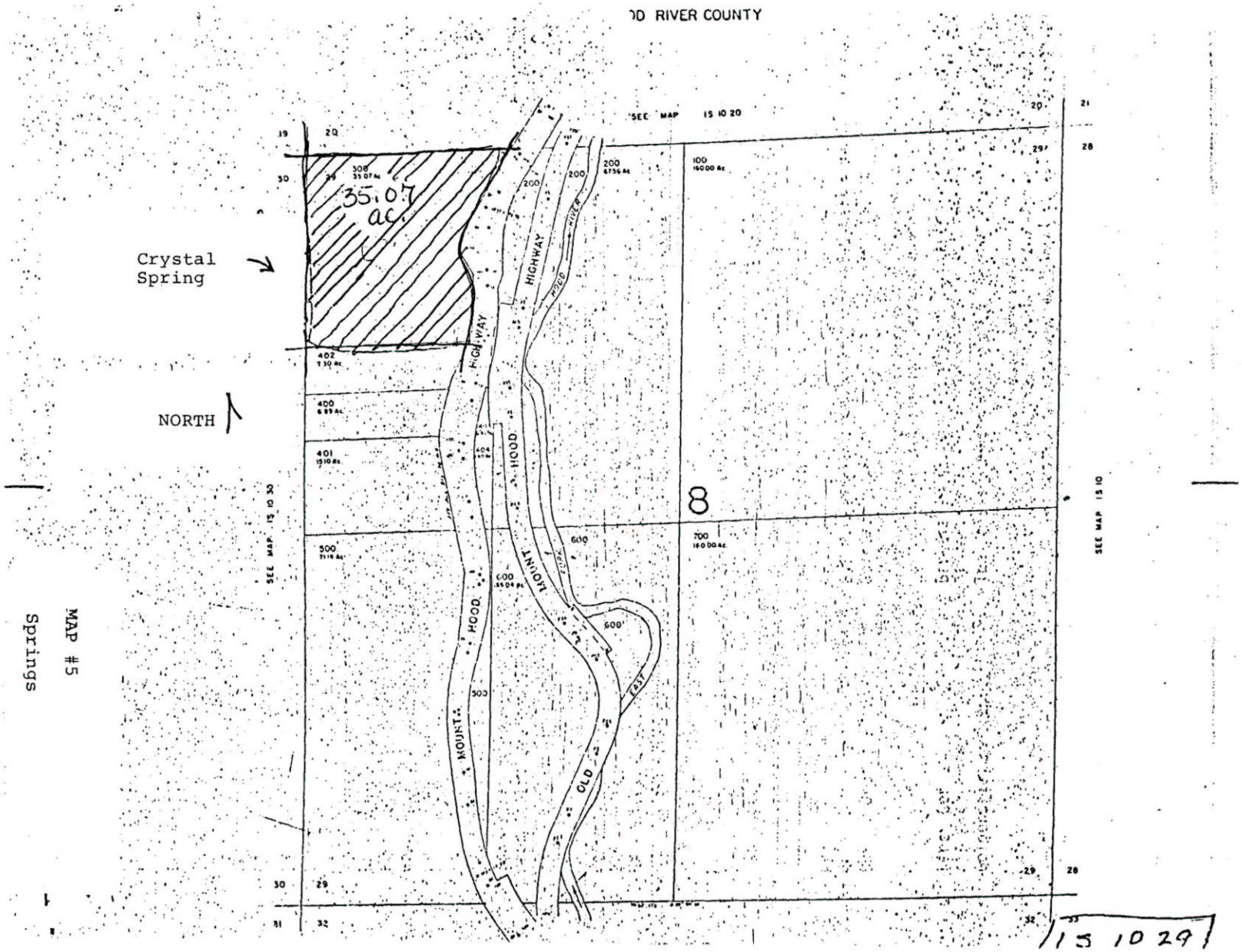
MAP #1 Springs

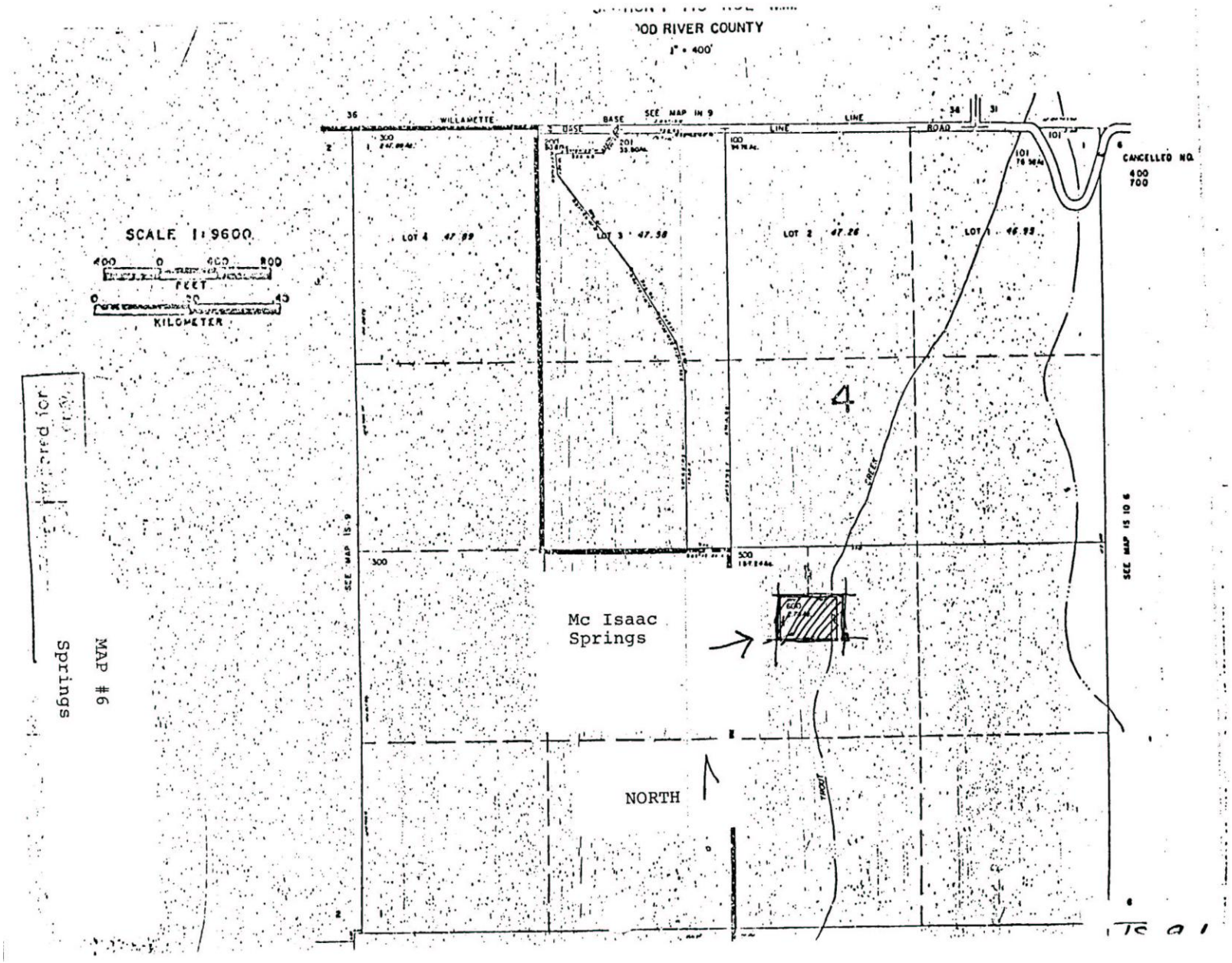
Oregon State Water Resources Board, "A Study of Water-Sources, Supply and Quantity, Hood River County, Oregon", (Salem, OR, June, 1965).

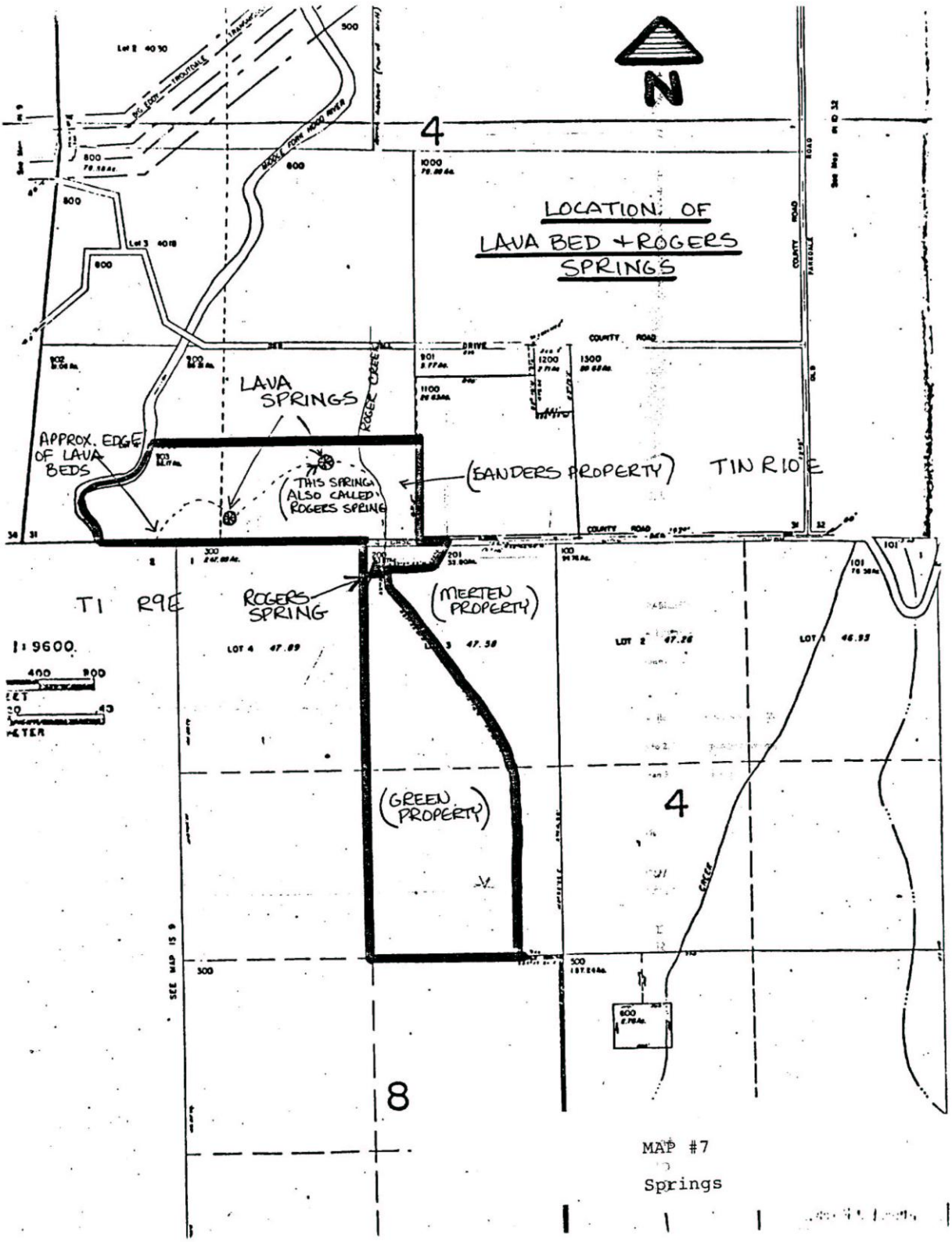

QUINN ROAD
WOODWORTH
BASSLER ROAD
ZIBA DIMMICK STATE PARK
Upper Valley Cem
Sewage Disposal
Lava Springs
Lava Springs
Rogers Spring
Parkdale
Heliport
Emil Creek Res
(McISAAC) Springs
Mc Isaac Springs
CULBERTSON ROAD
CRUSHER GREEN ROAD
R9E R10E
NORTH
by the Geological S
Control by USGS, NOS/NOAA, and State of Oregon
Topography by photogrammetric methods from aerial photographs taken 1973. Field checked 1974
Projection and 10,000-foot grid ticks: Oregon coordinate system, north zone (Lambert conformal conic)
MAP #2
Springs

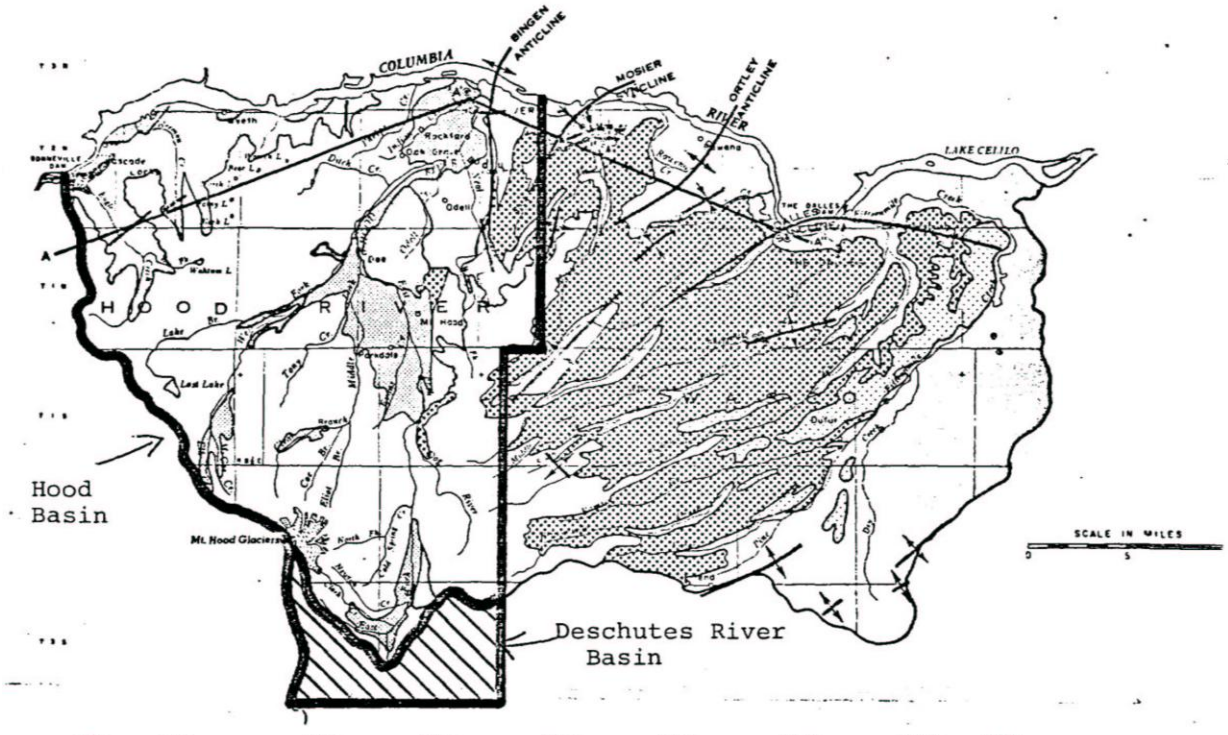

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Parkdale Cold Spring
HOOD
Clear Creek
Evans
NATIONAL FOREST BOUNDARY
Crystal Spring
MAP #3
Springs
NORTH


Hood River County
FEET
KILOMETER
1600 RJ McIsaac
EFU
Parkdale Water Company
NORTH
MAP #4
Springs
CULBERTSON DRIVE
CRUSHER DRIVE
COUNTY ROAD


OD RIVER COUNTY
SEE MAP 15 10 20
35.07 ac.
Crystal Spring
NORTH
HIGHWAY
HOOD
RIVER
MOUNT
OLD
POINT
EAST
8
SEE MAP 15 10 30
SEE MAP 15 10
MAP #5
Springs
15 10 29


OD RIVER COUNTY
1" = 400'
SCALE 1:9600
FEET
KILOMETER
WILLAMETTE
BASE
LINE
SEE MAP IN 9
ROAD
CANCELLED NO.
400
700
LOT 4
LOT 3
LOT 2
LOT 1
4
CREEK
SEE MAP 15 9
SEE MAP 15 10 6
Mc Isaac
Springs
NORTH
MAP #6
Springs


LOCATION OF
LAVA BED + ROGERS
SPRINGS
LAVA
SPRINGS
APPROX. EDGE
OF LAVA
BEDS
THIS SPRING
ALSO CALLED
ROGERS SPRING
(SANDERS PROPERTY)
T1N R10E
T1 R9E
ROGERS
SPRING
(MERTEN
PROPERTY)
(GREEN
PROPERTY)
1:9600
400 800
4
8
MAP #7
Springs



LEGEND

GEOLOGIC UNIT	YIELD CAPABILITY
Gravel, sand, silt, mudflows, glacial and terrace deposits	Moderate to Low (gpm unknown)
Silt and fine sand of Palouse formation	Low (gpm unknown)
Andesite, basalt, and pyroclastics	Unknown
Sandstone, shale, conglomerate, tuff and mudflows of Dalles fm.	Moderate to Low (less than 200 gpm)
Columbia River basalt formations	High to Low (up to 2,500 gpm)
Pyroclastics, mudflows and conglomerate of Eagle Cr. fm.	Very Low (less than 3 gpm)
Anticlinal Axis	Fault
Synclinal Axis	Flowing Wells

Volume of water in subsurface storage unknown. Water table generally at depths greater than 200 feet.

Source: State Water Resources Board, Deschutes River Basin

MAP #8

DATA SOURCE: U. S. Geological Survey
Oregon State Engineer
Oregon State Dept. of Geology and Mineral Ind.

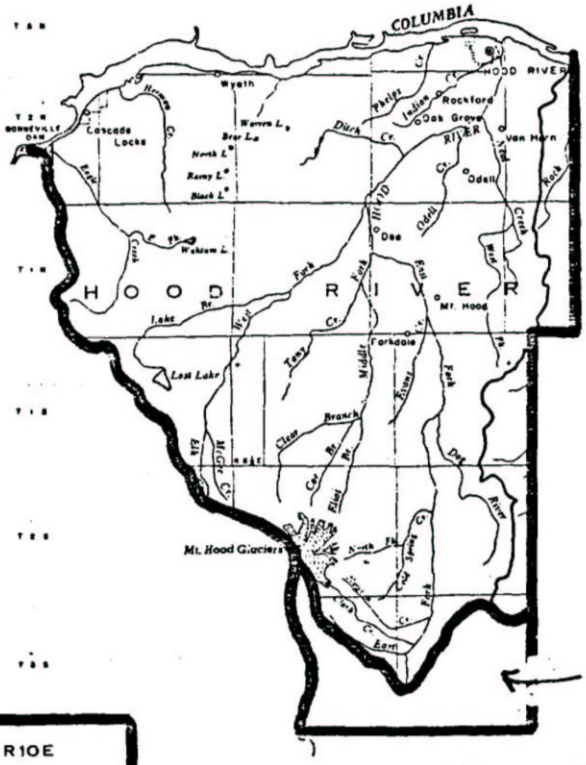
Generalized ground water geology.

Source: State Water Resources Board, Hood Basin, (Salem, OR - April, 1965) p. 40.

