

From: Dana Siegfried
To: John White
Date: Fri, Nov 4, 2005 10:59 AM
Subject: September 15 letter

In response to our conversation yesterday, regarding item #19 of your 9/15 letter which states:


19. Page Q-12 refers to "mitigation measures described in Section Q.6," but this appears to be a typographical error because that section does not contain mitigation measures for wildlife impacts. What mitigation measures did you intend to reference in this section?

The correct reference should have been to section Q5. Please note that Q5 states that no adverse impacts to the listed species and their habitat are anticipated and direct mitigation is not proposed. However, some indirect consequences of operating the facility were identified. Mitigation (i.e. avoidance of potential impacts to habitat) for these consequences were proposed (control of noxious weeds, and fire prevention activities).

I hope this clarifies things. Give me a call if we need to talk further.

Dana Siegfried
David Evans and Associates
503.499.0369

CC: Jesse Gronner





General: DISTRIBUTION INFORMATION USED IN THIS EOR WAS DERIVED FROM ODFW GEOGRAPHIC RESOURCES DATA PRODUCED AND DISTRIBUTED IN 1999. UNLESS SPECIFIC DATA EXISTS IN THE DATA FIELD, THE INFORMATION PRESENTED IN THIS EOR REPRESENTS THE "BEST PROFESSIONAL JUDGMENT" BY ODFWS DISTRICT FISHERIES BIOLOGIST; THE PRESENCE OF STEELHEAD IN DESCRIBED AREAS SHOULD BE CONSIDERED UNDOCUMENTED BUT AS HAVING A POTENTIAL OF BEING PRESENT.

Scientific Name: ***Euderma maculatum***

Common Name: **Spotted bat**

Federal Status: SOC GRANK: G4 NHP List: 2 Category: Vertebrate Animal
 State Status: SRANK: S2 HP Track: Y ELCODE: AMACC07010
 EO ID: 26600 First Obs: 2003-09-12 Last Obs: 2003-09-12 Confirmed:

Directions: Cottonwood Canyon Bridge over John Day River, just W. of J.S. Burres State Park.

<u>County Name</u>	<u>Ecoregion</u>	<u>Source Feature [Uncertainty Type (Distance)]</u>
Gilliam Sherman	CB	Point [Areal - Estimated (50 m)]

<u>Town-Range</u>	<u>Sec</u>	<u>Note</u>	<u>QuadCode</u>	<u>QuadName</u>	<u>Watershed</u>
001S019E	17		45120-D4	Esau Canyon	1707020406 - LOWER JOHN DAY

<u>Owner Name/Type</u>	<u>Owner Comments</u>	<u>Managed Area Name</u>
------------------------	-----------------------	--------------------------

EO Type: Minimum Elev.(m): 150 Annual Observations
 EO Data: 2003: bats observed, exact number not specified.

EO Comments: Bridge
 Protection:
 Management:
 General:

Scientific Name: ***Lepus townsendii***

Common Name: **White-tailed jackrabbit**

Federal Status: GRANK: G5 NHP List: 3 Category: Vertebrate Animal
 State Status: SU SRANK: S4? HP Track: N ELCODE: AMAEB03040
 EO ID: 10508 First Obs: Last Obs: 1972-PRE Confirmed:

Directions: DESCHUTES RIVER, 12 MILES WEST OF DUFUR ON THE WEST SIDE OF THE DESCHUTES.

<u>County Name</u>	<u>Ecoregion</u>	<u>Source Feature [Uncertainty Type (Distance)]</u>
Wasco	CB	Point [Areal - Estimated (8050 m)]

<u>Town-Range</u>	<u>Sec</u>	<u>Note</u>	<u>QuadCode</u>	<u>QuadName</u>	<u>Watershed</u>
001S016E	30		45120-D7	Erskine	1707030601 - LOWER DESCHUTES

<u>Owner Name/Type</u>	<u>Owner Comments</u>	<u>Managed Area Name</u>
STATE; PRIVATE		DESCHUTES RIVER STATE RECREATION AREA

EO Type: Minimum Elev.(m): 152 Annual Observations
 EO Data: MUSEUM COLLECTION. 1 SPECIMEN COLLECTED.

