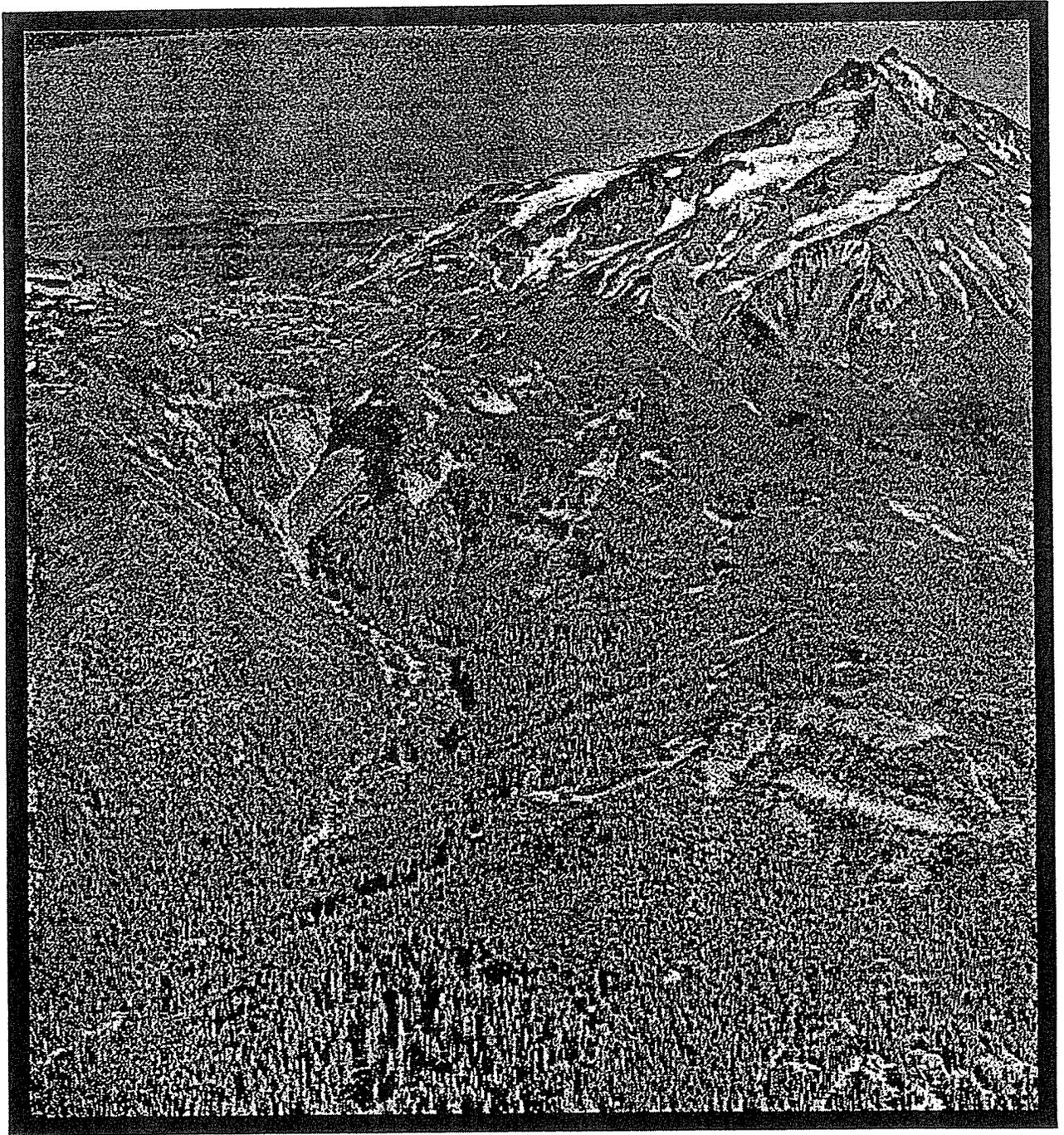


IV.B. Scenic Values



Mt. Jefferson and S. Fork of the N. Fork of the Breitenbush

IV. SOCIAL DOMAIN

B. Scenic Quality

1. Characterization

The corridor along the Breitenbush River and the high country along the Cascade crest with its peaks, volcanic cones, glaciers, lakes and subalpine meadows, has long been valued for its scenic and aesthetic qualities. Throughout history, maintaining the visual and aesthetic character of the watershed has been very important to people, and is displayed through various protective legislation and visual management practices. Earlier practices included Forest Reserve and Primitive Area legislation. Current protective practices established through various formal processes include: the Breitenbush Viewshed corridor identified in the Forest Land Management Plan; administratively designated Olallie Lake Scenic Area and Breitenbush National Scenic Byway; and Congressionally designated Mt. Jefferson Wilderness area, Pacific Crest National Scenic Trail, and South Breitenbush Gorge National Recreation Trail; as well as, Wild and Scenic River eligibility status for portions of the mainstem Breitenbush River and South Fork of the Breitenbush River. The quality of the Forest's scenic resource is important to the existing local tourist industry, to