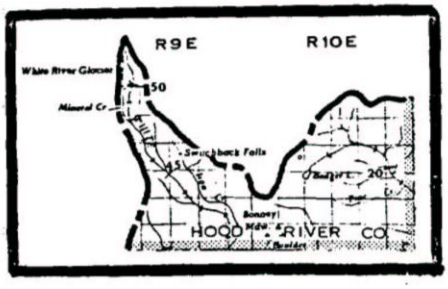
MAJOR STREAMS IN HOOD RIVER COUNTY

AND WATERSHEDS

Hood Basin Area



Deschutes Area (see insert)

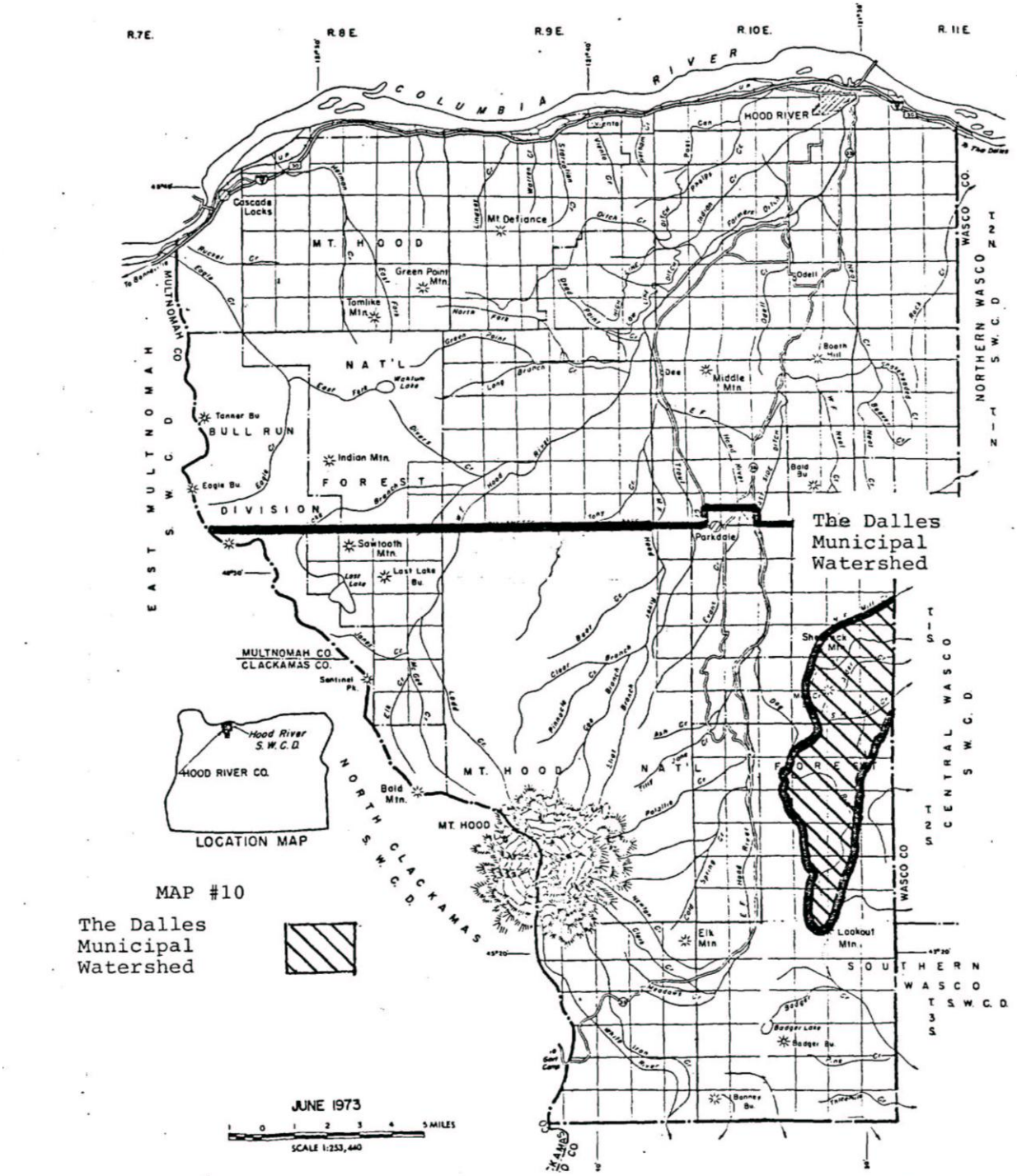


Deschutes Basin

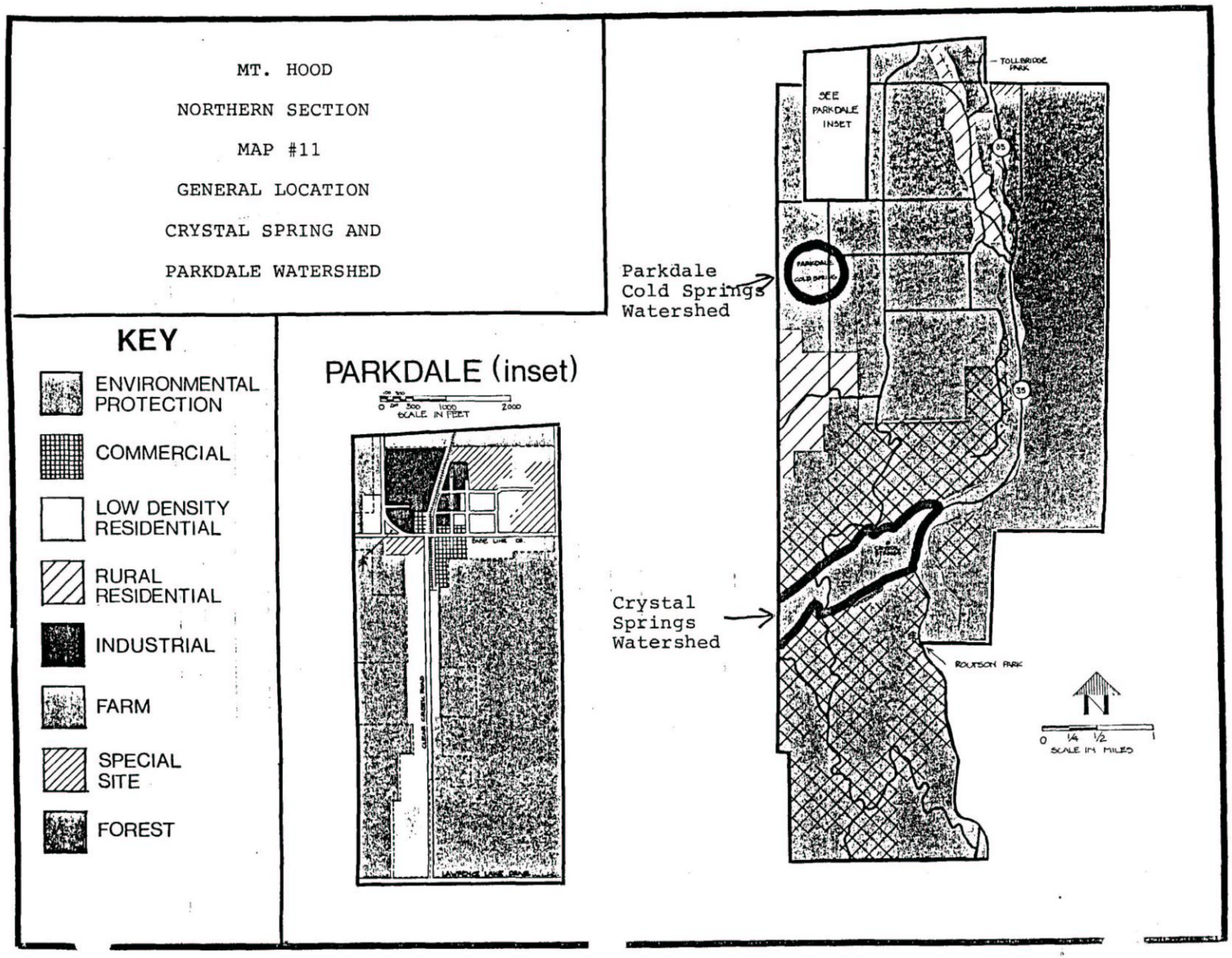
MAP #9

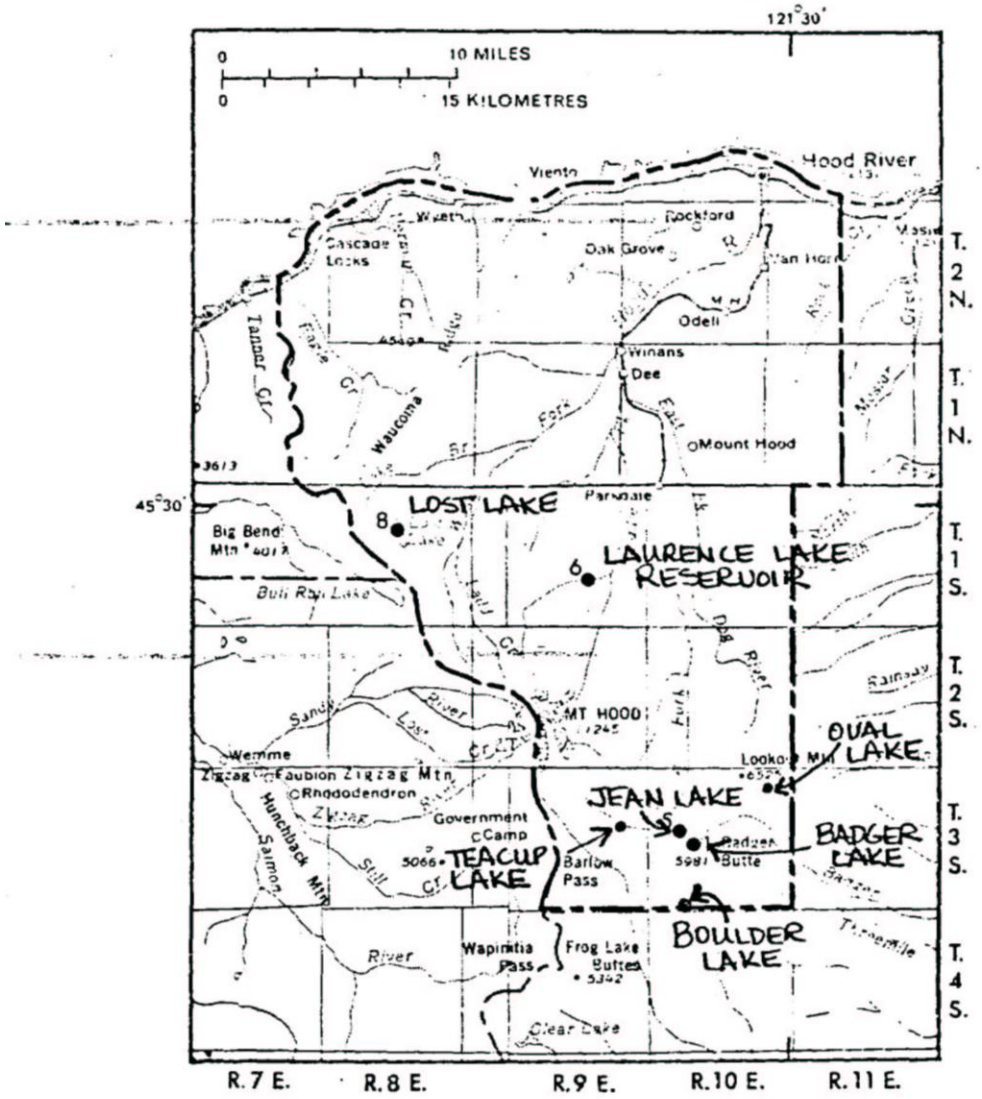
Source: State Water Resources Board, Hood Basin, (Salem, OR - April, 1965) P. 1.

State Water Resources Board, Deschutes River Basin (Salem, OR - January, 1961).



Source: Comprehensive Management Plan, The Dalles Municipal Watershed, (December 1972).


MT. HOOD
NORTHERN SECTION
MAP #11
GENERAL LOCATION
CRYSTAL SPRING AND
PARKDALE WATERSHED
KEY
ENVIRONMENTAL PROTECTION
COMMERCIAL
LOW DENSITY RESIDENTIAL
RURAL RESIDENTIAL
INDUSTRIAL
FARM
SPECIAL SITE
FOREST
PARKDALE (inset)
SCALE IN FEET
Parkdale Cold Springs Watershed
Crystal Springs Watershed
SEE PARKDALE INSET
TOLLBRIDGE PARK
ROUTSON PARK
SCALE IN MILES



MAP #12

LAKES IN THE MT. HOOD AREA

SOURCE: U.S. DEPT. OF INTERIOR, GEOLOGICAL SURVEY, LAKES OF OREGON - HOOD RIVER, MULTNOMAH, WASHINGTON AND YAMHILL COUNTIES, VOL. 3 (1975) p. 11

GOAL 5: WILDERNESS AREAS

A. Introduction:

Wilderness areas are defined as areas of undeveloped land retaining their primeval character and influence, without permanent improvement or human habitation. They are further defined as areas which are protected and managed so as to preserve their natural conditions and which: (1) generally appear to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) have outstanding opportunities for solitude or a primitive and unconfined type of recreation; and (3) also contain ecological, geological, or other features of scientific, educational, scenic, or historic value. Wilderness areas must be designated legislatively.

It will be up to the Citizen Advisory Groups to help identify natural areas, open space areas, and potential wilderness areas. Persons in the CAGs may also provide help in identifying present and future natural areas, open space, and wilderness area needs within the County, and identifying which natural area, open space, and potential wilderness areas should be protected to fulfill those needs. Economic, social, environmental and energy considerations should be taken into account. The Herman Creek - Eagle Creek area appears to have elements that could qualify it for wilderness designation and protection.

B. Wilderness Area:

The Mt. Hood National Forest Management Direction Map (see Map #1) identifies the Herman-Eagle Creek Wilderness Study area as a "Wilderness Study", and a "Special Interest" Zone. It is also in a RARE II Inventory Area #6090. (See Map #2 and TABLE 1). These designations are adopted by the County as the Plan designations for these areas.

The County has developed a Goal, Policies, and Strategies regarding federal lands; see Appendix "A". They have been incorporated into the County Policy Document.

C. County Policy Document:

The following have been added to the County Policy Document under Goal 5 Wilderness Areas:

1. Goal: Ensure protection of the existing Mt. Hood Wilderness.

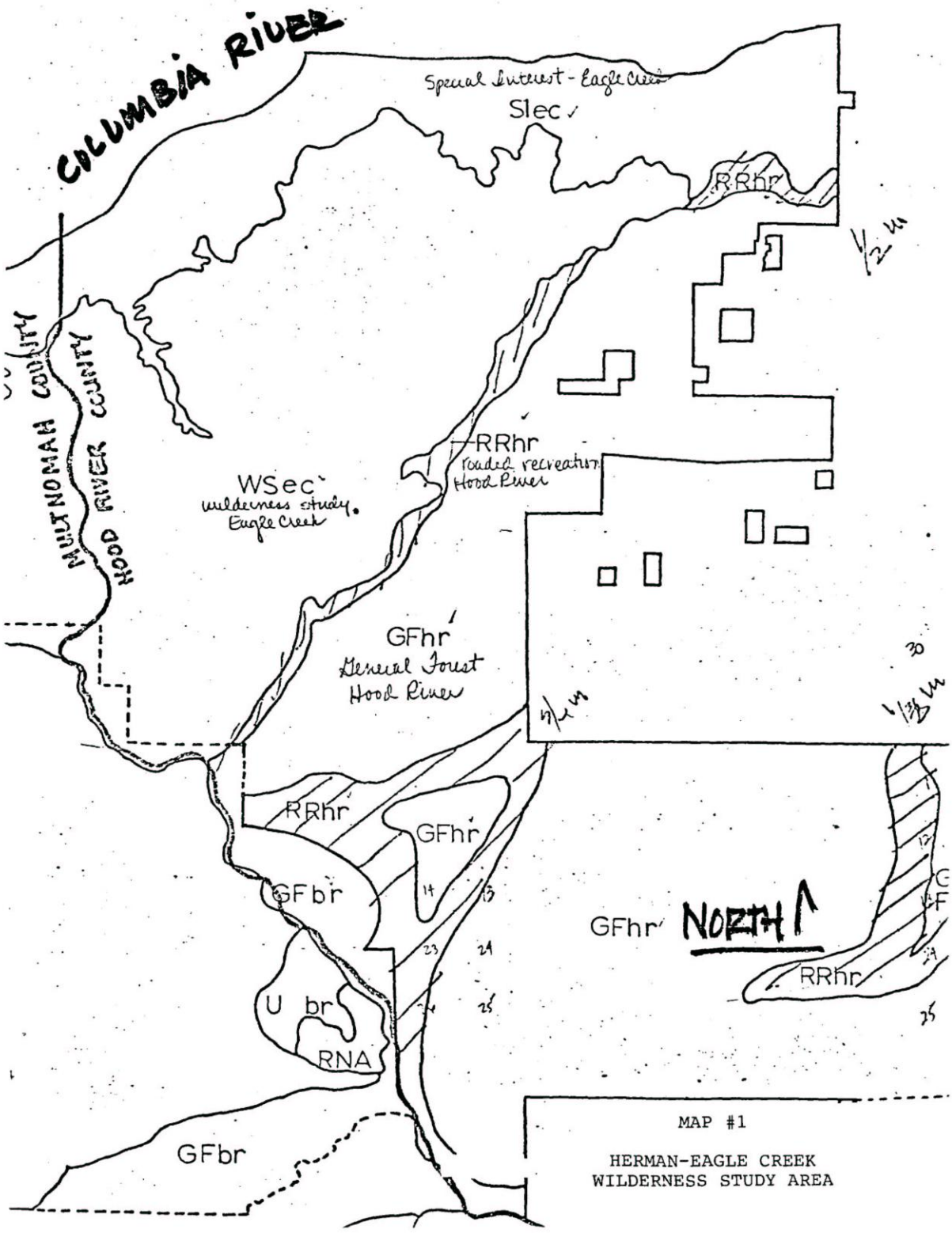
2. Policy: Review and comment on proposed U.S. Forest Service Wilderness Plans and revisions to existing Plans.

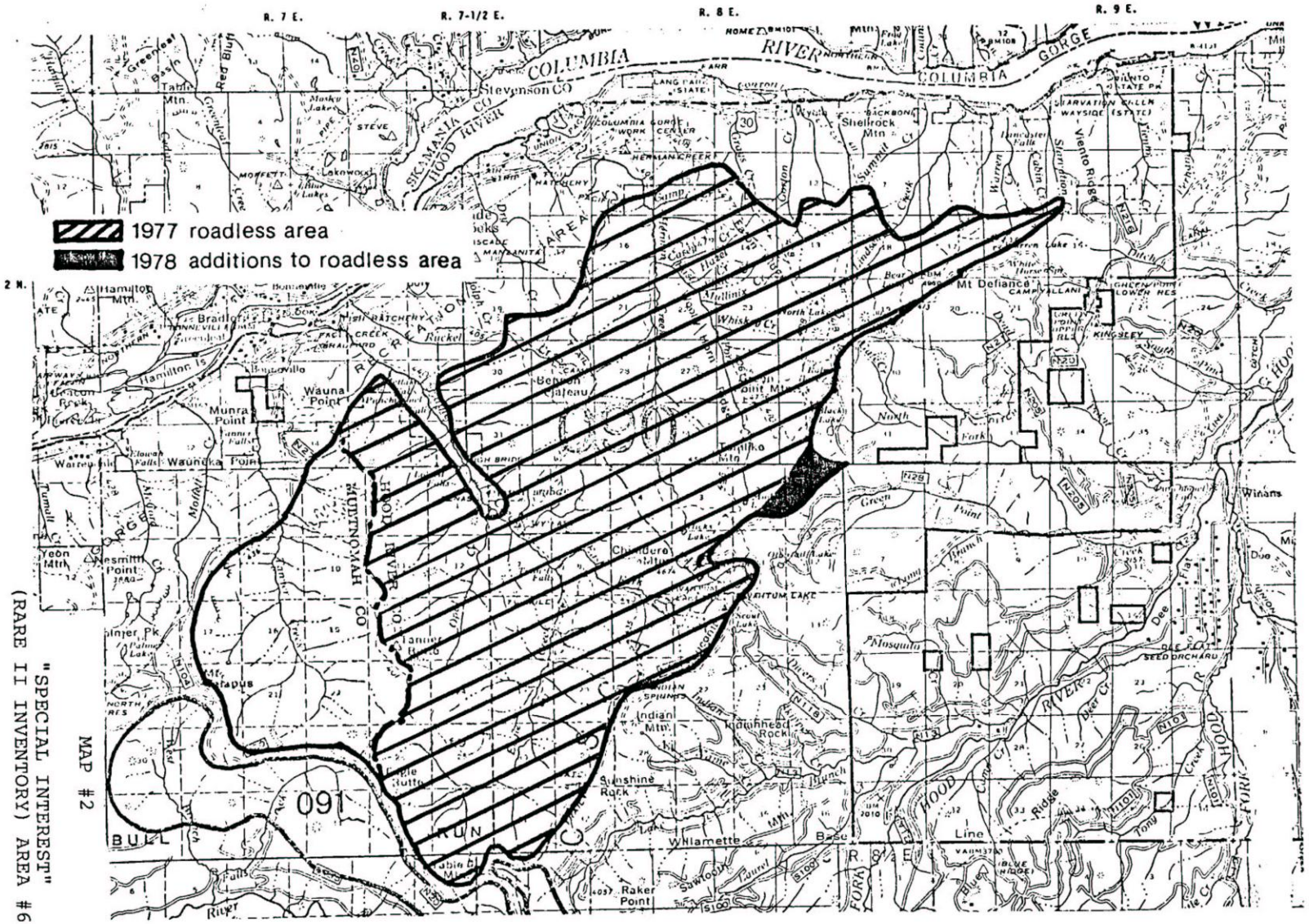
3. Strategies:

   a. Support the Mt. Hood National Forest Management Plan designation of Wilderness Study and Special Interest for the Herman-Eagle Creek

Wilderness Study Area. The Wilderness Study Area incorporates the RARE II Inventory Area #6090.

b. Support the U.S. Forest Service Plan designation for "Wilderness" (i.e., Wilderness and Wilderness Study) as shown on map 15 and defined in the FES (1977) and wilderness boundaries as shown on the Mt. Hood National Forest map, revised edition, 1979; scale ½" = 1 mile.