EO Comments:
 Protection:
 Management:
 General:

Scientific Name: ***Spermophilus washingtoni***

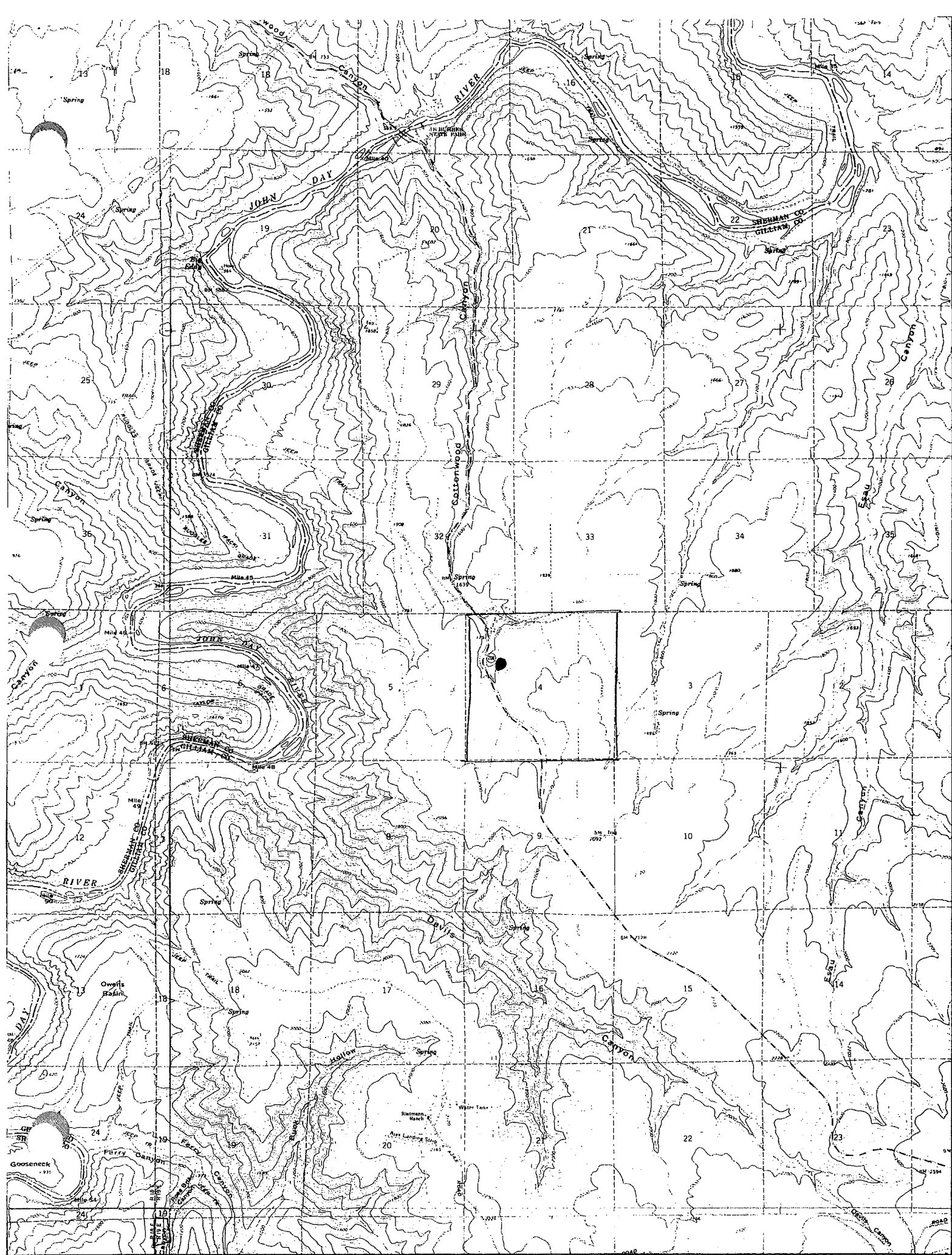
Common Name: **Washington ground squirrel**

Federal Status: C GRANK: G2 NHP List: 1 Category: Vertebrate Animal
 State Status: LE SRANK: S2 HP Track: Y ELCODE: AMAFB05020
 EO ID: 3345 First Obs: 1979 Last Obs: 1979- Confirmed:

Directions: ABOVE THE SOUTH END OF COTTONWOOD CANYON, OFF OF HWY 206.