local communities attempting to diversify their economic base, and to the Pacific Northwest. The Breitenbush Community, located within the watershed, relies on tourism and has expressed concern about maintaining the integrity of the surrounding landscape.

2. What values are associated with scenic quality?

- a) Scenery has aesthetic and economic value.

3. What are the highest priority issues or resource concerns associated with scenic quality?

- a) Given existing vegetative patterns and land allocations, an important issue is the management of the landscape to maintain and/or enhance the inherent beauty of the Breitenbush viewshed.
- b) The Breitenbush Community is concerned about preservation of their scenic backdrop, an important aspect of their economic well being. Some portions of their scenic backdrop are in other than scenic land allocations.
- c) The powerline corridor is a concern because it detracts from the overall scenic quality in

the Breitenbush watershed.

4. What are the management direction/activities, human uses or natural processes that affect scenic quality?

a) *Current condition*

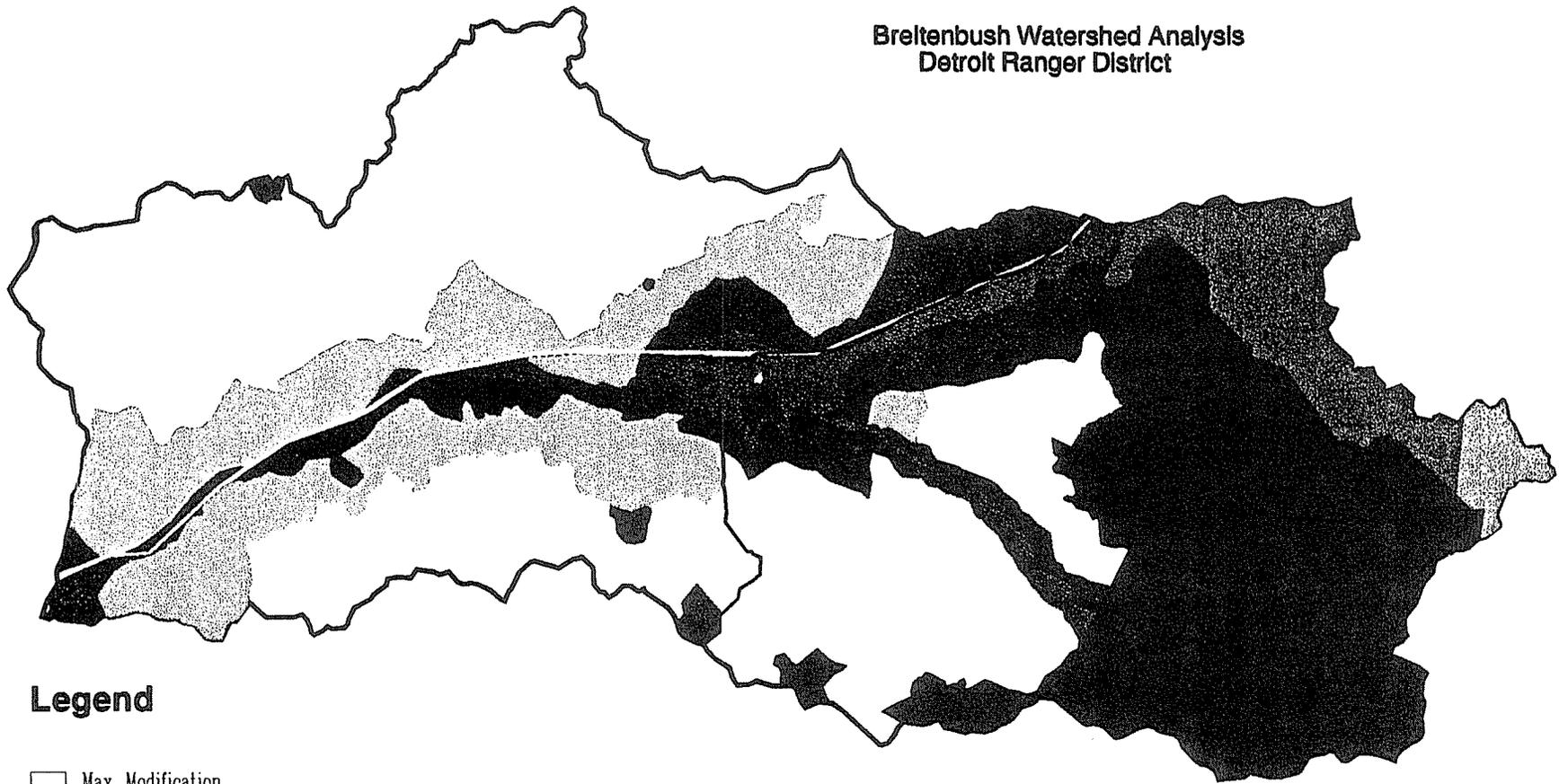
i) *What is the existing condition of the scenic resource, and how do we manage the landscape to maintain and/or enhance the inherent beauty of the Breitenbush viewshed?*