COLUMBIA RIVER
Special Interest - Eagle Creek
SIec
RRhr
MULTNOMAH COUNTY
HOOD RIVER COUNTY
RRhr
roaded recreation
Hood River
WSec
wilderness study
Eagle Creek
GFhr
General Forest
Hood River
RRhr
GFhr
GFbr
GFhr
NORTH
RRhr
U br
RNA
GFbr
MAP #1
HERMAN-EAGLE CREEK
WILDERNESS STUDY AREA



NOTE: Mapping errors may accrue from transferring boundaries from one map base to another. The intent here is to indicate as accurately as possible ro 'less areas.

TABLE 1

EAGLE - 090

LOCATION

The Eagle area is located on the Mt. Hood National Forest, Columbia Gorge Ranger District, within Multnomah and Hood River Counties.

The perimeter of the area is roughly as follows: Mt. Talapus on the west; road N-20 to Rainy Lake, Mt. Defiance and Warren Lake to the Forest boundary on the east; and generally the cliff tops in the Columbia Gorge to the north.

ACREAGE

Approximately 41,200 acres are included with 4,062 acres in Forest Service ownership.

GENERAL DESCRIPTION

The Eagle area is covered by two forest ecotypes: silver fir - Douglas-fir (003) and subalpine fir - mountain hemlock (004). Elevations range from 400 feet near the Columbia River to above 4,000 feet along the southern boundary. The country is typified by rough topography, many drainages oriented in a north-south direction and broad, flat ridge tops between drainages. The breaks of the Columbia Gorge along the river are characterized by rocky slopes and rock outcroppings. Higher elevations and ridge tops are generally covered with grasses or low growing shrubs. Waterfalls, mountain peaks and lakes provide the area with significant landscape features. An extensive and moderately used trail system provides access to the major drainages. The Pacific Crest National Scenic Trail, Eagle Creek Trail and Herman Creek Trail traverse the area.

CURRENT USES AND ACTIVITIES

The Eagle Creek area has always been used extensively for backpacking and camping. The PCNST covers about 10 miles in this area. Wahtum, North and Rainy Lakes are within the boundaries.

Draft and final environmental statements were circulated on the Eagle Creek Planning Unit (which includes all but 300 acres of the area). The final issued in January 1975 recommended to the Chief that 40,900 acres be included as a Wilderness Study Area.

STATISTICAL DATA

A detailed assessment of the resource impacts associated with allocating this area to multiple-use or wilderness management has been included in the OREGON STATE SUPPLEMENT. These figures have been presented in a manner that will facilitate comparison of this area with others for possible inclusion into the National Wilderness System.

Source: Mt. Hood National Forest, Attachment to the Oregon State Supplement of the U.S.D.A. Forest Service Environmental Statement on Roadless Area Review and Evaluation II - RARE II (U.S.D.A., Forest Service, June, 1978).

APPENDIX "A" (1/2)

[*]GOAL 2 – FEDERAL LANDS

A. GOAL:

Governmental agency management plans shall be consistent with Hood River County's Comprehensive Plan.

B. POLICIES:

1. Coordinate development of the Comprehensive Plan and related implementing measures with plans of other affected governmental units.

2. Develop and adopt appropriate plan and zoning designations for all properties transferred from federal ownership to private ownership.

3. Review and comment on various management plans and policies developed and adopted by governmental agencies in Hood River County.

4. Develop and adopt for all private lands in Hood River County a Comprehensive Plan and implement that Plan with appropriate ordinances.

5. The County will take into consideration other governmental needs when developing the Comprehensive Plan.

6. Ensure that affected governmental agencies are involved in development of the County's Comprehensive Plan.

C. STRATEGIES:

1. Affected governmental agencies shall seek and enter into special district cooperative agreements with Hood River County.

2. Educate the general public and governmental agencies to the fact that the County has the responsibility for developing a Comprehensive Plan and it is expected that local and state governmental agencies will conform to this plan.

3. Recognize that the U.S. Forest Service has entered into a cooperative agreement with the County regarding coordination of land management plan and policies.

[*] The Goals, Policies, Strategies, and Land Use Designations and Standards developed by the County are not binding on the management of the National Forest Systems Lands within Hood River County.

4. Review and comment on the U.S. Forest Service Forest Land and Resource Management Plan when made available to the public.

5. Adopt as a Background Report the Mt. Hood Planning Unit, Final Environmental Statement 1977 as developed by the U.S. Forest Service except for all revisions determined by the County to ensure that all private lands are appropriately planned and zoned.

6. Recognize, support and educate the public, agencies, etc., regarding the following concept and directive:

    a. The concept that the FES map scale was chosen to describe the resource area characteristics primarily for the purpose of selecting a plan management direction etc., for the U.S. Forest Service and Bureau of Land Management lands. Specific direction on private, County or state land will continue to be their adopted or revised comprehensive plan and ordinances. They are not superseded by the FES.

    b. The Goals, Policies, Strategies, and Land Use Designations and Standards developed by the County are not binding on the Management of the U.S. Forest Service Lands with Hood River County.

GOAL 5 - HISTORIC AREAS, SITES STRUCTURES AND OBJECTS

A. Introduction:

The following is a general overview and inventory of Historic Resources in Hood River County. Some of these resources are located within the City of Hood River and its Urban Growth Area. Questions concerning these sites should be addressed to the City of Hood River Planning Department.

An additional report has prepared which evaluates resources through the Goal 5 process. This report is entitled GOAL 5 EVALUATION PROCESS: HISTORIC AREAS, SITES STRUCTURES AND OBJECTS. These sites were identified by the LCDC in their compliance order.

B. City/Westside Area:[1]

The town and valley rising south and west from the new Hood River Village went through some indelicate periods of name calling before the permanent appellation of Hood River was finally settled on.

Indians of the area who lived in villages on the present site of Hood River City called it Waucoma, "place of the cottonwoods." Acres of the big trees lined the Columbia River at this point.

When Lewis and Clark Stopped near today's site of the Hood River Village complex on October 29, 1805, they called the mountain stream tumbling out of the valley the Labeasche River. Or so it was written in the Lewis and Clark Journal in "ear-spelling." The naming was in honor of Private Francois Labiche, second boatman and second interpreter in the explorer's party. A French-Canadian, he spoke English, French and several Indian dialects. He was a fine boatman and a good tracker, as well. The name Labeasche, or Labiche was applied to the valley's main stream and to the vicinity for many, years. Unfortunately, through common usage it degenerated into what sounded like the English word for a female dog. Possibly this erosion of the original name Labiche, led to renaming the stream Dog River.

However, an immigrant or settler of 1844 wrote many years later that a party coming down the trail from The Dalles with cattle late that year was stopped by torrential rains at the mouth of the river and forced to eat one of the camp dogs for sustenance. And so, he reported, the stream became Dog River. Another (immigrant or settler) stated that while coming across the plains by wagon train, he had been personally acquainted with the unlucky dog destined for the cooking pot.

Dog River, as a geographical label for the pioneer settlement did not appeal to Mrs. Coe, the first white woman to live permanently on the hillside overlooking the Columbia. The name was, she said, repugnant to her. She favored "Hood River" She refused to accept

[1] Reprinted from the Vacationer, Ruth M. Guppy, 1967.

any mail addressed to "Dog River, Oregon Territory." The fact that she was the wife of a former U.S. postal agent for the Territory, which embraced all land north of California and west of the Rockies, may have had some bearing on the swift change of the little settlement's name to Hood River.

This more fitting post office address appeared on a map as early as 1856, less than two years after Mrs. Coe began her one-woman fight for the name now uniformly applied to the mountain stream, the city, the county, and the valley made famous all over the United States...Hood River.

Hood River is an old community by Oregon standards. It was settled in 1854. The Columbia River was the only easily accessible gateway to Hood River until the railroad arrived in 1882. The old sidewheel steamers and then the sternwheelers put onto the convenient sandbars here from the day the first permanent white settlers stepped ashore in 1854 until World War I.

Before Bonneville Dam backed up the Columbia's waters, its riverfront was a mass of cottonwood trees and immense sandbars. When the river ran high in June, the river boats could snub their bows against the railroad tracks close to the train station. A floating dock accommodated passengers and freight.

Directly above the railroad station stood the first hotel. When white settlers first came, this spot was the site of an indian camp. The present location of Hood River Village served as a ferry landing until the interstate bridge was built in 1924.

The area of the city from the Hood River to Thirteenth Street was originally the donation Land Claim of Nathaniel Coe (1854). The Coes' platted the down in 1881.[2]

Few wooden buildings in Hood River have survived the start of the city proper in 1881 and the years of growth which followed. One of the oldest, the 90 year old Smith home, still stands at the northeast corner of (6th) Sixth and State Streets. After the Honorable Ezra L. Smith built his home in 1886, it stood for a long time in magnificent splendor and semi-isolation on its crest of land, the "only large house in town". C.C. Anderson purchased the property for a mortuary in 1928.[3]

In the summer of 1904, Mr. and Mrs. Rand opened the Wau-Gwin-Gwin Hotel where Phelps Creek dropped to the Columbia River. Indians had used the site as a meeting place and had called the falls by that name which means "rushing waters". Simon Benson, a prime factor in pushing the original Columbia Gorge Highway to completion in 1920 realized the need for a hotel to accommodate all of the motorists who would use the new highway. The old Wau-Gwin-Gwin resort came down and up went an imposing stucco-concrete complex called the Columbia Gorge Hotel in 1921. It was opened as the "first purely tourist hotel in the state".

[2] Reprinted from the "Vacationer" Hood River News, 1970.
[3] Excerpts from the "Panorama" Hood River News, 1971.

There are many historic places and structures in the Hood River community. Perhaps the oldest in the area is the H.W. Morton (Struck) house built in 1873 near Ruthton Point.

C. Central and Upper Valleys:

In pioneer days when heavy timber still covered much of the Upper Hood River Valley, the whole area was called "Mount Hood". And rightly so - it was named after the majestic Mt. Hood that loomed to the south.

In those times Indians, who called the mountain "Wy'east", would keep mountain trails open, setting fires every spring in the lower levels and letting them burn up the mountain as the frost and snowbanks receded.

The north side trails were popular because of the meadows and its massive growth of camas. Except for choice varieties of dried salmon, there was no article of food that was more widely traded than the camas. The camas bulbs were usually dug in the late spring and cooked in a pit in the ground. Sometimes they were dried and stored for future use. The Indians would also cache them in baskets lined with maple leaves and set them up in trees to be used later when traveling.

Records about first settlers in Mt. Hood are not clear. One account indicates the first settled about 1859, a date not definitely confirmed. They were said to include a D. M. Bridgefarmer and his young wife. They had 320 acres of rich upper valley land. Joel Divers was said to have settled on a meadow where the Hanel Mill was built near Middle Mountain, and three brothers named Robertson settled at the base of Bald Butte, and William Davis moved into the area at the ford by the Punch Bowl.

In the earlier years many miners lived in cabins along the creeks, and while along with trappers they might have come as the first white men in the area, they were not permanent residents. Upper valley trails were the shortest way to the Oregon City land office at the time, and they were a rugged route for travelers to take. Trails went over Booth Hill and up over Bald Butte, running along the East Fork of what is now known as Hood River to Dee and Sandy flats.

David R. Cooper and his brother-in-law, Hezekiah Dimmick, filed on land in 1882 at The Dalles land office and came to build their log houses, bringing their families the next spring. William Odell was another homesteader who lived about three miles north of Baldwins. He and Baldwin were elected alternately as county commissioner for the upper valley called Baldwin's precinct as early as 1870. The first settlement in this vicinity was made about 1882 to 1884 when Coopers, Dimmicks, George Werner, James Langille and Emery Welches arrived to homestead following the surveying of the land. John Diver bought O. H. Rhodes place on a little meadow east of the Hanel Mill site.

Traffic was growing in the area about this time, and in 1883 the Mt. Hood Toll and Wagon Road from Coopers to the Glaciers was incorporated by Cooper, Graham, Coe and Stranahan. By the next spring they had started a tourist business with a tented camp

up at the glacier. Mrs. Cooper was the first hostess to the T. S. Eliot party in August of 1884, then in 1888 they sold to Portland bankers Ladd and Tilton. The following spring every available team and man was put to work to build the road and a chalet up at the snow line on a promontory above the Cooper camp. They called it the Cloud Cap Inn. The Lewis and Clark Exposition at Portland in 1905-06 brought world tourists to the valley.

D. The Odell Area:[4]

Odell first included all of the County east of the Hood River. The town was named after the Tom Odell family whose child, Milton Odell, was the first white child born in the Odell area.

The first school was built in 1870, and the first high school in 1916. Prior to 1916 the high school had temporary quarters in the Odd Fellows Hall for a couple of years.

Tales from early settlers, hunters and trappers report that the timber and brush from Hood River south towards Odell was so dense that at 20 paces it was hard to tell a man from a bear. Early human inhabitants took advantage of the numerous game trails made by the many wild animals when traveling to and from Odell. The pure mountain streams and rivers teemed with a variety of fish.

Odell has had the largest concentration of fruit packing and storage buildings since farming started in the Valley in the late 1800's. There have been many sawmills in and around the Odell area, some dating back to the mid-1800's, shortly after the area was first settled.

Odell has had a variety of businesses and manufacturing through the years. In addition to fruit packing and storage warehouses and lumber mills, there have been box factories, fruit packing equipment manufacturing, a cheese factory, etc.

The town's two business districts came about as a result of the railroad moving its proposed track south of the original site. The town's original site was at the Summit Drive and Tucker Road intersection where two of the early commercial buildings still stand, the Odd Fellows Hall and the Stone Store (Webers).

The railroad track location was moved from the Dethman Ridge - Odell townsite area to its present site, a more circuitous route through south Pine Grove and then through the Odell Flat and on to Summit, Dee, and Parkdale.

Early residents of the area say the move was made because a property owner in the Dethman Ridge area either refused or asked too much money for a right-of-way.

[4] The history of Odell was contributed by John Weber (7/78).

The main Odell business district moved immediately 1/2 mile south to the present location. It was not until after World War II that commercial business appeared again around the old townsite at Summit Drive and Tucker Road.

E. Columbia Gorge:

The Columbia River Gorge is approximately one million years old. As the Cascade Mountains rose, the Columbia River continued to downcut and maintain its course. Several landslides have resulted from the oversteepened cliffs thus formed. The Bonneville slide, on the north side of the Gorge, covers approximately 10 square miles. In its last major episode of sliding 700 years ago, it dammed the Columbia River to a depth of 200 to 300 feet (John Beaulieu, Geologic Hazards of Parts of Northern Hood River, Wasco, and Sherman Counties, Oregon, 1977). The Bonneville slide is at the site of the Bridge of the Gods recounted in Indian Legends. The Wasco, Klickitat, and Chinook Indians who lived in the Columbia Gorge area narrated different legends behind this natural stone arch that they said once spanned the Columbia.

According to the Klickitat version, the Great Spirit provided the bridge to facilitate movement of the Indian peoples across the treacherous Columbia at this point. Two chiefs, Klickitat on the north bank, and Wy'East of the south bank became rivals for the hand of a beautiful Indian maiden. Because of the warfare that resulted between the two chiefs, the Great Spirit became angry and destroyed the Bridge of the Gods. Chief Klickitat turned into Mt. Adams and Wy'East became Mt. Hood. The Indian maiden became beautiful Mt. St. Helens.

The Indians in the Gorge at first lived in pit houses. They later came to build long cedar plank houses in which several related families lived. The Indians at the Cascades of the River (the present location of Cascade Locks) harvested salmon in dip nets, hunted game, and collected berries. Many Indians died when they came into contact with European man's diseases, particularly smallpox in the eighteenth and nineteenth centuries.

Lewis and Clark and their party in 1805 and 1806 were the first white men to pass through the Columbia Gorge. David Douglas, a British botanist, in the 1820's gave his name to the Douglas fir tree. He visited the rapids at the present location of Cascade Locks, and after climbing to the top of both the north and south sides of the Gorge named the mountains here the Cascades. It is not known if Douglas gave this name because of the rapids in the Columbia called the "Cascades", or because of the many waterfalls cascading down the sides of the Gorge.

Ever since the time of Lewis and Clark, the Columbia Gorge has been used by the white man primarily as a transportation route, first by water and later by road and rail. Up until completion of the locks at the present location of the town of Cascade Locks in 1896, the Cascades on the Columbia proved an obstacle to navigation between The Dalles and Portland. Enterprising individuals on both sides of the river made money by providing portage service for cargoes between the streamships that arrived from The Dalles on the upriver side and Portland on the downriver side. In 1851, Francis Chenoweth built a

railway portage around the Cascades on the north bank. It had wooden rails, over which a small flat car was pulled by a mule.

A few years later, when the 75¢ toll per hundred pounds was doubled on the wooden railway, two men named Ruckel and Olmstead jointly went into competition with the Washington portage by building a railway around the Cascade rapids on the Oregon side. This Oregon portage in 1861 purchased a small locomotive to haul the freight on the short railway. This engine, the "Pony", was the first in the Northwest. It is now on display at Cascade Locks. The people on the Washington side then put pressure on the Washington Territorial Legislative to provide a charter for the construction of a steam railroad on the north bank. The year 1864 saw 36,000 passengers and 21,834 tons of freight go over this Washington portage (Jim Attwell, Columbia River Gorge History, Vol. 1, Page 136, 1974). There were thriving settlements at the Cascades at this time, serving the gold mining traffic and military supplies into eastern Oregon and Washington. Cascade City (the location of present day North Bonneville) was the largest city in Washington Territory, surpassing Seattle and Tacoma in population.

The latter half of the nineteenth century saw the construction of The Dalles - Sandy Wagon Road (also known as the Old Military Road). This road served as an alternate mode of transportation to the dominant water transport. Portions of the road are still used. The alignment of the gravel road between Wyeth and Cascade Locks roughly follows the route of this old wagon road.

In 1883, construction of the O.W.R.& N (Oregon, Washington Railroad and Navigation Company) Railroad between The Dalles and Portland was completed. This undercut the business of the steamships and the portages. In 1913, construction of the Columbia River Highway was begun. This highway undercut the passenger business of the railroads. Many people, beginning in the early twentieth century, have traveled by car through the Gorge to see its features. Some tourists have continued from Hood River to drive south over the Mt. Hood Loop Highway.

In the early 1930's, the completion of Bonneville Dam caused a raising of the Columbia River within the Gorge and drowned out the Cascades on the river. Bonneville Dam was the first dam on the portion of the Columbia River bordering Oregon.

As one travels through the Columbia Gorge on the highway or railroad, he observes place names that have historical significance. Ruckel Creek is named for Joseph Ruckel who occupied a homestead just west of Cascade Locks. Wyeth is named for Nathaniel Wyeth, an American trader and colonizer who traveled overland to the Northwest in the 1830's. A railroad tie treatment operation was at Wyeth while the O.W.R. & N. Railroad was being built. A post office was here from 1903-1936. In the 1930's and 40's, Wyeth was a thriving community. It had a mill, school, service station, and for a time, a CCC (Civilian Conservation Corps) work camp.

Viento is a Spanish word meaning "wind". A post office was located here from 1896 until 1919. There used to be a planing mill here that shipped its planed lumber out by

rail. Logs were flumed down the Little White Salmon River drainage in Washington to the Columbia River and then towed across to the mill.

Starvation Creek receives its name from an incident on the railroad in the winter of 1884-85. Passengers on a train traveling through were stranded by slides for three weeks. They subsisted on supplies brought from Hood River together with the oysters, beef, mutton, and jackrabbits discovered in the baggage car (Jim Attwell, Columbia River Gorge History, Vol. 2, page 184, 1974).