<u>County Name</u>	<u>Ecoregion</u>	<u>Source Feature [Uncertainty Type (Distance)]</u>
Gilliam	CB	Point [Areal - Estimated (8050 m)]

<u>Town-Range</u>	<u>Sec</u>	<u>Note</u>	<u>QuadCode</u>	<u>QuadName</u>	<u>Watershed</u>
002S019E	04		45120-D4	Esau Canyon	1707020402 - LOWER JOHN DAY 1707020406 - LOWER JOHN DAY 1707020407 - LOWER JOHN DAY 1707020408 - LOWER JOHN DAY 1707020409 - LOWER JOHN DAY





**EAGLE CAP
CONSULTING**

**An Investigation of Rare Plant Resources
Associated with the Proposed Klondike III
Wind Project, Sherman County, Oregon**

Prepared for:
David Evans and Associates, Inc.
2100 SW River Parkway
Portland, Oregon 97201

Prepared by:
Eagle Cap Consulting Inc.
4130 SW 117th, #148
Beaverton, Oregon 97005

**Technical
Report**

July 11, 2005

TABLE OF CONTENTS

TABLE OF CONTENTS	I
LIST OF TABLES	III
LIST OF FIGURES	III
LIST OF APPENDICES	III
ABBREVIATIONS AND ACRONYMS	IV
1. INTRODUCTION	1
1.1 PROJECT OVERVIEW	1
1.2 LOCATION.....	1
1.3 STUDY OVERVIEW	1
2. EXISTING CONDITIONS	2
2.1 GEOLOGY, PHYSIOGRAPHY AND SOILS	2
2.2 CLIMATE	2
2.3 VEGETATION	2
2.4 LAND USE	3
3. METHODS	3
3.1 AREA ADDRESSED.....	3
3.2 TARGET SPECIES.....	4
3.3 PREFIELD REVIEW	4
3.4 FIELD INVESTIGATION.....	5
4. RESULTS	6
4.1 PREFIELD REVIEW	6
4.2 FIELD INVESTIGATION.....	7
5. DISCUSSION	8
5.1 SURVEY TIMING AND COVERAGE	8
5.2 TARGET PLANT SPECIES WITHIN THE RARE PLANT SURVEY AREA	8
5.3 POTENTIAL PROJECT IMPACTS TO TARGET PLANT SPECIES	8
5.4 SIGNIFICANCE OF IMPACTS	8
6. RECOMMENDED MITIGATION MEASURES	9
7. LIST OF PREPARERS	9
REFERENCES	10

TABLES12

FIGURES18

APPENDICES.....23

LIST OF TABLES

TABLE 1: RARE PLANT SPECIES WITH POTENTIAL FOR OCCURRENCE IN THE KLONDIKE III WIND POWER ANALYSIS AREA	12
TABLE 2: GENERAL DESCRIPTION OF HABITATS ENCOUNTERED WITHIN THE RARE PLANT SURVEY AREA DURING THE 2005 SPRING SURVEY	14

LIST OF FIGURES

FIGURE 1: KLONDIKE III WIND PROJECT MAP.....	19
FIGURE 2: PHOTO OF TYPICAL CRP HABITAT IN THE SURVEY AREA.....	20
FIGURE 3: PHOTO OF SHRUB DOMINATED HABITAT IN SW CORNER OF THE SURVEY AREA	20
FIGURE 4: PHOTO OF BUNCHGRASS DOMINATED HABITAT IN SW CORNER OF THE SURVEY AREA.....	21
FIGURE 5: PHOTO OF NON-NATIVE-DOMINATED HABITAT NEAR CULTIVATED FIELD.....	21
FIGURE 6: PHOTO OF NON-NATIVE-DOMINATED HABITAT ALONG EXISTING ACCESS ROAD.....	22

LIST OF APPENDICES

APPENDIX 1: VASCULAR PLANT SPECIES FOUND WITHIN THE RARE PLANT SURVEY AREA (SPRING 2005 SURVEY)	
---	--

ABBREVIATIONS AND ACRONYMS

aMW	Average Megawatt(s)
BPA	Bonneville Power Administration
CRP	Conservation Reserve Program
ECCI	Eagle Cap Consulting Inc.
EIS	Environmental Impact Statement
EFSC	Oregon Energy Facility Siting Council
EO	Element Occurrence
F	Fahrenheit
GIS	Geographic Information System
GPS	Geographic Positioning System
kV	Kilovolt(s)
MW	Megawatt(s)
NEPA	National Environmental Policy Act
NRCS	Natural Resources Conservation Service
O&M	Operations & Maintenance
ODA	Oregon Department of Agriculture
ORNHIC	Oregon Natural Heritage Information Center
USFWS	US Fish and Wildlife Service
WNHP	Washington Natural Heritage Program
WRCC	Western Regional Climate Center