Visual Management: The Willamette National Forest Land and Resource Management Plan has assigned Visual Quality Objectives (VQO's) for each Management Area (MA) on the Forest (*figures IV-1 and IV-2*). For the purpose of the analysis, it is assumed that the small piece of private land above Slide Creek will maintain a Maximum Modification Visual Quality Objective and Breitenbush Community private land is managed to meet a VQO of Retention.

Currently, there are no Visual Quality Objectives assigned for the Late Successional Reserve (LSR) and Riparian Reserves that lie within the Breitenbush. Within the LSR and Riparian Reserve, 11,988 acres or 17% of the Reserves have a VQO of Maximum Modification or Modification under the Forest Plan. However, with the newly designated allocations, the Reserves will likely be managed to achieve at least a Partial Retention VQO in order to meet the objectives of creating and maintaining late-successional habitats.

Forest Plan VQO Allocations

Breitenbush Watershed Analysis
Detroit Ranger District



Legend

-  Max. Modification
-  Modification
-  Partial Retention
-  Preservation
-  Retention
-  Ollalie Scenic Area
-  Mt Hood NF Outside Scenic
-  Warm Springs Scenic
-  Lsr



Scale 1:140000
05/14/96
Request R1

ATTENTION
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Figure IV-2. Visual Quality Objectives by Management Allocations

Management Allocation	Visual Quality Objective	Acres	Percent of Watershed
Wilderness (MA-1/MA-A2) Old Growth Groves (MA-7)	Preservation	15,287	22
Special Interest Areas (MA-5a) Special Habitat Areas (MA-9d) Dispersed Rec. Lakeside Settings (MA-10f) Scenic Retention Foreground (MA-11f) Breitenbush Community Olallie Lake Scenic Area (MA-A4)	Retention	7,079	11
Scenic Partial Retention Middleground (MA-11c) Scenic Partial Retention Foreground (MA-11d) Developed Recreation Sites (MA-12a/b) Administrative Sites (MA-13b) Olallie Lake Scenic Area (MA-A4) Mt. Hood Upper Clackamas Viewshed (MA-B2)	Partial Retention	7,045	10
LSR/Riparian Reserves - Former Modification Allocations (General Forest and Scenic Modification Middleground)	Partial Retention	11,988	17
Scenic Modification Middleground (MA-11a)	Modification	9,239	13
General Forest (MA-14a) Special Use Permit Area (MA-13a powerline) Private	Maximum Modification	18,753	27
Totals		69,391	100

Existing Visual Condition: At this time, 25% of the watershed comprises an early seral stage with seedlings and sapling size stands; 39% is composed of stands in a mid seral stage with pole and small size tree classes; while 31% of the area contains a mix of medium and large size trees in a late seral stage (*figure IV-3*). Within the Wilderness, Olallie Area and Warm Springs, many of the stands, although considered old growth, contain seedlings to small size trees due to the shorter growing seasons and harsher site conditions. Approximately 2% of the total area has relatively new harvest units considered in disturbed condition.