F. Historical Landmarks and Preservation:

Historic preservation is a well-rounded program of scientific research and study, protection, restoration, maintenance and the interpretation of sites, buildings, and objects significant in American history and culture. To be considered for preservation, a structure or area should have outstanding historical and cultural significance in the nation or in the state, region, or community in which it exists. Such significance is found in:

1. Historical structures or sites which have a broad cultural, political, economic or social history of the larger patterns of American heritage.

2. Structures or areas that are identified with the lives of historic personages or with important events in the main currents of national, state, or local history.

3. Structures or areas that embody the distinguishing characteristics of architectural type specimen, inherently valuable for a study of period style or method of construction; or a notable work of a master builder, designer, or architect whose individual genius influenced his age. Smaller structures, such as the first squared log cabins or the sod houses of the pioneers may be as important, relatively, as the mansions of the past.

4. Structures or sites or archeological interest that contribute to the understanding of aboriginal man in America.

G. Definitions:

1. Historic areas: Lands with sites, structures and/or objects that have local, regional, statewide, or national historical significance.

2. Important buildings: Have been erected by every generation in history. There is no style too elaborate or severe, or too academic or spontaneous that it may not be highly regarded by future generations.

H. Inventory of Historic Resources:

1. The following buildings have been identified as having possible historical significance in the City/Westside area (the list is by no means conclusive):

a. The J.W. Morton (Struck) house built in 1873 off Ruthton Point. The historical significance is that it is the oldest house in the Hood River area.

b. The Columbia Gorge Hotel (Neighbors of Woodcraft) built in 1921 on Phelps Creek on cliffs above the Columbia River. Significance is the architectural style and the fact that it was the first tourist hotel of its kind in the state.

c. The E.L. Smith house (Arts and Crafts Society) built in 1886 at 514 State Street, Hood River. Significance is the architectural style and social history of the structure.

d. The Hood River City Hall built in 1920 at the corner of State and Second Streets. Significance is the Art Nouveau brick style of the building.

e. The A.H. Tieman Building (Masonic Lodge Hall) built in 1901 at 212 Second Street. Significance is the brick "eyebrow" voussior over each window.

f. The Hood River railroad station built in 1911 at the corner of Cascade and First Streets. Significance is architecture and early transportation.

g. The Union Building (Diamond Fruit Growers office) building in 1912-13 at Third and Columbia Streets. The original use of the building was as the Apple Growers Association meeting place.

h. The First National Bank (First National Bank of Oregon) built after the turn of the century (1910) at Third and Oak Streets. The significance is architectural style.

i. The Butler Banking Co. (U.S. National Bank of Oregon) built in 1924 at Third and Oak Streets, south of the First National Bank. Significance is the Egyptian revival style of architecture (columns), popular in the 1920's.

j. The IOOF building built in 1906 at Fourth and Oak Streets. Significance is the architectural style.

k. The Hood River County Library built in 1913 on State Street, just east of the E.L. Smith house. The Georgian style is significant.

1. The William Stewart house built in 1903 at 719 State Street. This is a two story wood frame Colonial style house.

m. The Truman Butler house built in 1902 at 621 State Street. This is a two story wood frame house with bellcast hip-on-gable roof.

n. The Congregational Church (original use) built in 1891-1892 at 311 Sherman Street. It is used as a residence today but the distinctive architectural style remains.

o. The Congregational Church (Riverside Community Church) built in 1912-13 at Fourth and State Streets. This is the second church erected by the Congregationalists and is suggestive of the Northern Baroque style.

p. The Frank Cram house built in 1903 at 922 State Street. This square shaped house with bay windows, bedroom dormers, and such is in excellent condition.

q. The St. Mark's Episcopal Church built in 1903 at the corner of 11th and Eugene Streets. The architectural style is significant. Remodeling occurred in 1924-25.

r. The Capt. C.P. McCan (Sheppard) house built in 1911 on Route 5, Tucker Road. This house is a distinctive Colonial style home.

s. The Charles N. Clarke house built in 1903 at the east end of Prospect Drive is a classic colonial house complete with a two story front porch supported by huge columns.

t. The Owen Hartley house built in 1905 at 12th and State Streets. This is a two story wooden frame colonial style house.

u. The Miles Potter (Cooper) house built shortly after 1875 on Route 3, Belmont Road. This 18 room, two and one-half story house has distinctive wood scroll designs.

v. The Valley Christian First Congregational Church built in 1887 on Route 5, Rockford Road. The bays of lancet windows, a lancet lourve and steep gable roof identify this significant style.

w. The Oregon (Hood River) Hotel built in December, 1904 on the corner of Second and Cascade Streets. The architectural style is significant.

x. The building on the southwest corner of First and Oak Streets. This is an original brick building.

2. The following sites have been identified as having possible historical significance (City/Westside):

a. The present Hood River County Courthouse is located on the site of the first city school house erected in 1883.

b. The Wau-Gwin-Gwin Hotel was located on the present site of Neighbors of Woodcraft building. This was a former camping and meeting place for Indians.

c. At Second and Cascade was the site of the Waucoma Indian Camp.

d. Koberg Beach was an old recreation site and docking point for early barge traffic.

e. The Old Dalles Wagon Road east of Hood River.

f. The former site of the Opera House is north of the present Riverside Church on State Street.

g. The Georgiana Smith Park Landmark adjacent to the County Library. A bronze plaque is placed on a boulder commemorating this site.

3. The following buildings have been identified as having possible historical significance in the Central Valley area:

a. The Church of Christ built in 1902, formerly the Union Church located on the Wy'East School Road in Odell. Significance is the architectural style and social history of the structure.

b. The Roy Pierce house built around 1920, located on Rt. 2, Box 900 Straight Hill Road in Odell. The house is a one and one-half story English house in the bungalow style.

c. Hazel Rebekah Lodge 156 and Kemp I.O.O.F. Lodge 181 built in 1904-1905 located on the southeast corner of Ehrck Hill and Odell Road in Odell. Significance is the architectural style and social history.

d. The Kollas house built around 1900 or prior, located on Kollas Road in Odell. Significance is in the architectural style.

e. The Kroeger house built around 1900 or prior, located on Summit Road in Odell. The significance is the architectural style.

f. Mt. Hood School built in 1915, located on Highway 35 in Mt. Hood. The significance is the architecture.

g. Odell United Methodist Church built in 1911, located in Odell. The significance is the architecture.

h. Tucker House built in 1881, located at Tucker Bridge on Highway 281 near Odell. Significance is the architectural style.

i. Weber Bros. Hardware built in 1908, located in Odell. Significance is architectural style.

4. The following places have been suggested as possibly having special historical significance. The suggestions need to be evaluated as to their significance using the enclosed checklist as a guide (Central and Upper Valleys):

   a. Old Odell Grade School.

   b. The Post Office on the East Fork.

   c. Billy Sunday Ranch.

   d. Home at 2700 Paasch Drive.

   e. Pine Grove Methodist Church.

   f. Pine Grove Grange Hall.

   g. Mt. Hood Country Store.

   h. Dave Winans residence, 4195 Dee Highway.

   i. Dexter Parton residence, 5630 Highway 35.

   j. Jack Davis place, Straight Hill Road.

   k. Tillicum Lodge, Miller Road.

   l. Crag Rats Hut, Pine Grove.

5. The following site has been identified as having historical significance in the Columbia Gorge area:

   Columbia River Highway Landmark (two bronze plaques located at Starvation Creek State Park).

   The Citizens Advisory Group will hopefully be able to identify any other significant sites (including archaeological sites) or structures within the Columbia Gorge area. (Note: It should be remembered that the Columbia Gorge area does not include anything within the Cascade Locks Urban Growth Boundary).

I. Conclusions and Observations: Findings:

1. The Hood River Valley, particularly the area within the Central Valley area, is rich in history and diverse in background. The Historic Sites and buildings

located in the Statewide Inventory provides an initial debarkation point for future exploration. Local residents have and should add future historic information as time goes on.

2. Goals and Policies should be established regarding the treatment of cultural resources within the planning process. A thorough inventory of the localities, cultural resources should begin with either the County Museum Board or Historical Society spearheading the campaign. The inventory should be a comprehensive, evaluated survey having a specific target date for completion. After identification, a plan must be developed which will protect these significant resources.

3. The Columbia River Gorge was used first by Indians who harvested anadromous fish and the abundant game and berries in the area.

4. The Gorge has been used by the white man primarily as a transportation corridor, for the generation of hydroelectric power, and for scenic recreation.

5. The Cascade mountain range was named by David Douglas when he visited the Gorge.

6. The Statewide Inventory of Historic Sites and Buildings (1976) identifies one site of historical significance within the Columbia Gorge area. The County Museum Board or Historical Society can hopefully lead the effort to thoroughly inventory cultural resources within the Columbia Gorge area and identify Goals, Policies, and a plan for protection of all the historic and cultural resources (sites and structures) that may still exist within the Gorge.

GOAL 5 EVALUATION PROCESS: HISTORIC AREAS, SITES, STRUCTURES AND OBJECTS

A. Introduction:

The following involves a Goal 5 analysis of specific resources and other items noted in the LCDC Critique.

B. Cloud Cap-Tilly Jane Recreation Areas Historic District:

1. Location: In Mt. Hood National Forest, T2S R9E Sections 10, 14, and 15. (See MAP #1)

2. Quality and Quantity: Most of the buildings and historic sites are relatively well preserved, although some of the original buildings no longer stand. The site gives a good opportunity to observe historic trails and roads, and gives a representation of architectural styles and lifestyles during the period between 1885 and the late 1930's. See Appendix "A" and Map #1 for inventory on quality and quantity and map.

3. Conflicting Uses: Forest practices and small hydroplants could be considered potential conflicting uses, according to the U.S. Forest Service.[1]

Consequences - Economic: (on conflicting use) Would reduce by a small amount land available for these uses. (to resource) Allowing conflicting uses would diminish the beauty and character of this historic site, which could reduce the number of tourists that visit it each year.

Social: (on conflicting use) None. (on resource) Same as above.

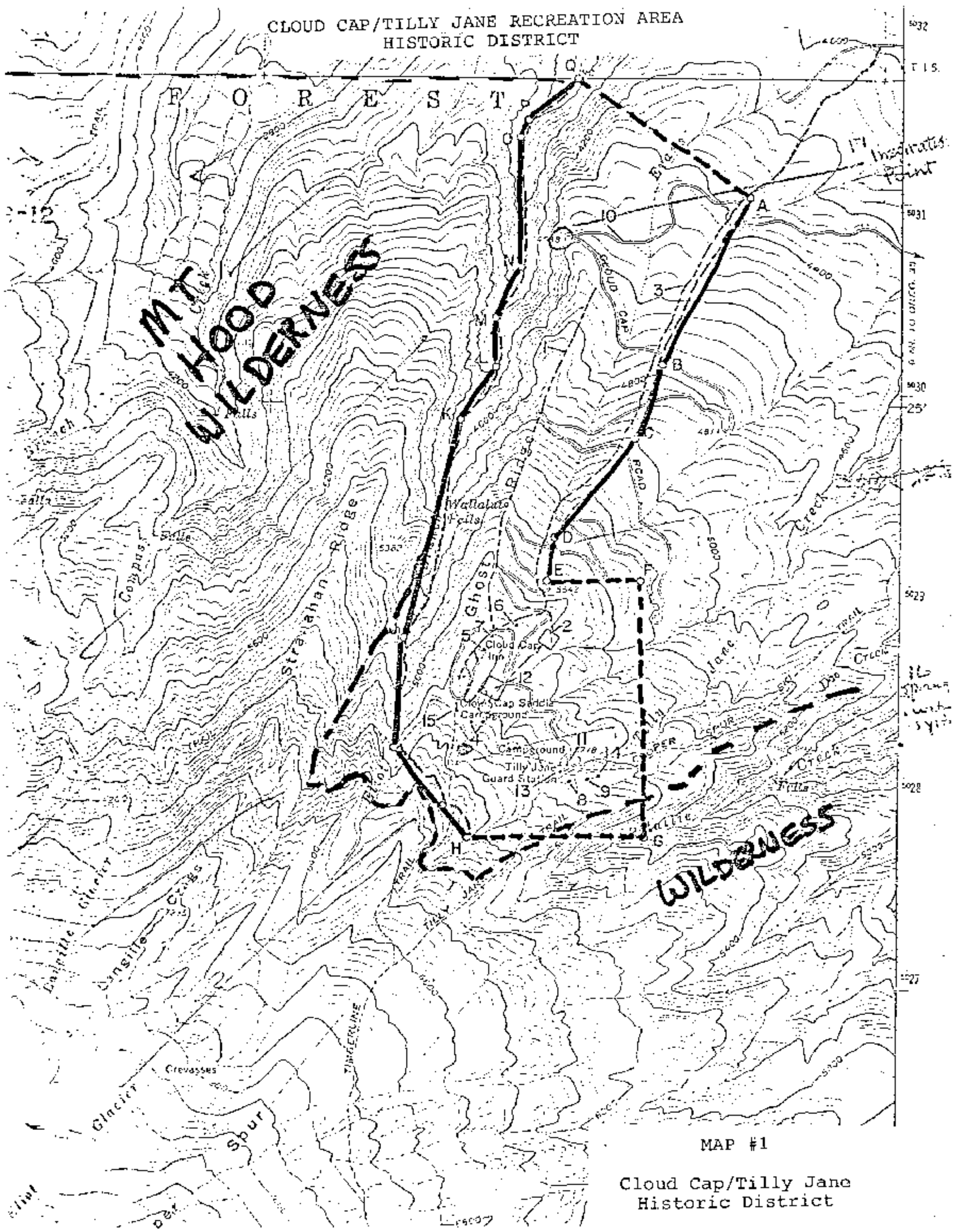
Environmental: (on conflicting use) None. Area has been in recreational use for many years and is recognized as an important feature of the area's tourist trade. (on resource) Allowing conflicting uses would diminish the natural beauty of the area and make it less desirable as a tourist attraction.

Energy: (on conflicting use) None. (on resource) Could allow commercial establishments to purchase electric energy at less cost.

4. Recommendation: The recommended designation for the site is 3C (Limit Conflicting Uses), because this area is designated as a "developed recreational" site, it is managed primarily for recreation use. However, this does not preclude other activities such as forestry and hydropower from occurring. The following Strategy has been added to the County Policy Document under Goal 5, Historic Areas, etc.

[1] U.S. Forest Service personnel correspondence, 7/22/82.

CLOUD CAP/TILLY JANE RECREATION AREA
HISTORIC DISTRICT



MAP #1

Cloud Cap/Tilly Jane
Historic District

"Support the U.S. Forest Service designation of Historic District and related management plans for the Cloud Cap Inn-Tilly Jane Recreation Areas."

C. Parkdale Community Church:

1. Location: Listed in the Statewide Inventory of Historic Sites and Buildings, Hood River County. See Appendix "B" for inventory on location, quality and quantity.

2. Conflicting Uses: If site is not preserved, church could be removed for use as a residential lot.

3. Consequences: Since removal of the church would obviously destroy the resource, only consequences to conflicting use will be discussed.

   Economic: May remove a tourist attraction resulting in decrease of tourist dollars coming into the community. Would provide additional homesites in the area.

   Social: Would remove a unique social gathering spot for church and other community uses; would allow residential uses to develop.

   Environmental: None.

   Energy: Provides a tourist attraction in Parkdale and along a major road.

4. Recommendations: Recommend 3C designation: Plan policy recommends that identified historic places be preserved and provides that the County pursue a program to implement the Goals, Policies and Strategies of the Plan. This may include a Historic Overlay Zone Ordinance or specific Historic Zone Ordinance to be placed on the site to insure its preservation. This site also appears on TABLE 1 - List of Historic Resources. The following Strategy has been added to the County Policy Document under Goal 5, Historic Areas, etc.:

   "Designate within the Plan the Parkdale Community Church as an important Historic Site (3C)."

D. Other Important Historic Resources:

Information on the quality and importance of the place is not given in the Statewide list and has not been provided by objectors or the Department regarding the following sites: (1) Dee Lumber Mill, (2) Cascade Massacre Site, (3) LoLo Pass Trail, (4) Indian Trail, and (5) Indian Springs. They satisfy the criteria of Section 1A OAR 660-16-000 and need not be addressed in the Plan.

The Goal 5 process was applied to the following sites: (1) Columbia Highway Landmark, (2) Tucker Sawmill Site, and (3) Oregon Trail.

The Eagle Creek Bridge is in Multnomah County, consequently it will not be discussed and the Parkdale Community Church has already been evaluated. The Oregon Trail referred to in the Statewide list is also known as the Barlow Trail where it passes through Hood River County. The County has inventoried the Barlow Trail.

1. Columbia Highway Landmark:

   a. Location: Starvation Creek State Park; State ownership; T2S R9E Section 4 (see Map #2 and Appendix "c").

   b. Quality and Quantity: The landmark is unique, because there is only one Columbia River Highway and the two plaques are significant because they recognize the initial construction of the highway at this point in 1912 (see Appendix "C").

   c. Conflicting Uses: Vandalism from public, however, it must be recognized the purpose of landmarks is to make the public aware of our heritage and the site has been in existence for some time, obviously without signs of vandalism.

      Economic: Additional public funds necessary to maintain the site if vandalized and possibly additional policing to reduce vandalism.

      Social: By being in a State Park, continual observation by State employees and general public will deter vandalism.

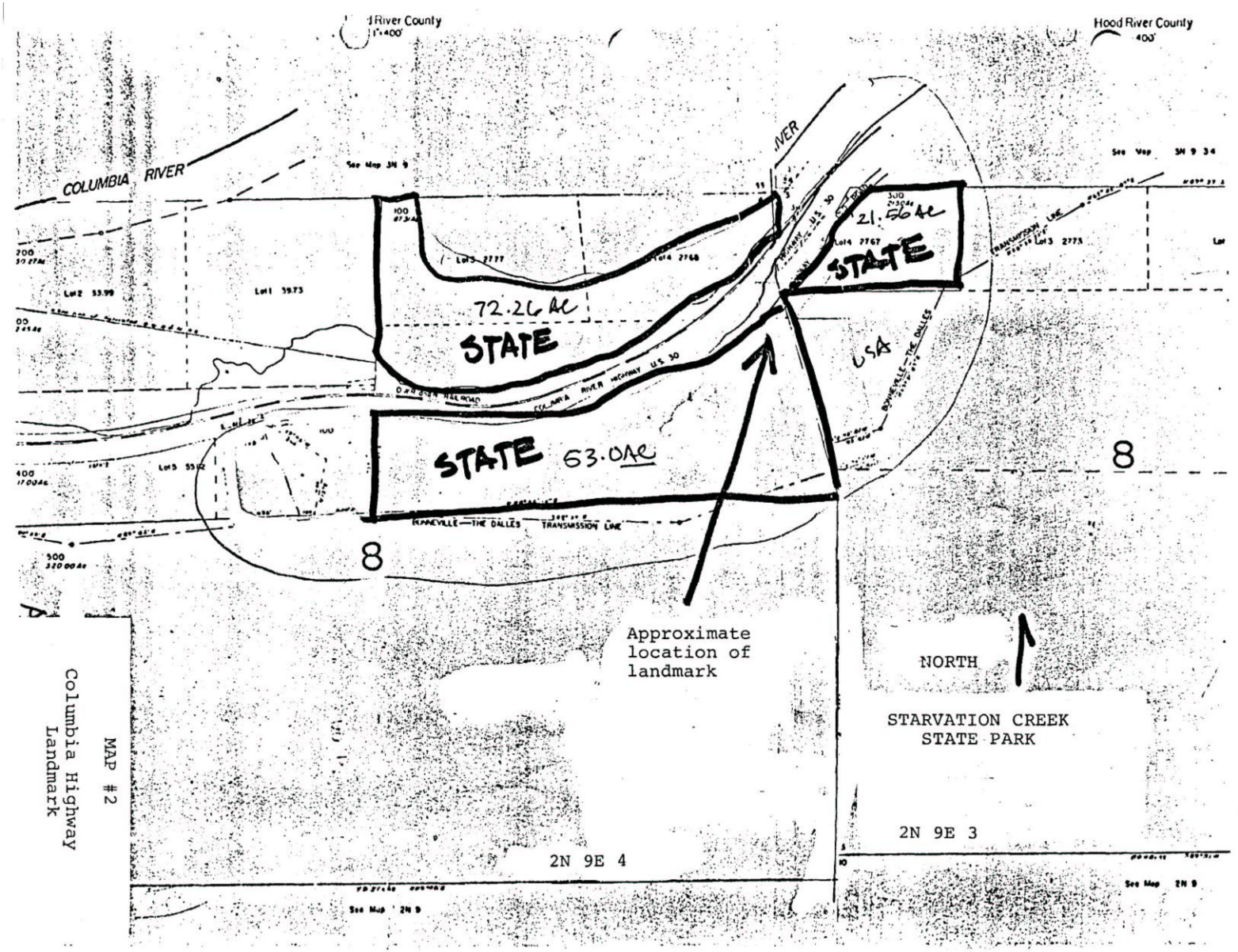
      Environmental: Indirectly the plan and zoning designation of Scenic Protection will provide public recognition and awareness that the intent and purpose within the Gorge is to protect scenic qualities.

      Energy: Replacement or repair will require more energy, obviously if vandalism does not occur negative energy impacts will not be noted.

   d. Recommendation: The following Strategies have been added to the County Policy Document.

      (1) Designate the Columbia Highway Landmark in the Plan as an important resource site, and allow conflicting uses (3B).

      (2) Support the State Parks and Recreation Division, Department of Transportation and the Oregon State Historic Preservation Office in all efforts to maintain and preserve the Columbia Highway Landmark in Starvation Creek State Park.


Hood River County
COLUMBIA RIVER
72.26 Ac
STATE
21.56 Ac
STATE
USA
STATE 63.0Ac
8
8
Approximate location of landmark
NORTH
STARVATION CREEK STATE PARK
2N 9E 4
2N 9E 3
MAP #2
Columbia Highway Landmark

2. Tucker Sawmill Site:

a. Location: General vicinity of Tucker Bridge; T2N R10E Section 15 (see Map #3 and Appendix "D"), however a specific site has yet to be determined.

b. Quality and Quantity: The site is unique because it was one of the earliest known industrial sites in the Valley (see Appendix "D").

c. Recommendation: A specific site location has yet to be determined, consequently the following Strategy has been added to the County Policy Document.

> "Designate within the Plan the general location of the Tucker Sawmill site, and identify as a Special Category and further address the site during post-acknowledgment, but by December, 1984."

3. Barlow Trail (Oregon Trail):

a. Location: T3S R9E Sections 28, 29, and 33 (see Map #4) .

b. The U.S. Forest Service is in the process of nominating Barlow Trail (Oregon Trail) to the National Register of Historic Places. The Forest Service is also developing a corridor management plan for the trail.

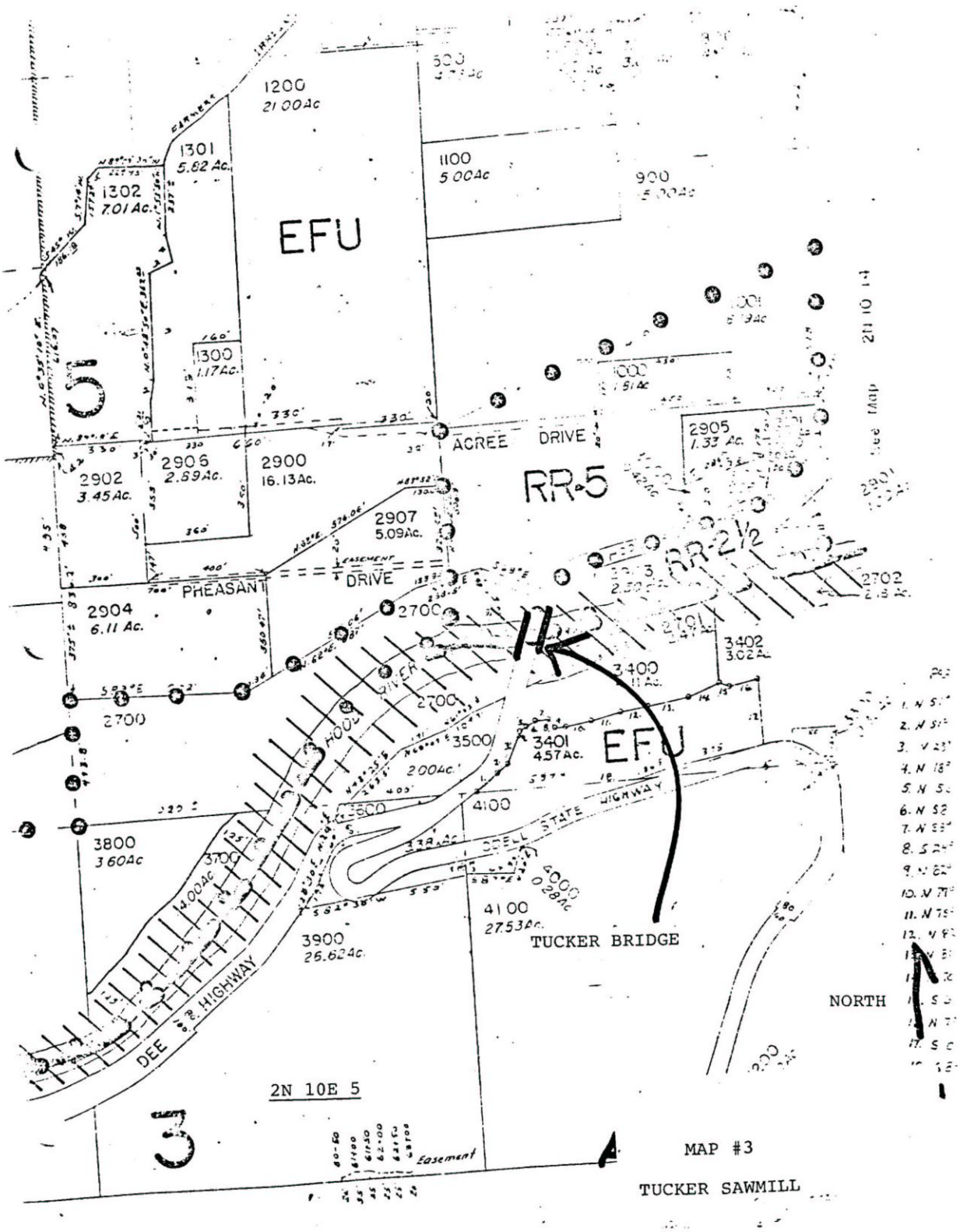
c. Recommendation: The following Strategy has been added to the County Policy Document:

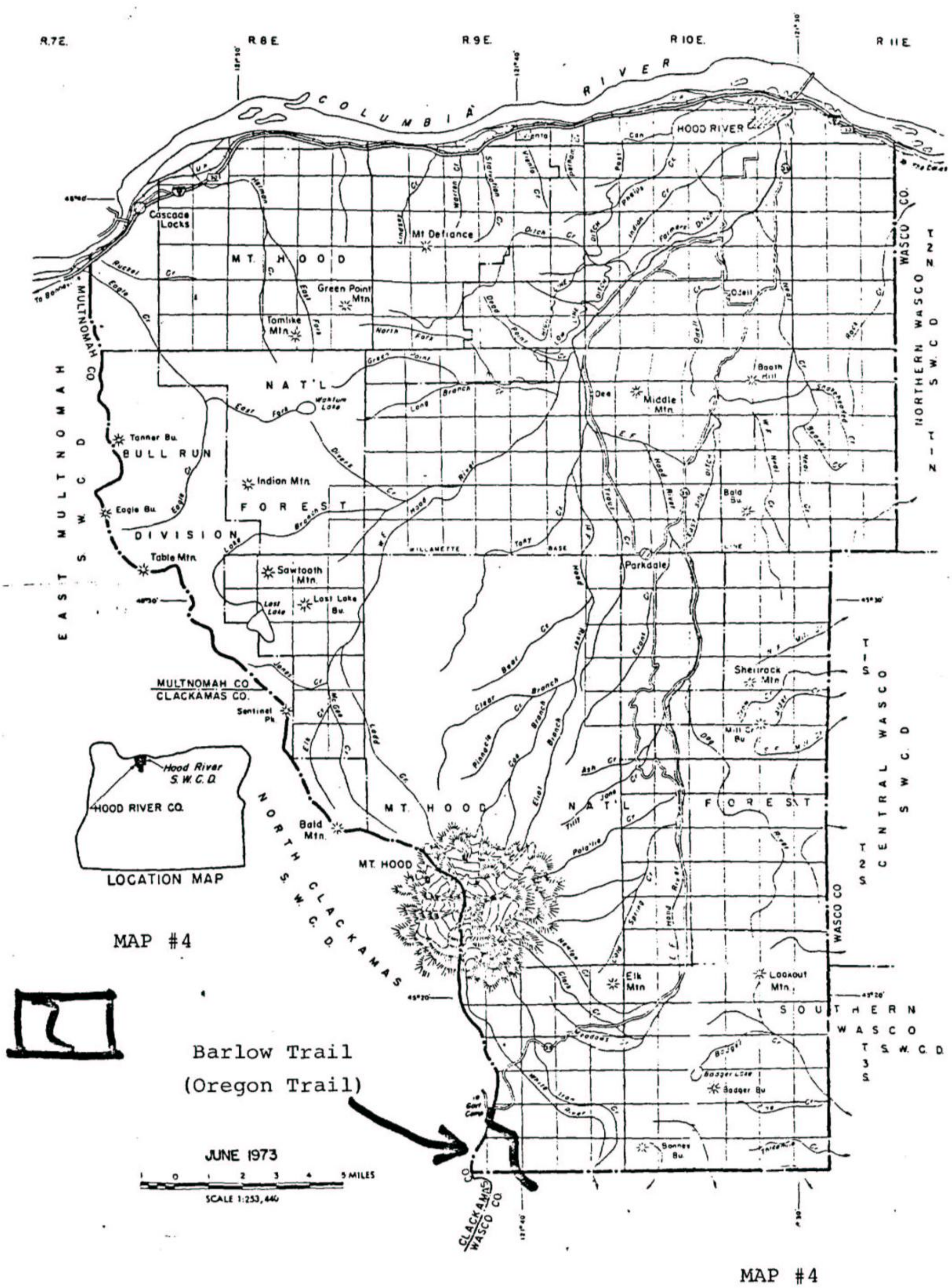
> "Support the U.S. Forest Service in the process of placing the Barlow Trail (Road) on the National Register of Historic Places."

E. Statewide Inventory:

The Statewide Inventory of Historic Sites and Buildings, Hood River County, 1976, lists fourteen historic structures (including the Parkdale Community Church) as having historic significance. Table 1 lists these sites. These sites are outside the UGAs of Hood River and Cascade Locks. The Columbia Gorge Hotel is a structure located within the City of Hood River's Urban Growth Boundary (3N 10E 27D #100) and it is listed on the National Register of Historic Places. LCDC Staff (Claire Puchy) stated it is the City's responsibility to evaluate the site through the Goal 5 process.

1. Location: Table 1 shows the location of all resource sites. Reduced plat maps showing the exact tax lot location are on file in the Hood River County Planning Department.


1200
21.00Ac
1301
5.82 Ac.
1302
7.01 Ac.
EFU
1100
5.00Ac
900
1300
1.17Ac.
ACREE DRIVE
RR-5
2905
1.33 Ac.
2902
3.45Ac.
2906
2.59Ac.
2900
16.13Ac.
2907
5.09Ac.
PHEASANT DRIVE
RR-2½
2904
6.11 Ac.
2700
3402
3.02Ac.
3400
11 Ac.
3500
3401
4.57Ac.
EFU
4100
3800
3.60Ac.
4000
0.28Ac.
4100
27.53Ac.
TUCKER BRIDGE
3900
25.62Ac.
DEE HIGHWAY
NORTH
2N 10E 5
MAP #3
TUCKER SAWMILL


R.7E.
R 8 E.
R 9 E.
R 10 E.
R 11 E.
COLUMBIA RIVER
HOOD RIVER
Cascade Locks
Mt Defiance
MT. HOOD NAT'L FOREST
Green Point Mtn
Tomlike Mtn
Middle Mtn
Dee
Booth Hill
Tanner Bu.
BULL RUN DIVISION
Indian Mtn
Eagle Bu.
Table Mtn
Sawtooth Mtn
Lost Lake Bu.
Parkdale
Bald Bu.
Shellrock Mtn
MULTNOMAH CO.
CLACKAMAS CO.
Sentinel Pk
Hood River S.W.C.D.
HOOD RIVER CO.
LOCATION MAP
Bald Mtn
MT. HOOD
NORTH CLACKAMAS S.W.C.D.
EAST MULTNOMAH S.W.C.D.
NORTHERN WASCO S.W.C.D.
CENTRAL WASCO S.W.C.D.
SOUTHERN WASCO S.W.C.D.
WASCO CO.
MAP #4
Elk Mtn
Lookout Mtn
Badger Bu
Barlow Trail
(Oregon Trail)
JUNE 1973
SCALE 1:253,440
5 MILES
CLACKAMAS CO.
WASCO CO.

MAP #4

2. Quality and Quantity: The quality and quantity of each site are appropriately discussed in the Statewide Inventory (1976) Document, consequently comments will not be repeated.

3. Conflicting Uses and Consequences: Overall, demolition and alteration are the two primary conflicting uses regarding all historic structures. For purposes of expediting this overall evaluation process, the sites have been grouped together.

   Economic: Demolition of historic structures on property zoned Commercial could result in allowing more insensitive use of the property and could generate additional jobs, commercial square footage, and economic return to the property owner. Demolition of a historic structure on property zoned Residential could result in higher density housing and a greater economic return to the property owner. Maintaining existing historic structures but allowing alterations to accommodate recycling of the structure to preserve the quality craftsmanship could make existing historic residential and commercial property more valuable and could diversify the County's tourist economy by creating new jobs and additional places for the public to visit. Funding opportunities are available to owners of historic properties. Some programs include: (a) conservation or scenic easements are beneficial because they preserve the historic character of historic structures and sites, plus properties subject to an easement shall be assessed on the basis of true cash value of the property less reduction in value caused by the easement; (b) make application to the State Historic Preservation Office to place the site on either the State or National Register. With a registration program, funding becomes available to assist individuals and owners become eligible for tax relief program; (c) the State provides owners of historic properties with a special property tax assessment and authorizes open space deferral assessment of properties. If the application is approved, the County Assessor must assess property classified as historic at its full cash value at the time of valuation for the next 15 years.

   With tax deferral programs and registration also come restrictions and government involvement regarding use of the property.

   Social: Removal or substantial alteration of a historic structure could very well meet the needs and desires of the property owners. The preservation of a historic structure adds to the local culture, education and enjoyment of County and State residents. Historic structures are part of our cultural heritage that should not be neglected if the County wishes to retain a “sense of place”. Growing rural population poses a threat of destruction to historic resources. A preservation plan, ordinance, etc., provides a means of integrating the preservation of County resources with the process of growth and change. Photos and written records are not enough to remind us of the conditions, lessons, successes and failures of the past. The County needs authentic visible living museums that make Hood River County different from other regions.

TABLE 1

List of Historic Resources

1.	Potter (Miles) House (Cooper, Emma House)	2N 10E 3B #300
2.	Hazel Rebekah Lodge 156 and Kemp I.O.O.F. Lodge 181 (same)	2N 10E 26B #800
3.	Kollas House ("Starvation Flats")	2N 10E 28 #3700
4.	Kroeger (John) House (same)	2N 10E 27 #4200
5.	McCan (Capt. Charles P.) House (same)	2N 10E 2A #1900
6.	Mt. Hood School (Mt. Hood Town Hall and Recreation Center)	1N 10E 27 #2100
7.	Methodist Episcopal Church (Odell United Methodist Church)	2N 10E 26C #3600
8.	United Church Upper Hood River Valley (Parkdale Community Church)	1N 10E 32DD #2500
9.	Morton (J.W.) house (Struck, Sheldon House)	3N 10E 28 #402
10.	Tucker (Barton R.) House (same)	2N 10E 15 #3500
11.	Connaway (Harry) and Lafferty (I.U.) Store (Weber Bros Hardware)	2N 10E 22DD #700
12.	First Congregational Church (Windmaster Community Church of God)	2N 10E 10 #1900
13.	Union Church (Church of Christ)	2N 10E 22DD #800
14.	English House (same)	2N 10E 21 #6002
15.	Oak Grove School House	2N 10E 16 #3800

*Sites listed by historic name and common name as they appear in the Statewide Inventory of Historic Sites and Buildings, Hood River County, 1976.

Environmental: Some alteration or even destruction is necessary to meet health or structural requirements of various codes. A structure which has been damaged in excess of 70% of its assessed value due to fire, flood, wind or other acts of God should be demolished.

Energy: Alteration and recycling of historic structures for other uses is considered energy efficient. Demolition and rebuilding does not conserve energy. The public will consume additional energy seeking and going to identified historic sites.

4. Recommendation: The following have been added to the County Policy Document:

   a. Designate the sites listed in Table 1 as 3C sites (Limit Conflicting Uses).

   b. Add the sites listed in Table 1 as an Appendix to the Historic Preservation Ordinance.

F. Potential Sites: Historical Significance:

1. Current information is not available regarding resource sites listed in Table 2. These sites are considered 1B (sites considered special category until work completed). Only sites outside the Hood River City Limits and the Urban Growth Area (UGA) will be evaluated. For additional information regarding sites in the City and UGA contact the City of Hood River Planning Department.

   The following Strategy has been included in the County Policy Document under Goal 5, Historic Areas.

   > "Include the 19 potential sites listed in Table 2, Goal 5 Evaluation Process Report in the Comprehensive Plan Inventory as a Special Category (1B) and further address these resources through the Goal 5 process after post-acknowledgment, but by December, 1984."

G. County Historic Preservation Ordinance (HP):

The County has created a Historic Preservation Ordinance and has also placed the following in the County Policy Document.

> "Pursue, analyze, and adopt appropriate implementing measure(s) (i.e., Historic Overlay Zone Ordinance; specific Historic Zoning Ordinance; or a combination) to implement Goals, Policies, Strategies, etc., to protect historic places. This ordinance to be submitted as a compliance item."

This ordinance applies to sites listed in Table 1.

TABLE 2

Potential Sites: Historic Significance

1. Old Odell Grade School.
2. The Post Office on the East Fork
3. Billy Sunday Ranch
4. Home at 2700 Paasch Drive
5. Pine Grove Methodist Church
6. Pine Grove Grange Hall
7. Mt. Hood Country Store
8. Dave Winans Residence, 4195 Dee Highway
9. Dexter Parton Residence, 5630 Highway 35
10. Jack Davis Place, Straight Hill Road
11. Tillicum Lodge, Miller Road
12. Crag Rats Hut, Pine Grove
13. The present Hood River County Courthouse is located on the site of the first city school house erected in 1883.
14. The Wau-Gwin-Gwin Hotel was located on the present site of Neighbors of Woodcraft building. This was a former camping and meeting place for indians.
15. At Second and Cascade was the site of the Waucoma Indian Camp.
16. Koberg Beach was an old recreation site and docking point for early barge traffic.
17. The Old Dalles Wagon Road east of Hood River.
18. The former site of the Opera House is north of the present Riverside Church on State Street.
19. The Georgiana Smith Park Landmark adjacent to the County Library. A bronze plaque is placed on a boulder commemorating this site.

Form No. 10-300a
(Rev. 10-74)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

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TIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

CONTINUATION SHEET ITEM NUMBER 7 PAGE 7 of 9

Buildings and Sites Contributing to the Character of the Cloud Cap - Tilly Jane Recreation Area Historic District:
(Numbers Correspond to Locations on Accompanying Site Map)

1. Traces of 1886-1899 Wagon Road: Ascending Ghost Ridge parallel to Eliot Branch of the Middle Fork Hood River to the foot of Eliot Glacier, the road is largely obliterated by vegetative regeneration, and in places by subsequen development. Faint traces of the roadbed are presently visible along the crest of the ridge.

2. Site of Cooper's Tent Camp, 1885-1889: The spur road entering Tilly Jane Meadows from the north, campfire ash mixed with surface soil, a squared and leveled area 15' x 25' on the west side of the clearing, sill logs, 15' x 20' on the east side, and two toilet pits remain as evidence of Cooper's Tent Cam .

3. Traces of 1889-1926 Wagon Road: Ascending a minor ridge between Crystal Spri gs Creek and Evans Creek, traces of the road built in 1889 to access Cloud Cap I n are clearly visible.

4. Cabin Sites: No structural remains: two leveled areas, each measuring ca 12 x 15' are cut out of the hillside above the present junction of the Cloud Cap and T lly Jane Campground Roads, adjacent to a small loop of the 1889-1926 Wagon Road.

5. Cloud Cap Inn: Situated on a rocky prominence, the Inn, designed by William M. Whidden, is a single story structure with a modified V-shaped plan broken coursed native stone foundations, exterior walls of horizontally laid ogs with square-notched jointure, massive stone chimneys and wood-shingled hipped and gable roofs.