Figure IV-3. Existing Visual Condition - Size classes by Management Allocation

Mgmt Area	Early Seral		Mid Seral		Late Seral		Non-Forest	Total Acres
	Seedlings	Saplings	Poles	Small Trees	Med. Trees	Large Trees		
Wilderness	132	948	4507	3799	2369	418	2575	14,749
5a	2	1	0	164	0	17	0	183
7	0	0	0	0	54	16	0	70
9d	1	4	34	25	0	0	9	73
10f	21	0	0	10	12	87	0	130
11a	990	3040	612	2754	374	1459	8	9,237
11c	295	535	218	798	10	515	2	2,373
11d	0	1	2	17	1	0	0	21
11f	38	143	63	508	9	383	4	1,148
12a	2	0	5	25	0	45	0	77
12b	0	0	0	4	0	3	0	7
13a	166	213	55	130	2	22	7	595
13b	0	1	5	0	0	6	0	12
14a	2065	3850	1104	4264	2832	3797	143	18,055
15	120	404	127	764	209	968	12	2,604
16a	2330	1559	496	3702	1414	4984	74	14,575
16b	9	16	1	304	362	465	3	1,176
Private	0	15	21	4	2	130	30	202
Mt. Hood	20	0	1	2	180	0	0	203
OLSA	0	0	420	1549	725	0	486	3,181
WSR	0	31	284	273	34	0	89	711
water	0	0	0	0	0	0	37	37
Acres	6,190	10,760	7,955	19,096	8,590	13,316	3,480	69,392
Percent	9%	16%	11%	28%	12%	19%	5%	100%

Viewshed Condition Analysis: The Forest Plan's goal for scenic management areas are to "maintain desired visual characteristics of the forest landscape through time and space." Achieving long-term visual quality goals in a forest environment works in direct proportion to how well time and space are managed. Time sequence over a landscape involves combinations of old growth and younger age classes. This provides visual variety but will shift in location as trees are harvested and new ones grow to take their place. Planning this dynamic situation through space and time is important to achieve an attractive sequence of views. To address the time and space component, maximum disturbance rates and harvest rate objectives for each allocation was assigned to each subdrainage to determine area available for harvest over the landscape.

Overall existing disturbed condition for all Scenic allocations within the Breitenbush Viewshed is consistent with Forest Plan Standards. An analysis was completed looking at existing disturbed conditions by subdrainages to see how regeneration harvests were distributed. Overall, Byars (92b), Humbug (92d), Mansfield (92h), S. Fork Breitenbush (92k), and North Fork Breitenbush (92h) subdrainages have the highest disturbed rate conditions within the watershed indicating where the most recent harvest activity has occurred (*figure IV-4*). The only subdrainage above desired disturbed condition is North Fork Breitenbush (92i) in MA-11f. Over half of this subdrainage now lies within the designated area managed as Late Successional Reserves. The asterisks in *figure IV-5* indicates the most restrictive acreage between harvest rates and maximum disturbance allowances. This acreage should be used as a guide to plan future regeneration harvests, by subdrainage, in the Breitenbush to best distribute management activities.

Although recent harvest activities are currently consistent with Forest Plan standards, the sizes, arrangements, and geometric character of treatments over the past fifty years have had a lasting effect on the scenic quality of the area. The visibility, distribution and concentration of various treatments in contrast with older uncut stands contribute significantly to the current quality of the scenic resources. Currently, 21 stands are inconsistent with 1990 Forest Plan standards for maximum created opening sizes due to regeneration harvest activities. These stands were harvested primarily during the 1980's, prior to the current Forest Plan. Total acreage of these stands is 906 acres. To the casual viewer, the Existing Visual Condition of the landscape in the Breitenbush can be described as Natural Appearing within the Mt. Jefferson Wilderness, Olallie Lake Scenic Area; and Slightly to Heavily Altered outside of Wilderness.

Scenic Concerns: The powerline corridor occupies 595 acres, paralleling Road 46 for the entire length of the Breitenbush watershed. This unnatural feature along with its high contrast towers dominates many segments along the road. The wide

Figure IV-5.