6. Stables: The log structure built in 1889-90, has collapsed: three tiers of saddle-notched logs remain in place, revealing the structure's 12 x 15 foot dimensions and doorway in the center of the west elevation.

7. Snowshoe Club Cabin: 1910. Rectangular plan, ca 25' x 70', long axis north/ outh. Built into slope, partial basement on north end: uncoursed native stone foun dation, large stone exterior chimney off-set on east elevation, horizontally laid logs, square-notched at corners and partially hewn form exterior walls, wood-shingled high hipped roof.

8. American Legion Amphitheater: Port of American Legion Camp facilities built ca 1920 on the south side of Tilly Jane Creek approximately 1 km southeast Cloud Cap Inn. Nine tiers of half-log benches to the south and west of central fireplace, built into natural hillside, and accessed by flights of stone steps at the ends of the rows.

9. American Legion Cookhouse: Located to the east of the amphitheater, with its long axis lying north/south, the cookhouse is a one-room single story log structure. Essentially an Adirondack-type shelter with a split shake gable roof of unequal pitches, the cookhouse was formerly open but is now enclosed by removable board and batten walls. The entrance is off-center on the north gable end. A concrete cook stove, 15 feet long, occupies the center of the building.

10. 1926 Cloud Cap Road - Forest Road S-12: Now designated Forest Road S-12, the Cloud Cap road was built in 1926 by the Forest Service to provide more convenient access to the developing recreation area. With a graded gravel surface, the road gradually ascends 10 miles from its beginning opposite Cooper Spur Inn to a junction at one of the branches of Tilly Jane Creek. From this junction, Tilly Jane Campground is 1/2 mile east and the Cloud Cap area is 3/4 mile west at the 6,000 foot level, on dirt-surface roads.

11. Tilly Jane Campground: A formal public occupancy site extending along the north bank of Tilly Jane Creek. Initially developed by the Forest Service in 1926, the facility was enlarged and improved under the auspices of the Civilian Conservation Corps in 1934. Retains its rustic character with little to moderate site modification.

12. CCC Campsite: Occupied by Civilian Conservation Corps in 1934, the site is bounded by the present road, Tilly Jane Creek, the cabin sites and the hillside to the west. No structures remain, but structural outlines and foundations indicate the locations of former built features. These include traces of the camp access road, three tent platform outlines, each 15' x 18', the foundations of a building 15' x 30', the foundations of a plumbed structure ca 25' x 25', and evidence of a smaller wood-frame structure.

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CONTINUATION SHEET ITEM NUMBER 7 PAGE 9 of 9

13. Tilly Jane Guard Station, Residence and Garage: 1934. Residence is 1½ story wood-frame structure with poured concrete foundation, split-shake hipped-gable roof. Exterior walls are horizontal clapboard to window level, vertical board and batten above. Multi-light sash windows; main entry, center, east facade. Rectangular plan, with gabled addition off-set to left on west elevation: a smaller wood-shingled extension abuts the west gable end of the addition off-center.

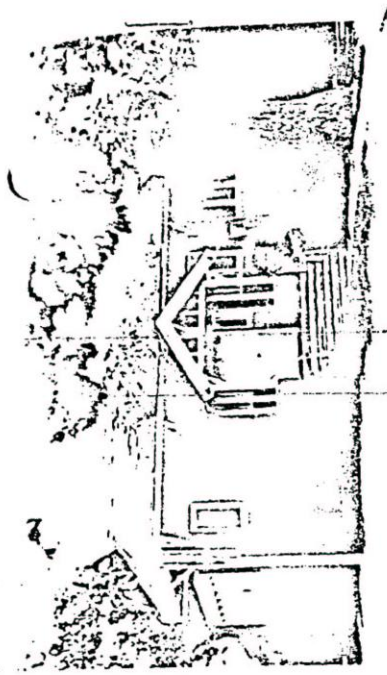
The garage is a single vehicle capacity wood-frame structure, with poured concrete foundation, split-shake hipped-gable roof, horizontal clapboard exterior walls to four-foot level, vertical board and batten above. Double-leaf vertical board doors, reinforced, off-center on north gable end.

14. Ski Warming Hut: 1939. Located on the south side of Tilly Jane Creek, approximately 200 feet east of American Legion cookhouse, the warming hut is a rectangular, 1½ story, A-frame log structure, with a poured concrete foundation, split-shake high gable roof. Exterior walls are covered with shakes except lower level of east (main facade) which exhibits half-round vertical log walls. Four-light single sash windows; main entry, vestibuled at center, east facade.

15. Cloud Cap Saddle Campground: A more recent formal public occupancy site, located in Cloud Cap Saddle to the south of Cloud Cap Inn. Low level site development consistent with the overall rustic character of the recreation area.

16 SPRING & WATER SYSTEM This spring served Cooper's Tent Camp in the 1880's and was later developed to provide piped water to Cloud Cap Inn when it was constructed. It is still the system used to serve Cloud Cap Inn, the Snow Shoe [redacted] cabin and Cloud Cap Saddle Camp.

17. Insp.



HISTORIC SITES AND BUILDINGS
State Historic Preservation Office
Oregon State Parks, Salem, 97310

County Hood River

Theme

Name
(Common) Parkdale Community Church

(Historic) United Church, Upper Hood River Valley

Address Parkdale, Oregon

Present Owner Parkdale Community Church

(Address) Parkdale, Ore.

Original Use church

Date of Construction 1911

Statement of historical significance:

The Parkdale Church, known as "The Little Brown Church," is a one story wood frame building with a gable roof and shingle exterior. The outside of the building is decorated by simulated buttresses which project on the north and south (front) elevations. The small square belfrey is open and is surmounted by a cross. The eaves are boxed and are decorated by open brackets. Many of the casement windows are of leaded glass. A newer wing with rough horizontal clapboard siding is attached on the east elevation and contains the sanctuary. The main entry is protected by a small front porch with gable roof. The addition is topped with a steeple.

zoned R1-7500, designated low density residential in MH plan. Surrounded by residential + some commercial uses.

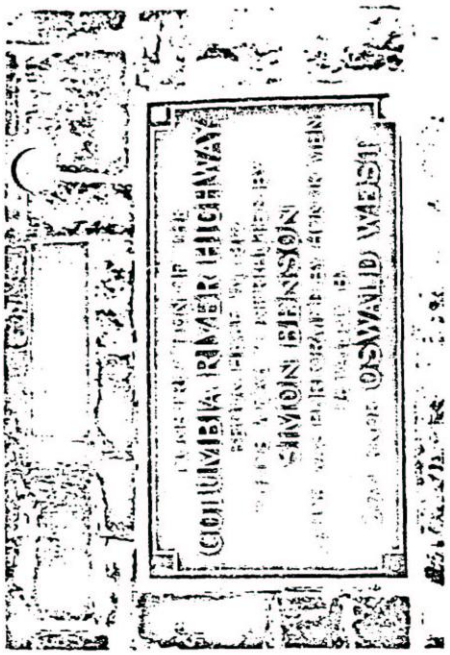
Continue back if necessary

Recorded by Stephen Dow Beckham Date 5 July 1976 Sources Consulted:

Or Oregon State Historic Preservation Office

Please enclose map Township 1 (N) Range 10 (E) Section 32 DD tax lot 2500

APPENDIX "B"



HISTORIC SITES AND BUILDINGS
State Historic Preservation Office
Oregon State Parks, Salem, 97310

County Hood River

Theme

Name
(Common) Columbia River Highway Landmark

(Historic) Columbia River Highway Landmark

Address Starvation Creek State Park
Interstate 80N

Present Owner State of Oregon

(Address) Salem, Oregon

Original Use landmark

Date of Construction ~~1969~~

Statement of historical significance:

The Columbia River Highway landmark consists of two btonze plaques mounted on a base of basalt. The first plaque reads:

> "Construction of the Columbia River Highway begun here in 1912. Funds were contributed by Simon Benson. Labor was performed by honor men detailed by Governor Oswald West."

The second plaque reads:

> "The plaque below was originally displayed on the Columbia River Scenic Highway at Shell Rock Mountain, a little more than two miles to the west. Later highway construction in the area necessitated its removel and installation at the nearest suitable location. It is mounted on native basalt removed from the old highway retaining wall. Oregon State Highway Commission 1969."

Continue back if necessa

Recorded by Stephen Dow Beckham Date 5 July 1976 Sources Consulted:

For Oregon State Historic Preservation Office.

Please enclose map Township 2 S Range 9 W Section 4

APPENDIX "C"

JUL 76

STATE OF OREGON INVENTORY
HISTORIC SITES AND BUILDINGS
State Historic Preservation Office
Oregon State Parks, Salem, 97310

County Hood River

Theme

Name
(Common) Tucker (Barton R.) Sawmill Site

(Historic) (same)

Address Rt. 5, Box 1580
Hood River, Oregon

Present Owner Richard Odell

(Address) Rt. 5, Box 1580

Original Use sawmill site

Date of Construction c. 1881

historical significance:

Near the present Tucker Bridge, erected in 1932, is the site of the Barton R. Tucker sawmill. This location, taking advantage of a rapids in the Hood River, was one of the earliest industrial sites in the Hood River Valley. The sawmill site is now covered with pines and maples and is unmarked. Some metal debris from the sawmill yet remains at the location.

In 1881 Barton R. Tucker erected a bridge across the Hood River at this site. A photograph of his mill, bridge, and house in 1892 appeared in the 1976 Bicentennial tabloid Our Town Odell (p. 4). Tucker was born April 11, 1840, in North Carolina. He married in 1861 to Martha Walls, who was born February 27, 1841. After serving in the Union Army, Tucker moved to Kansas and in 1877 settled in Oregon. He located at Hood River in the 1880's. According to Mrs. D.M. Coon's History of Early Pioneer Families he erected his house in 1892.

APPENDIX "D"

at Continue back if necessary

...rded by Stephen Dow Beckham Date 7 July 1976

...or Oregon State Historic Preservation Office

Please enclose map Township 2 S Range 10 W Section 15

Sources Consulted:

"Odell Community", Hood River News, December 9, 1955.

"History of Odell Area," Our Town Odell, June, 1976, pp. 4-6. (Bicentennial

GOAL 5: CULTURAL AREAS

The United States Forest Service's FES (1977) includes a section on "Cultural Resources"; pp. 79-81. However, the resources described are historical in nature. These resources are discussed under Goal 5's Historic Areas, Sites, Structures and Objects under Section I. above. None of the other portions of the County note the presence of cultural resources.

GOAL 5: POTENTIAL AND APPROVED OREGON RECREATION TRAILS

A. Columbia Gorge Trail:

The Columbia River Gorge Trail is a proposed trail that is only partially completed (see Map #1). The trail is completed from the western Hood River County line at Eagle Creek to Cascade Locks and from there it joins with the Pacific Crest Trail to the Forest Service work center on Herman Creek. The route from Herman Creek to Wyeth has been flagged, but is not yet developed. From there the passage over or around Shellrock Mountain has not yet been determined, as the mountain is very erosive and difficult to work or hike on. Existing roadways and trails will probably be utilized. The proposed route for the trail picks up again along portions of the Old Columbia River Highway, from Starvation Creek Park to Viento Park. This area is available for hiking, although it has not been formally proposed as a portion of the trail.

The route from Viento Park into the City of Hood River has not been established, nor have there been any actual proposals for the trail's location east of Hood River, although it may follow the route of the Old Columbia Gorge Highway.[1]

According to State Parks and the U.S. Forest Service, who work jointly on the development of the trail, some easements may have to be acquired to allow the trail to cross over private lands. Efforts are being made to place the trail on public lands and old highway right-of-way only. State Parks anticipate that the trail may be completed within 10 years.[2]

B. Pacific Crest Trail:

See Map #2 for location of Pacific Crest Trail. The Pacific Crest National Scenic Trail is located in the western portion of Hood River County and is located primarily on federal and other public lands. The Trail generally traverses the County in a north-south direction and is situated primarily along the west side of the Cascades. The trail is unique in quality because is has national recognition from the standpoint that it extends from the Mexican to the Canadian border.

C. Recommendation: Include the following in the County Policy Document under Goal 5:

1. Goal:

   a. Ensure protection of potential and approved Oregon Trail Systems.

2. Policies:

[1] Department of Parks and Recreation and U.S.F.S., phone conversations, 6/18/82 and 6/22/82.
[2] Department of Parks and Recreation, phone conversation (Jack Remington), 6/18/82.

a. The Mt. Hood National Forest and the Oregon Department of Transportation should coordinate with the County in the development of potential and approved Oregon Trail System.

b. Encourage the Mt. Hood National Forest and the Oregon Department of Transportation to place the remaining portions of the lower Columbia River Gorge Trail and other proposed trails on public lands.

3. Strategies:

a. Support the U.S. Forest Service and Oregon Department of Transportation in maintaining the existing portion of the lower Gorge trail system as described and mapped. The existing Scenic Protection and Columbia Gorge Combining Zones recognize and support construction and maintenance of trails.

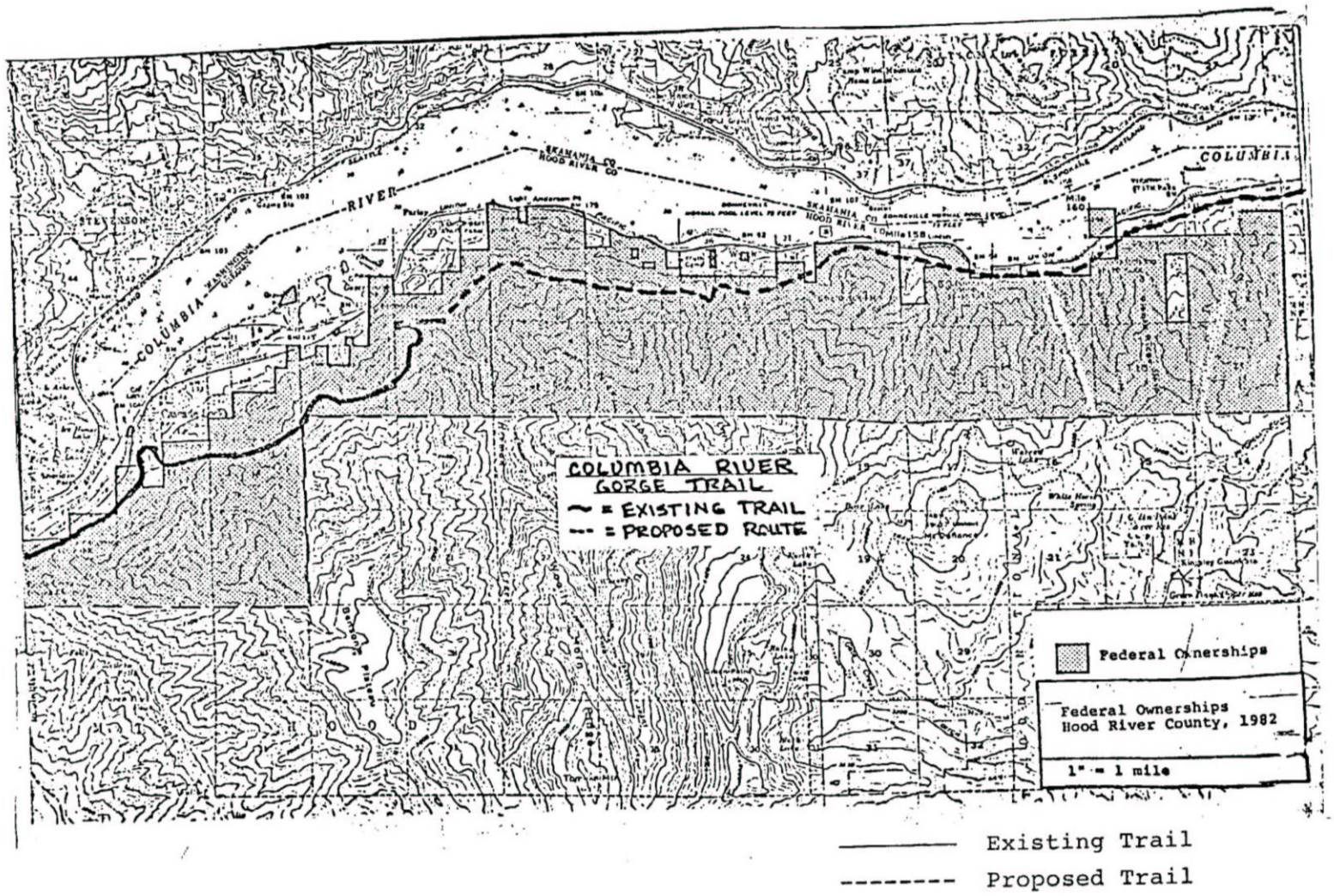
b. Coordinate, review and make recommendations to the Oregon Department of Transportation, and if necessary, the Mt. Hood National Forest and other affected property owners, regarding the future location of the uncompleted portions of the lower Columbia Gorge Trail as referenced in the County's Inventory. The future location to be determined during post-acknowledgment and will be further addressed by December, 1984.

c. Support the U.S. Forest Service Plan designations for the described and mapped portions of the Pacific Crest National Scenic Trail in the County.

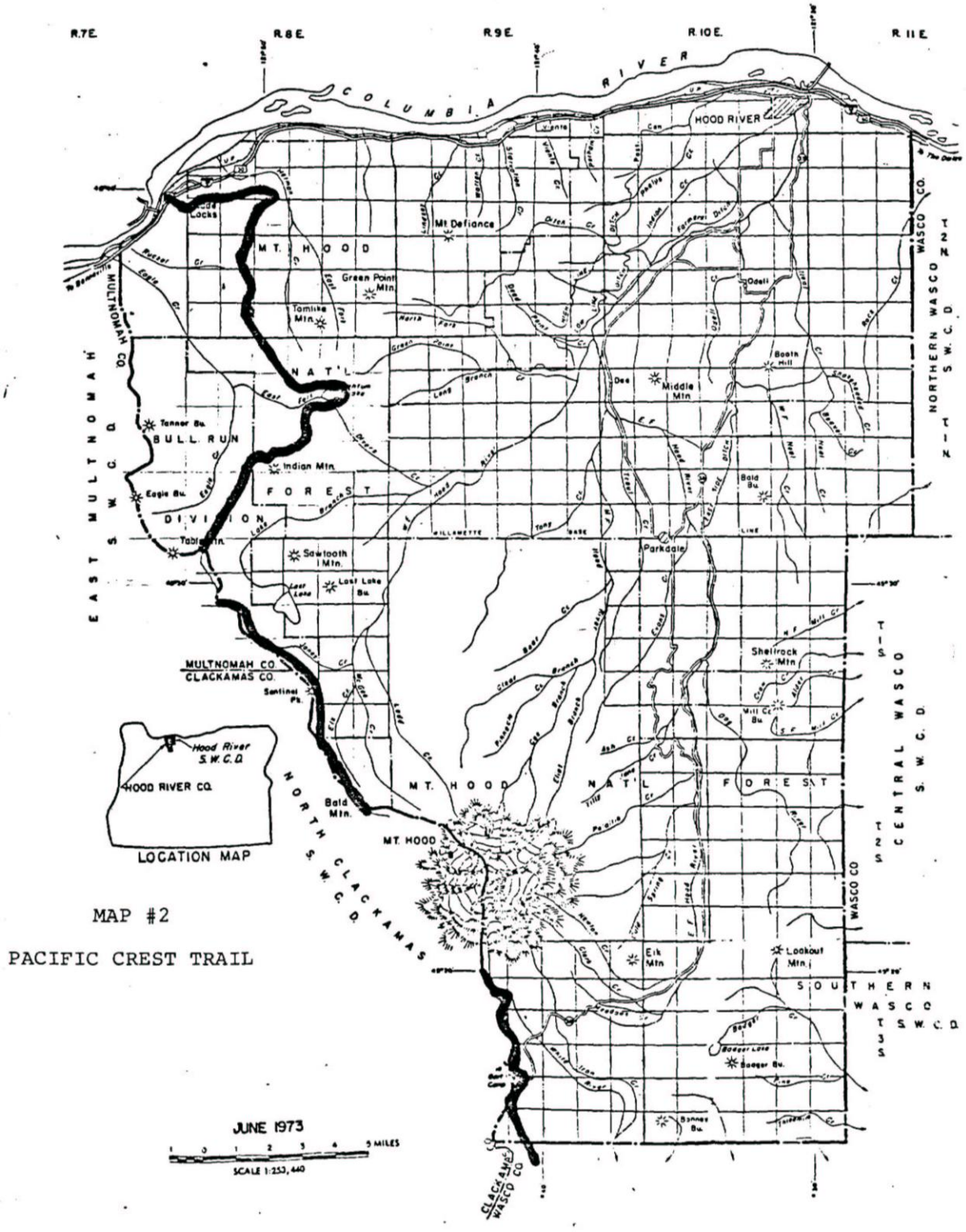
d. The construction and maintenance of the Columbia Gorge Trail and other state and federal hiking, horse and bicycle trails shall be supported.

MAP #1

COLUMBIA RIVER GORGE TRAIL



MAP #1


R.7E.
R.8E.
R.9E.
R.10E.
R.11E.
COLUMBIA RIVER
HOOD RIVER
Mt Defiance
Green Point Mtn.
Tomlike Mtn.
MT. HOOD NAT'L FOREST
Middle Mtn
Booth Hill
Odell
Bald Mtn
Tanner Bu.
BULL RUN
Indian Mtn.
Eagle Bu.
DIVISION
Table Mtn.
Sawtooth Mtn.
Lost Lake Bu.
Parkdale
Shellrock Mtn
Will Cr. Bu.
MULTNOMAH CO.
CLACKAMAS CO.
Santiam Pk.
Bald Mtn.
MT. HOOD
Elk Mtn.
Lookout Mtn.
Badger Lake
Badger Bu.
Bonney Bu.
EAST MULTNOMAH S.W.C.D.
NORTH CLACKAMAS S.W.C.D.
NORTHERN WASCO S.W.C.D.
CENTRAL WASCO S.W.C.D.
SOUTHERN WASCO S.W.C.D.
WASCO CO.
CLACKAMAS WASCO CO.
Hood River S.W.C.D.
HOOD RIVER CO.
LOCATION MAP
MAP #2
PACIFIC CREST TRAIL
JUNE 1973
SCALE 1:253,440
MILES

GOAL 5: POTENTIAL AND APPROVED FEDERAL WILD AND SCENIC WATERWAYS AND STATE SCENIC WATERWAYS

There are no potential or approved federal wild and scenic waterways or state scenic waterways in Hood River County.

HOOD RIVER COUNTY
ORDINANCE NO. 253

AN ORDINANCE AMENDING THE HOOD RIVER COUNTY COMPREHENSIVE LAND USE PLAN, POLICY DOCUMENT AND BACKGROUND REPORT, AND PLAN MAP AND ZONING ORDINANCE, IN COMPLIANCE WITH STATE-WIDE PLANNING GOAL NO. 5 FOR RIPARIAN CORRIDORS, OAR 660-023-0090 AND PERIODIC REVIEW, OAR 660-025 AND REPEALING ALL PRIOR ORDINANCES AND MAPS INCONSISTENT WITH SUCH AMENDMENT.

WHEREAS, the Board of Commissioners approved inclusion of Work Task 5 on the County's Periodic Review Work Program to address Goal 5, Riparian Corridors; and

WHEREAS, Work Task 5 has been reviewed pursuant to the Statewide Planning Goal 5 – Riparian Corridor Planning Rule (OAR 660-023), as well as for compliance with the Statewide Planning Goals and the County Comprehensive Plan and Policy Document; and

WHEREAS, a Public Hearing was held on October 22, 2003 by the Planning Commission to consider Work Task 5, Fish-Bearing Streams Inventory Report, Fish-Bearing Streams maps, an implementing ordinance, amendments to the County Comprehensive Plan and Policy Document; and the Commission, through the hearing process, received written and oral testimony and Staff Reports, and incorporated changes in the proposed amendments, based upon the testimony and material received; and

WHEREAS, a second Public Hearing was held on December 10, 2003 by the Planning Commission to consider the incorporated changes in the proposed amendments and proposed related amendments to the Nonconforming Use Article 65 and Definitions Article 3, of the Hood River County Zoning Ordinance; and made recommendation to the Board of County Commissioners for an ordinance adopting amendments to the County Comprehensive Land Use Plan, Policy Document, and Zoning Ordinance; and

WHEREAS, the Board of County Commissioners conducted a public hearing on February 2, 2004 and, after reviewing the written and oral testimony and the Staff and Planning Commission recommendations, voted to adopt the Hood River County Fish-Bearing Streams Inventory Report, seven (7) each Fish-Bearing Streams maps, digital map data and attribute database into the Comprehensive Plan Background Document, and adopt amendments to the Comprehensive Plan Section IV – Plan Designation Definitions and amendments to the County Zoning Ordinance in compliance with the requirements of OAR 660-23-0090 including adoption of a new Article, Article 42, Stream Protection Overlay Zone to the Hood River County Zoning Ordinance, as well as revisions to Article 3, Section 3.0, Definitions; Article 60, Administrative Procedures; Article 64, Land Use Permits; Article 65, Nonconforming Use; Article 72, Planning Director's Review Procedure, and amendments to the County Policy Document to update Goals, Policies, and Strategies pertaining to Goal 5 (Open Spaces, Scenic and Historic Areas, and Natural Resources) to incorporate the updated Riparian Corridor related provisions;

NOW, THEREFORE, it is hereby

ORDAINED by the Board of County Commissioners of **HOOD RIVER COUNTY** that the amendments to the Hood River County Comprehensive Plan, Plan Map and Zoning Ordinance, Policy Document, and Background Reports, as recommended by the Hood River County Planning Commission, attached hereto as Exhibits "A", "B", "C", "D", "E", "F", and "G" and by this reference incorporated herein, be adopted; and it is further

ORDAINED that all prior ordinance provisions, including maps, inconsistent with amendments herein are repealed; and it is further

ORDAINED that these amendments are adopted in fulfillment of the requirements of Periodic Review Work Task No. 5 and Statewide Planning Goal No. 5 and current Oregon law.

DATED this 17th day of February 2004.

BOARD OF COMMISSIONERS FOR HOOD RIVER COUNTY, OREGON

Chair

Commissioner

Commissioner

Commissioner

Commissioner

APPROVED AS TO FORM:

Wilford K. Carey, County Counsel

Exhibit A
Hood River County Fish-Bearing Streams Inventory

Hood River County

Fish-Bearing Streams Inventory

Prepared for

Hood River County
309 State Street
Hood River, Oregon 97031

Prepared by

Wetland Consulting
3710 SE Taylor Street
Portland, Oregon
(503) 238-5942

July 2003

Contents

1.0 Introduction

This report documents the inventory of fish-bearing streams in Hood River County. This information is used for local land use planning under Statewide Land Use Planning Goal 5, the natural resources goal, to identify significant riparian corridors using the safe harbor inventory method. Locally significant riparian corridor identification and local riparian corridor planning activities are reviewed by the Department of Land Conservation and Development (DLCD), the state agency that oversees local land use planning.

1.1 Definitions

The following definitions are from DLCD's administrative rules for Goal 5 (OAR 660-023-0090):

"Fish habitat" means those areas upon which fish depend in order to meet their requirements for spawning, rearing, food supply, and migration.

"Riparian area" is the area adjacent to a river, lake, or stream, consisting of the area of transition from an aquatic ecosystem to a terrestrial ecosystem.

"Riparian corridor" is a Goal 5 resource that includes the water areas, fish habitat, adjacent riparian areas, and wetlands within the riparian area boundary.

"Stream" is a channel such as a river or creek that carries flowing surface water, including perennial streams and intermittent streams with defined channels, and excluding man-made irrigation and drainage channels.

"Water area" is the area between the banks of a lake, pond, river, perennial or fish-bearing intermittent stream, excluding man-made farm ponds.

1.2 Study Area

The study area is Hood River County, Oregon except for the portions of the county within the Mount Hood National Forest, the Columbia River Gorge National Scenic Area (CRGNSA), and the Hood River and Cascade Locks urban growth areas (Figure 1).

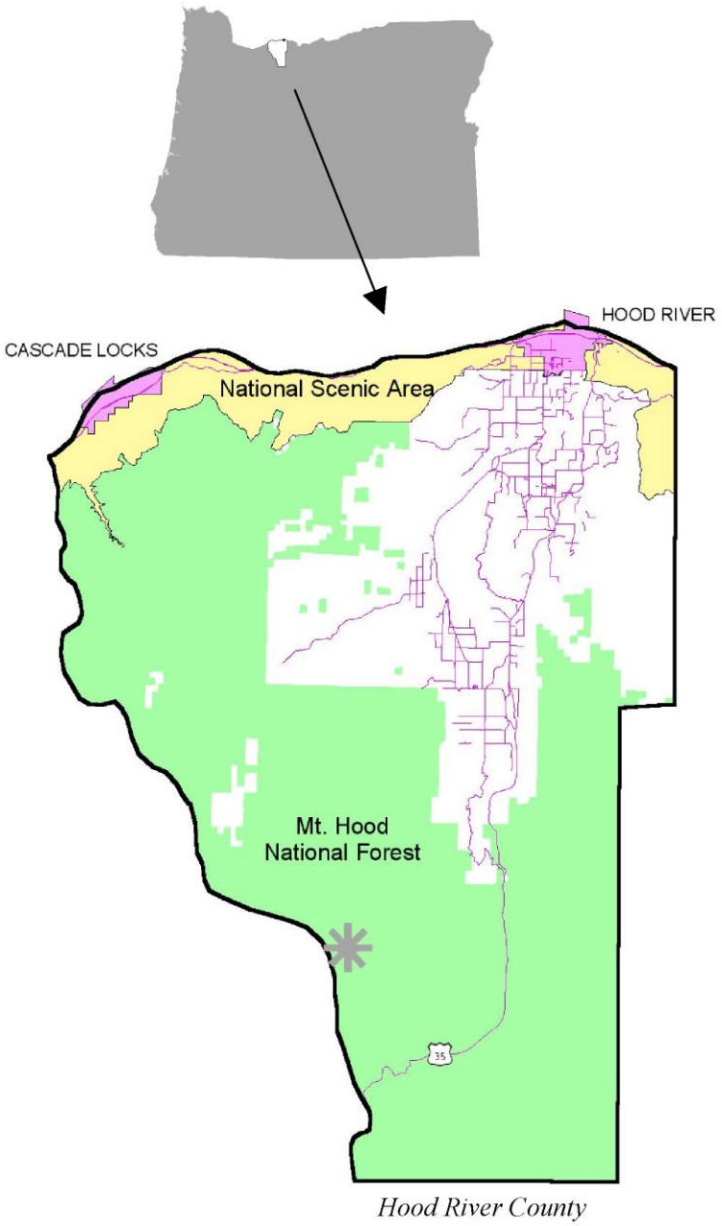


FIGURE 1. STUDY AREA LOCATION

NORTH
no scale

Source: Data provided by Oregon Geospatial Data Clearinghouse and Hood River County

2.0 Methods

Requirements for local governments for the inventory, assessment, and management of riparian corridors are contained in Oregon administrative rules (OARs) 660-023-0000 to 660-023-0050 and 660-023-0090. Local governments can inventory and determine significant riparian corridors by following either the safe harbor methodology, a simple prescriptive approach that requires local governments to protect riparian setbacks around fish-bearing streams and lakes, or by using the standard inventory process that requires a comprehensive inventory and assessment and gives local governments greater latitude in determining significant riparian corridors and developing a protection program. The Hood River County Fish-Bearing Streams Inventory was conducted to support determinations of significant riparian corridors using the safe harbor method.

Hood River County contracted with Winterbrook Planning, a consulting firm, to provide technical assistance for Goal 5 planning for riparian corridors in 2002. Wetland Consulting was hired in 2003 to complete the project. A Technical Advisory Committee (TAC) assisted the County (Table 1).

Table 1. Technical Advisory Committee

NAME	AFFILIATION
Anne Debbaut	Project Manager, Hood River County Planning
Carl Perron	Planning Commission, Architect
Mike Schrankel	HR County GIS
Holly Coccoli	Hood River Watershed Group
John Benton	Orchardist
Felix Tomlinson	Orchardist
Katie Skakel	Farmers Irrigation District
Gary Asbridge	US Forest Service
Mark Kreiter	US Forest Service
Jeff Weber	Department of Land Conservation and Development
Steve Pribyl	Department of Fish and Wildlife
Bonnie Lamb	Department of Environmental Quality

The safe harbor method identifies significant riparian corridors using a standard setback distance from all fish-bearing lakes and streams, as follows:

- Along all streams with average annual stream flow greater than 1,000 cubic feet per second (cfs) the riparian corridor boundary shall be 75 feet upland from the top of each bank.
- Along all lakes, and fish-bearing streams with average annual stream flow less than 1,000 cfs, the riparian corridor boundary shall be 50 feet from the top of bank.
- Where the riparian corridor includes all or portions of a significant wetland the standard distance to the riparian corridor boundary shall be measured from, and include, the upland edge of the wetland. (Hood River County has not identified significant wetlands to date.)

Wetland Consulting used existing information on fish habitat and stream flow that was developed for Hood River County in 2002 by Winterbrook Planning, a consulting firm, and the Technical Advisory Committee (Winterbrook Planning 2002). This information included GIS mapping of streams and attribute data on stream flows and fish presence. The information was developed from the following sources:

- Oregon Department of Forestry stream classification maps.
- Topographic quadrangle maps produced by the US Geological Survey (USGS) at a scale of 1:24,000.
- National Wetlands Inventory (NWI) maps produced by the US Fish and Wildlife Service (USFWS) at a scale of 1:24,000.
- Oregon Department of Fish and Wildlife fish habitat maps.
- Federal Emergency Management Agency (FEMA) flood maps.
- True color aerial photography taken May 29, 1999, provided by Hood River County.
- Current fish presence information provided by staff of the Oregon Department of Fish and Wildlife, Oregon Department of Forestry and the U.S. Forest Service.

Wetland Consulting reviewed the fish presence data against ODFW and NMFS mapping for quality control purposes. Wetland Consulting also reviewed the information sources listed above for fish-bearing lakes in the study area; none were identified.

Stream flow data was compiled from existing sources by Holly Coccoli of the Hood River Soil and Water Conservation District and provided to the Technical Advisory Committee in 2002 (Winterbrook Planning 2002).

3.0 Results

3.1 Fish-Bearing Streams

Most of the study area is in the Hood River watershed, consequently most fish-bearing streams are in that watershed. Additional fish-bearing streams are Phelps Creek and Post Canyon Creek in the Columbia Gorge Tributaries East watershed and Rock Creek in the Mosier Creek watershed. Hood River County has approximately 160 miles of fish-bearing streams in the study area.

Native anadromous fish include chinook and coho salmon, sea-run cutthroat trout and steelhead trout. Anadromous fish from hatchery stocks include steelhead, chinook, coho and sea-run cutthroat trout. Hood River indigenous coho, spring chinook and fall chinook stocks are extinct. Major streams with anadromous fish include the Hood River Mainstem and East, West and Middle Forks, Green Point Creek, Lake Branch Creek, Ladd Creek, Tony Creek, Evans Creek and Neal Creek (HRWG 1999).

Native resident fish include bull trout, rainbow trout, cutthroat trout, mountain whitefish, sculpin and longnose dace. Bull trout are found mostly within the Mt. Hood National Forest. Introduced resident fish include rainbow trout and brown bullhead (HRWG 1999).

Steelhead and bull trout in the Hood River are listed as threatened under the federal Endangered Species Act. Coho salmon are a candidate for federal listing. Sea-run cutthroat trout and redband rainbow trout are listed as sensitive species by the Oregon Department of Fish and Wildlife (HRWG 1999).

3.2 Stream Flows

The Technical Advisory Committee concluded that the Hood River Mainstem downstream of its confluence with the Hood River West Fork exceeds 1,000 cfs average annual flow. All other fish-bearing streams in Hood River County (not including the Columbia River) have less than 1,000 cubic feet per second (cfs) average annual stream flow. These conclusions are based on the following information:

- The average annual flow in the Hood River at its mouth is 1,192 cfs.
- The average annual flow in the Hood River at Tucker Bridge (river mile 6.1) is 1,062 cfs.
- The combined average annual flows of the West, Middle and East Forks of Hood River at the Hood River confluence is estimated at 1043 cfs.
- The average annual flows for other major drainages are substantially less than 1,000 cfs.

4.0 References

Hood River Watershed Group (HRWG). 2000. Hood River Subbasin Summary: including Oregon tributaries between Bonneville Dam and the Hood River, prepared for the Northwest Power Planning Council

Hood River Watershed Group (HRWG). 1999. Hood River Watershed Assessment. prepared for the Hood River Soil and Water Conservation District

National Marine Fisheries Service (NMFS). 1999. Endangered Species Act Listing Maps for chinook salmon, coho salmon and steelhead. Obtained on-line at: http://www.nwr.noaa.gov/1salmon/salmesa/mapswitc.htm

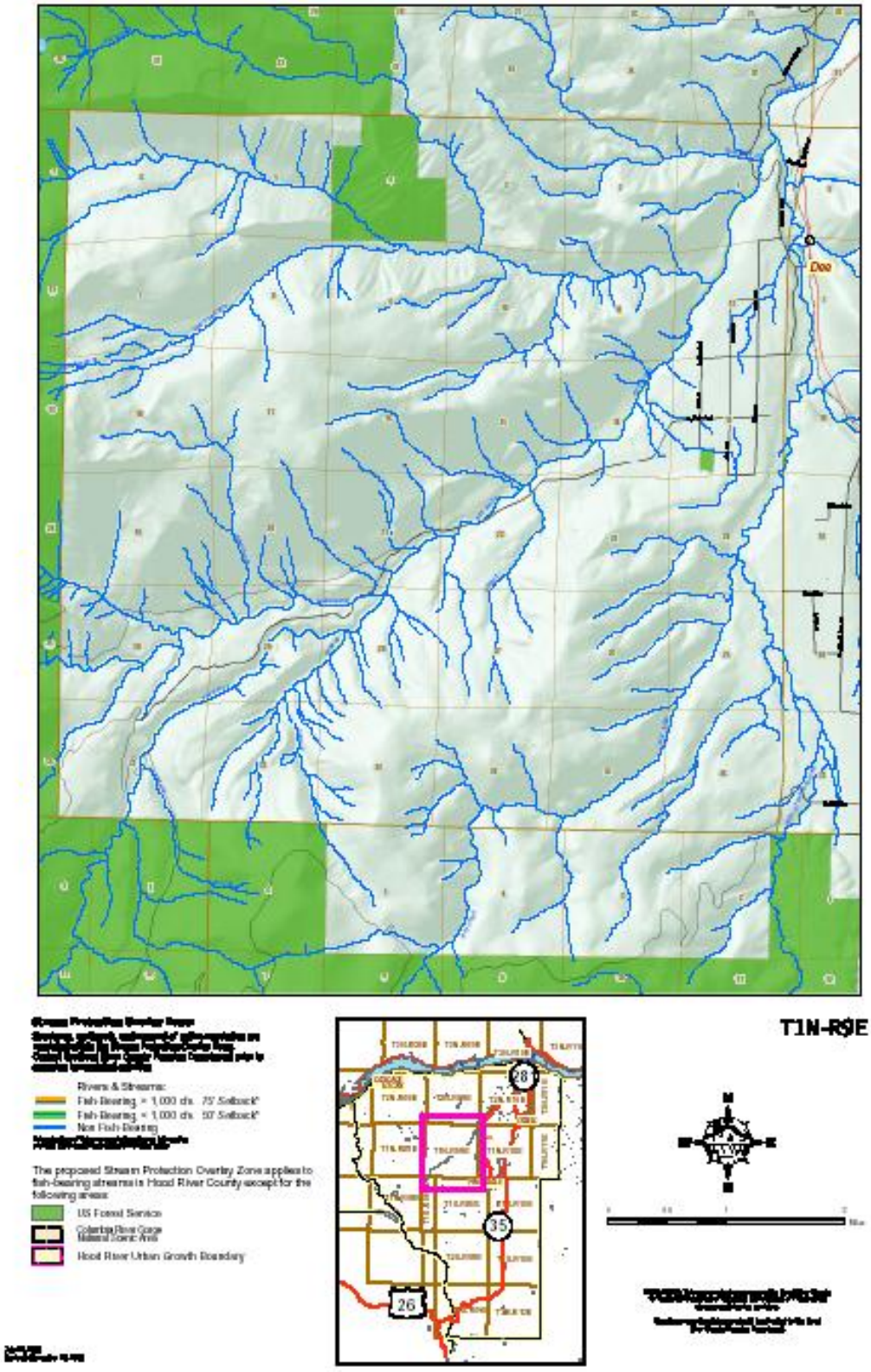
Oregon Department of Land Conservation and Development. 1996. Oregon Administrative Rules Chapter 660, Division 23. Procedures and Requirements for Complying With Goal 5. http://arcweb.sos.state.or.us/rules/OARS_600/OAR_660/660_023.html