Breitenbush Viewshed Condition Analysis

Mgmt Area/ Planning Subdrain.	HRO	EDC	MDC	Unsuited/ Unavail.	Suited & Avail.	Maximum Disturbed Allowed Acres	Visually Disturbed Acres	Harvest Rate Objective Acres	Current Decade Harvest	Avail. Harvest (HRO)	Avail. Harvest (MDC)
11a	0.12	0.096	0.24	2514	6214	1491	599	746	55	691*	892
92a	0.12	0.05	0.24	430	337	81	17	40	17	23*	64
92b	0.12	0.24	0.24	143	374	90	88	45	0	45	2*
92c	0.12	0.00	0.24	465	93	22	0	11	0	11*	22
92d	0.12	0.24	0.24	81	434	104	106	52	0	52	-2*
92e	0.12	0.04	0.24	117	453	109	20	54	16	38*	89
92f	0.12	0.00	0.24	32	105	25	0	13	0	13*	25
92g	0.12	0.05	0.24	177	541	130	28	65	0	65*	102
92h	0.12	0.20	0.24	141	388	93	76	47	2	45	17*
92i	0.12	0.22	0.24	169	589	141	129	71	12	59	12*
92m	0.12	0.08	0.24	49	460	110	35	55	0	55*	75
92n	0.12	0.05	0.24	316	1073	258	49	129	8	121*	209
92p	0.12	0.03	0.24	53	270	65	9	32	0	32*	56
92q	0.12	0.04	0.24	308	1002	240	41	120	0	120*	199
92r	0.12	0.01	0.24	33	95	23	1	11	0	11*	22
11c	0.10	0.094	0.20	824	1589	318	149	159	6	153*	169
03i	0.10	0.00	0.20	14	27	5	0	3	0	3*	5
92a	0.10	0.04	0.20	41	51	10	2	5	0	5*	8
92g	0.10	0.03	0.20	29	190	38	5	19	0	19*	33
92h	0.10	0.00	0.20	17	165	33	0	17	0	17*	33

Mgmt Area/ PSub.	HRO	EDC	MDC	Unsuited/ Unavail.	Suited & Avail.	Maximum Disturbed Allowed Acres	Visually Disturbed Acres	Harvest Rate Objective Acres	Current Decade Harvest	Avail. Harvest (HRO)	Avail. Harvest (MDC)
92i	0.10	0.18	0.20	613	774	155	142	77	6	71	13*
92m	0.10	0.00	0.20	1	110	22	0	11	0	11*	22
92n	0.10	0.00	0.20	109	272	54	0	27	0	27*	54
11f	0.05	0.039	0.10	194	875	88	34	44	0	44*	54
92a	0.05	0.00	0.10	16	7	1	0	0	0	0*	1
92b	0.05	0.00	0.10	5	69	7	0	3	0	3*	7
92d	0.05	0.00	0.10	0	15	2	0	1	0	1*	2
92e	0.05	0.08	0.10	8	93	9	7	5	0	5	2*
92f	0.05	0.00	0.10	2	3	0	0	0	0	0*	0*
92g	0.05	0.04	0.10	58	117	12	5	6	0	6*	7
92h	0.05	0.05	0.10	9	58	6	3	3	0	3*	3*
92i	0.05	0.12	0.10	14	50	5	6	3	0	3	-1*
92m	0.05	0.06	0.10	5	231	23	13	12	0	12	10*
92n	0.05	0.00	0.10	24	98	10	0	5	0	5*	10
92p	0.05	0.00	0.10	0	11	1	0	1	0	1*	1*
92q	0.05	0.00	0.10	53	123	12	0	6	0	6*	12
15	0.00	0.03	0.00	1887	0	0	25	0	0	0	0
92d	0.00	0.01	0.00	276	0	0	1	0	0	0	0
92e	0.00	0.01	0.00	149	0	0	1	0	0	0	0
92g	0.00	0.03	0.00	251	0	0	5	0	0	0	0
92h	0.00	0.01	0.00	173	0	0	3	0	0	0	0

Mgmt Area/ PSub.	HRO	EDC	MDC	Unsuited/ Unavail.	Suited & Avail.	Maximum Disturbed Allowed Acres	Visually Disturbed Acres	Harvest Rate Objective Acres	Current Decade Harvest	Avail. Harvest (HRO)	Avail. Harvest (MDC)
92m	0.00	0.06	0.00	323	0	0	15	0	0	0	0
16a	0.00	0.09	0.00	5754	0	0	386	0	0	0	0
92i	0.00	0.07	0.00	3045	0	0	192	0	0	0	0
92j	0.00	0.01	0.00	1076	0	0	2	0	0	0	0
92k	0.00	0.23	0.00	898	0	0	192	0	0	0	0

HRO = Harvest Rate Objective outlined in Forest Plan Standards and Guidelines

EDC = Existing Disturbed Condition

MDC = Maximum Disturbed Condition allowed within Standards and Guidelines of the Forest Plan.