Oregon Department of Fish and Wildlife. 1996-2001. Fish Distribution/Habitat Maps for bull trout, chinook salmon, coho salmon, steelhead. Obtained on-line at: http://oregonstate.edu/dept/nrimp/information/fishdistmaps.htm

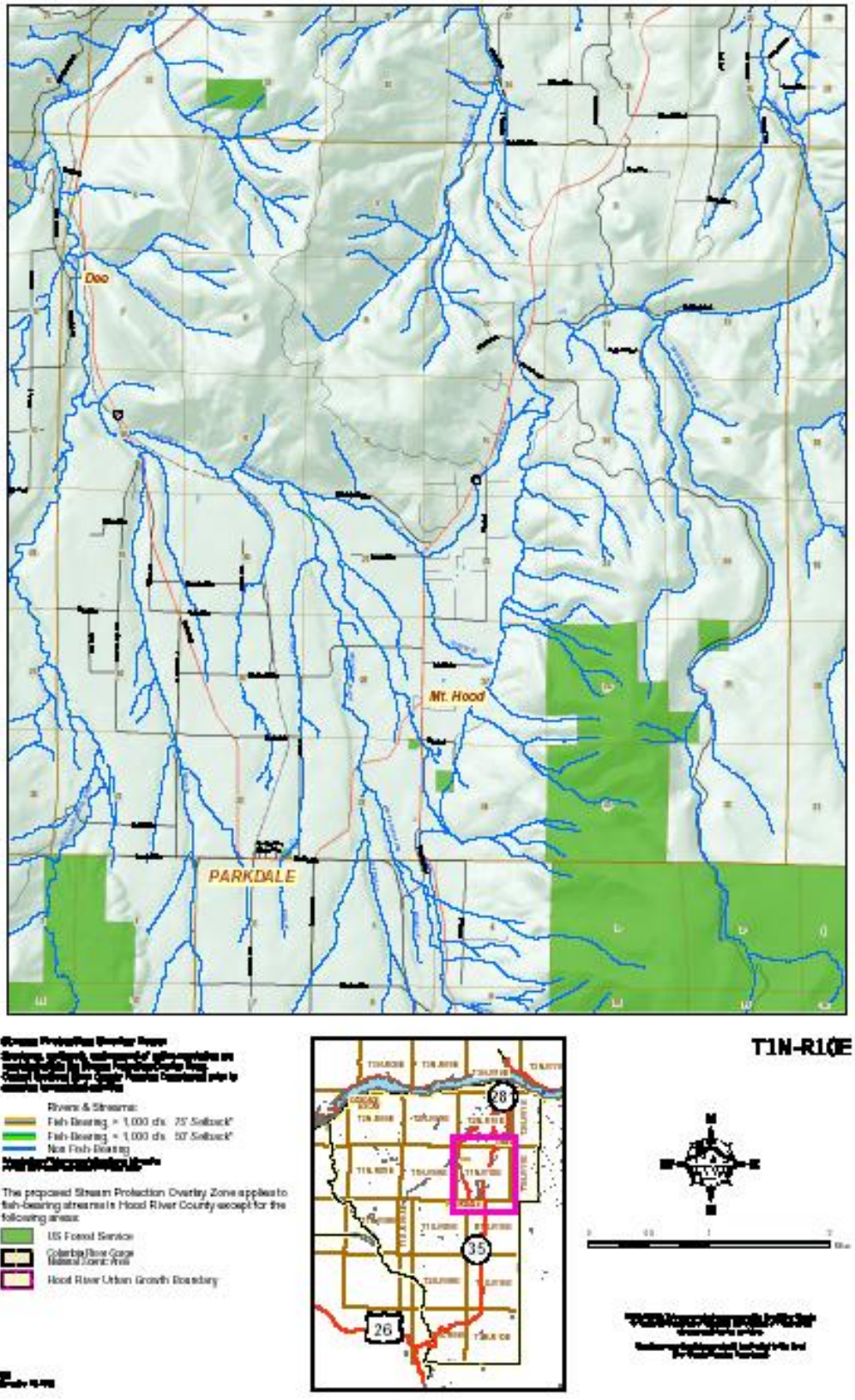
Oregon Division of State Lands. 2001. Essential Salmon Habitat: Hood River County. Obtained on-line at: http://statelands.dsl.state.or.us/maps/hoodriver.pdf

Winterbrook Planning. 2002. Task 3 Technical Memo – Determination of Confined Channel and Broad Channel Migration Zone (CMZ) Riparian Corridors. Memorandum to Anne Debbaut, Hood River County, September 30, 2002.

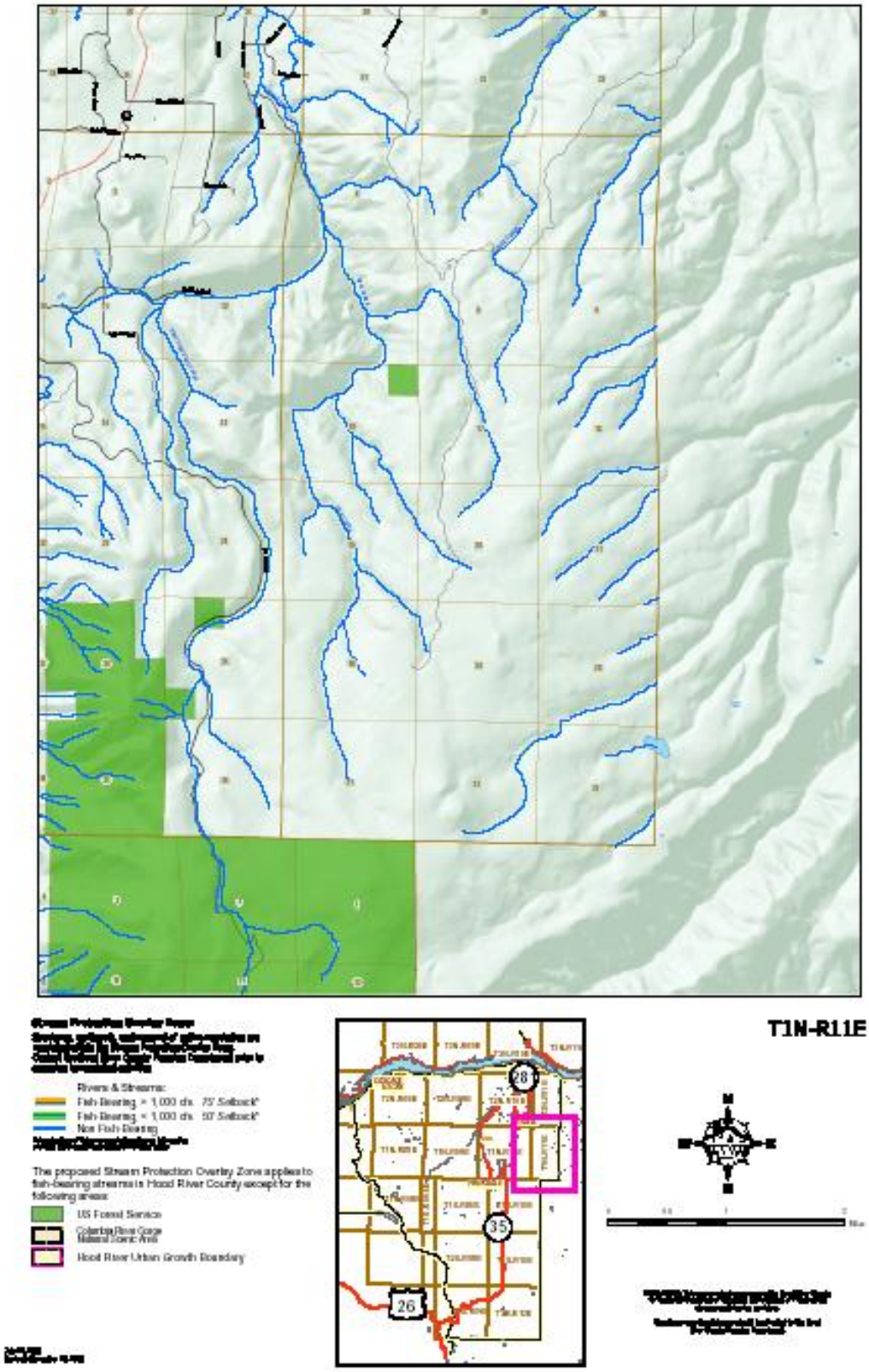
Fish-Bearing Streams



Fish-Bearing Streams



Fish-Bearing Streams



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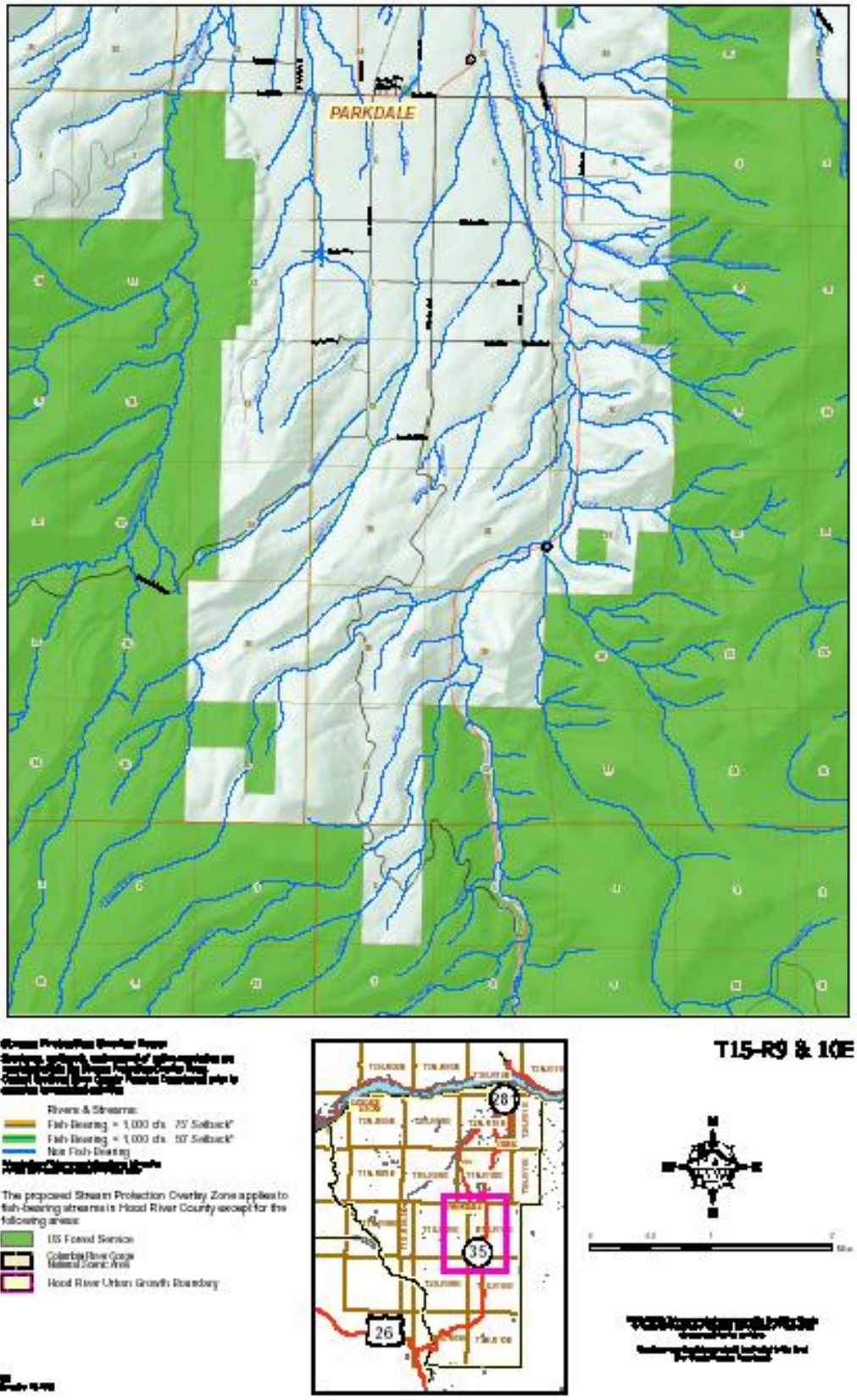

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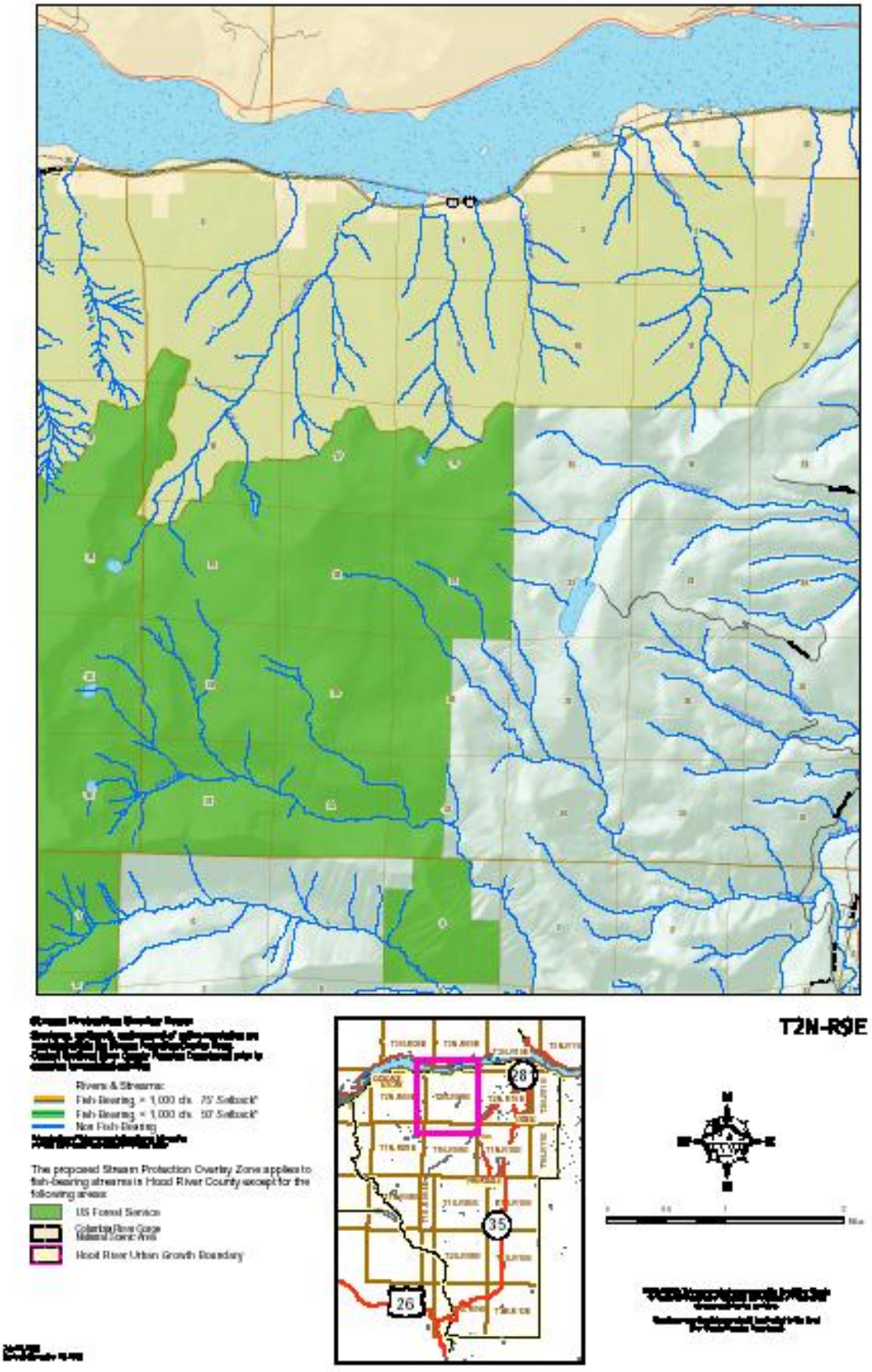
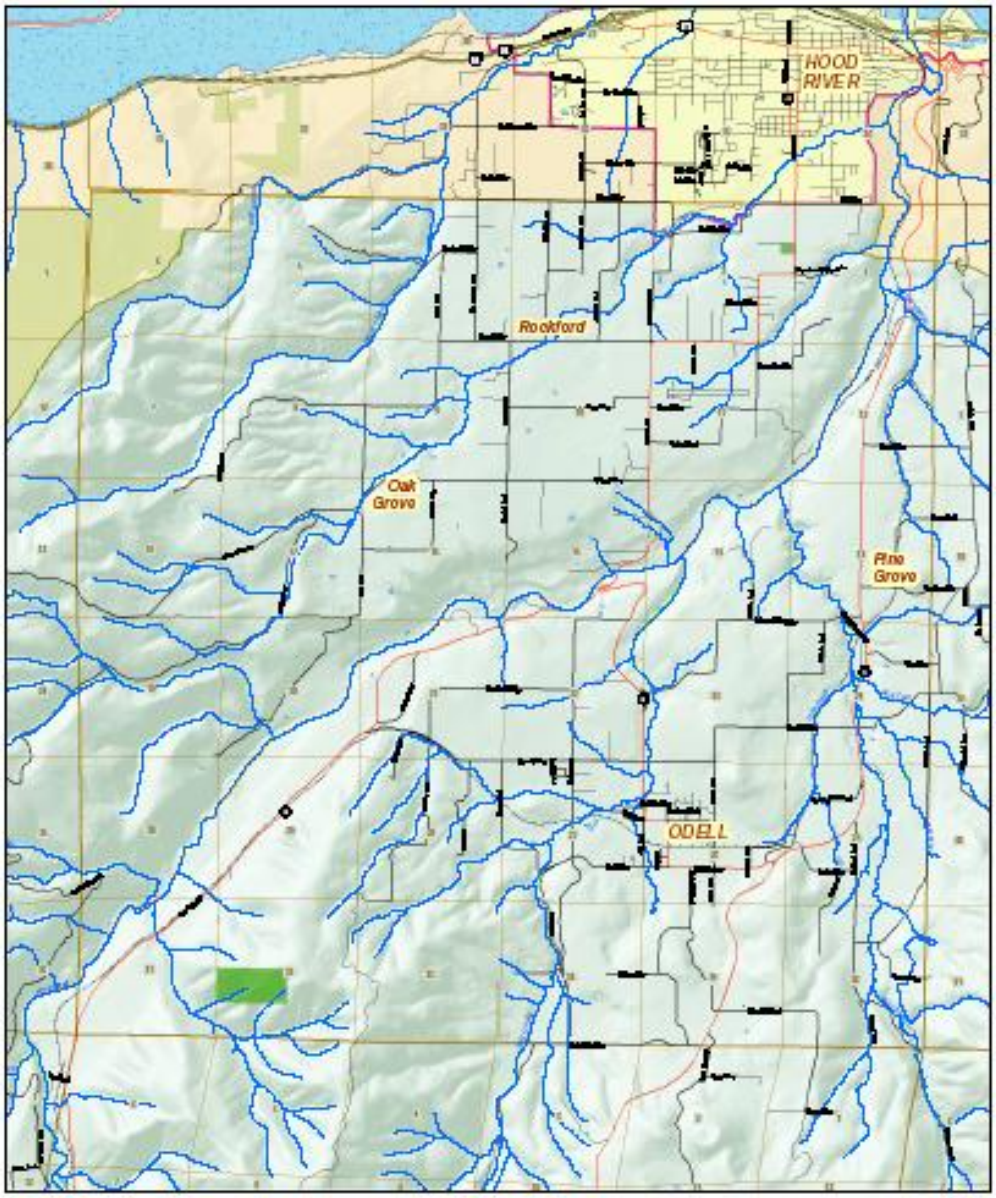


Fish-Bearing Streams



Rivers & Streams:
Fish-Bearing = 1,000 cfs 75' Setback*
Fish-Bearing = 1,000 cfs 50' Setback*
Non Fish-Bearing

The proposed Stream Protection Overlay Zone applies to fish-bearing streams in Hood River County except for the following areas:

US Forest Service
Columbia River Gorge National Scenic Area
Hood River Urban Growth Boundary

T2N-R10E

Fish-Bearing Streams