Note: Only those subdrainages in 15 and 16a that have had previous regeneration harvest are shown. MA 15, 16a and 16b had former scenic allocations. MA 15 and 16a contain units considered in disturbed condition under Forest Plan allocations. Other allocations exist in the viewshed (eg. 5a, 7, 10f, 12a and 12b) but are not depicted on table since no harvest activities have occurred in these areas.

clearances are noticed in several areas such as near Mansfield Creek where the casual viewer can see an expansive view of the landscape. Areas where the electric transmission line is visible from the road would normally be classified as retention or partial retention foreground. It is obvious that these areas will never achieve this objective, but modification at best.

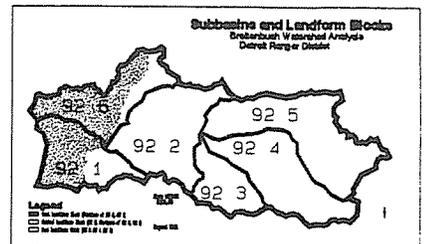
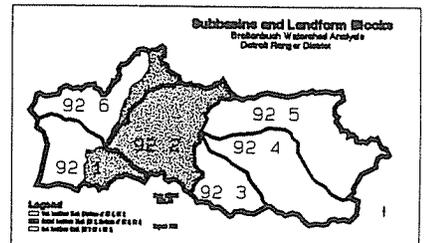
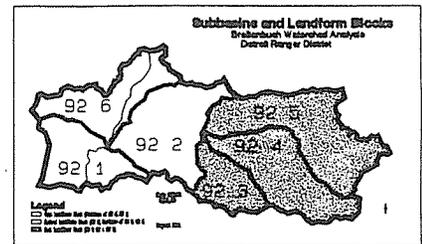
The Breitenbush drainage has a history of large stand replacement fires. The recent Flood of '96 created several landslides across the drainage. In the event of large fire or landslide, the visual character can dramatically change the landscape. In high risk areas for large events, short term visual degradation can occur until the area recovers.

b) Reference condition

i) What is the historical scenic condition in the watershed?

Prior to development of road access within the Breitenbush watershed the condition of the scenic resource was a natural appearing landscape shaped by a long history of natural processes, marked by periodic events of flooding, land flows, and wildfire which consumed large areas and understories of old growth stands in valley bottoms. The diverse landscape structure formed the scenic resource of the watershed which is composed of:

- **Eastern Landform Block - High Cascades:**
 Contains steep U-shaped glaciated valleys with flat valley bottoms and steep rocky walls that abruptly transition to rolling uplands and flat glaciated plateaus in the High Cascades.
- **Western Landform Block - Western Cascades:**
 The most distinguishing features are the sharp, steep V-shaped canyons with stunning relief over 3500 feet, and contains terraces along the Breitenbush River.
- **Central Landform Block - Transition:**
 A geomorphically diverse and highly complex landscape that ranges from extensively glaciated upland benches and headwalls at higher elevations; to large-scale stabilized slump complexes; to



localized areas of actively unstable land flows; to steep, shallow soiled, highly dissected headlands with rock scarps and bluffs; and finally to extensive areas of lower elevation benches, and flat terraces.

This landscape, covered by older and younger coniferous forests, accentuated with rock formations, glaciers, numerous subalpine lakes and meadow openings, and bisected by streams tributary to the Breitenbush River, is what has attracted many people to the watershed over the last century.

In 1895, 33% of the Breitenbush contained seedling/sapling size stands in early seral stage; 14% of the watershed comprised pole and small sized stands in mid seral stage; and 40 percent was composed of medium and large size trees in late seral stage. Various non-forest habitats feature 13% of the area. Historically, the watershed has had large areas disturbed by fire occurrences which is suggested by the evidence of relatively young stands. Natural in origin and random in composition, the Existing Visual Condition (EVD) of the watershed would be considered Natural Appearing.

The vast majority of the older stands found in the watershed today date from the early 1600's when fires burned over most of the watershed. In 1901, a Forest Reserve map indicates that 48% of the watershed was recently burned. Between 1914 and 1967, 6719 acres were burned in the watershed. These areas, now young stands, are still evident today within the watershed in Canyon and Byars drainage and around Eagle Rock.

Plans for a road adjacent the Breitenbush River from Detroit to Breitenbush Hot Springs made it necessary to coordinate logging plans with scenic roadways. In 1920 Fred Ames and Fred Cleator made such plans for the projected sales on Canyon and Humbug Creeks. These included providing a 100-250 feet scenic strip between the railroad track and river so logging trains would run behind the scenic corridor. In 1930, Cleator made plans to build a road up the North Fork of the Breitenbush River to Olallie Lake to connect with the Mt. Hood Loop Road. This would unite the northern Santiam (Willamette) and the Mt. Hood National Forest into an integrated recreation complex. A road was developed accessing the Breitenbush Hot Springs before 1931 and access to Olallie Lake by road was developed before 1935 as depicted on historic forest maps.

The first significant human initiated disturbance occurred during the 1930's which included clearcutting timber and hauling via the newly constructed railroad in the lower Breitenbush from Detroit up to the confluence of Humbug Creek. A decade later new roads were constructed and harvesting practices consisted of logging the lower elevation, easier ground first. The 1950's marked the post-war boom, when

there was a rush to open forests for rapid development through increased timber sales and road construction in the higher elevations. From the 1950's through the 1980's, increasingly these activities produced significant alterations of the Natural Appearing landscape outside of wilderness, resulting in a mosaic of patch cuts in various stages of regeneration. Since the 1980's, shelterwood and thinning harvest practices changed the character across the landscape. The 1980's began the practice of over snow logging on overstory removal units, and the beginning of commercial thinning in second growth stands. The 1990's brought regeneration modified to meet wildlife and long-term productivity objectives, increased stream protection and helicopter logging.

Figure IV-6. Harvest by Decade

Decade	Clearcut Acres	Shelterwood Acres	Thinning Acres
1920	61	0	0
1930	1,031	0	0
1940	0	0	0
1950	842	0	0
1960	3,786	6	0
1970	2,411	0	232
1980	3,816	1963	638
1990	361	132	325
	12,308	2,101	1,195

By the 1990's, 20% of the watershed had been regeneration harvested and reforested since the 1920's (Figure IV-6). Up to the 1950's, the scenic condition ranged from Natural Appearing in the areas that had not been developed to Moderately Altered where harvest activities and road construction occurred. By the 1980's, management activities created significant changes to the landscape over time, ranging from Natural Appearing within Retention and Preservation allocations to a Heavily Altered Visual Condition where developments occurred. Past management activities did not consider visual objectives as evident by the large size (scale), and design of units; eg. geometric shapes, harsh edges, and mid-slope roads with exposed steep cuts and fills. Created openings were not designed borrowing textures, and shapes from the existing landscape character.

c) ***Comparison of Current and Reference Condition***

i) ***What are the natural and human causes of change between historical and current scenic conditions?***

Management activities such as timber harvest, powerline construction and road construction are the most significant human causes of change between historical and current scenic conditions within the Breitenbush drainage. While fire and vegetative growth are the most significant natural causes of change between historic and current scenic conditions.

The area harvested during current times is roughly comparable to the area burned during reference times, but the scenic impacts are different. Harvest units tend to have straight sides and usually appear square or rectangular in shape, while fires tend to have more feathered edges and more variable shapes. Harvest units tend to be smaller and more numerous while fires tend to be larger and fewer in number.

Trends: The future visual condition of the watershed is expected to improve over current conditions when considering several developments and trends affecting Forest land management activities. As Forest managers begin to focus more attention on balancing human use and product extraction with management of natural processes the appearance of the watershed, in time, is expected to approach Visual Condition of Moderately to Slightly Altered.

With the development of the Forest Plan and associated standards for management of scenic resources, including the control of harvest rates, unit sizes and shapes, treatment alternatives, and methods such as thinning and individual tree selection, the design and distribution of activities within the watershed are expected to be less apparent to the casual viewer.

Implementation of the Forest Plan as amended by the 1994 President's Plan; which allocated land for the preservation of Late Successional Reserves, increased the size of riparian reserves, reduced annual harvest rates, and established standards for management of a wide range of forest resources, is expected to have a beneficial effect on the quality of the scenic resources in the future.