1. INTRODUCTION

1.1 PROJECT OVERVIEW

The Klondike III project is a wind energy facility with a peak electric generating capacity of approximately 273 megawatts (MW) and an average electric generating capacity of approximately 91 MW. The project site is located in Sherman County approximately 4 miles east of Wasco, Oregon, on private land that has been leased by Klondike III to develop the project. The project will consist of: (i) 165 turbines with an installed peak generating capacity of either 1.5 MW or 1.65 MW per turbine, and associated turbine towers, turbine pads and related equipment; (ii) underground collector lines with a capacity of 34.5 kV to transmit electric power generated by the wind turbines to two collector substations located within the project boundary; (iii) two collector substations; (iv) an operations and maintenance (O&M) facility to serve the Klondike III project; (v) an above ground 230 kV collector line to transmit power between the collector substation near Webfoot and the point of interconnection with the Bonneville Power Administration's (BPA's) facilities at BPA's Klondike Schoolhouse substation; and (vi) new access roads.

All project facilities would be located on private agricultural land upon which the applicant has negotiated long-term wind energy leases with the landowners. The wind energy leases allow for the applicant to permit, construct, and operate wind energy facilities for a defined period. The terms of the wind energy leases allow landowners to continue their farming operations in and around the wind turbine generators and other facilities where the farming activities do not impact the operation and maintenance of the wind generation equipment. Figure 1 shows the area currently under lease agreements for the project (the lease area).

1.2 LOCATION

The Klondike III lease area is located in rural northeast Sherman County. At its closest, it is roughly one mile west of the John Day River, approximately five miles south of the Columbia River, and twelve miles east of the Deschutes River. Grass Valley Canyon, which contains an intermittent tributary to the John Day River, extends along the southern edge of the lease area.

1.3 STUDY OVERVIEW

As part of the application process, the applicant is required to conduct studies to analyze potential impacts that the project may have on environmental resources. One of these studies is an investigation of rare plant resources that is designed to evaluate potential project effects (if any) on rare plant species. The investigation is complete, and this report documents the methods and results of the study.

2. EXISTING CONDITIONS

2.1 GEOLOGY, PHYSIOGRAPHY AND SOILS

The proposed project would be located in the Deschutes-Columbia Plateau physiographic province. This province is a north-sloping, volcanic plateau that measures over 60,000 square miles in Oregon, Washington, and Idaho. Volcanic rocks mapped as Columbia River Basalt Group underlie nearly all of the province. These rocks are middle Miocene in age (around 6 to 17 million years old) and principally consist of basalt that erupted from vents in central and northeast Oregon, southeast Washington, and Idaho, and flowed westward to the Pacific Ocean (Beeson *et al.* 1989). In late Pleistocene time, a surficial layer of wind-derived, fine-grained sediment referred to as "loess" was deposited in the province along the Columbia River drainage. Arid-land processes have also locally formed light-colored layers of calcium carbonate, known as "caliche" in the near surface loess soils.

Elevations range from 170 feet above mean sea level along the Columbia River at the northern edge of the county, to 3,000 feet in the southern part of the county (Orr *et al.* 1992). Topography within the lease area is typified by gently rolling to level ground located along the high plateau. Areas of steep slopes are confined to portions of the northeast and southern margins of the site. These slopes drop rapidly from the high and relatively level plateau down to the stream in Grass Valley Canyon, as well as several other unnamed intermittent streams which border the lease area. Elevations along the plateau range between approximately 1,250 feet to 1,500 feet. Elevations drop to roughly 1,000 feet in project portions of Grass Valley Canyon.

2.2 CLIMATE

Located on the eastern side of the Cascade Mountains, the lease area predominantly exhibits the continental climate of the Intermountain Region (*i.e.* extreme temperatures and low rainfall) (Orr *et al.* 1992). However, the Columbia River Gorge provides a passageway for the normal eastward migration of ocean-conditioned air masses from the Pacific. These currents usually lead to shorter hot or cool periods than those typical of the Intermountain Region. For the period from 1928 to 2004, mean minimum and maximum temperatures for the month of January, the coldest month of the year, were 23.9 and 37.5° Fahrenheit (F) respectively, as measured at Moro, Oregon (WRCC 2005). For the month of July, the warmest month of the year, mean minimum and maximum temperatures were 53.6 and 83.2°F respectively. Most of the annual rainfall in Sherman County occurs between November and March, reflecting the strong influence of marine air masses entering from the Pacific Ocean. Mean monthly precipitation at the Moro station ranges from 0.22 inches in July to 1.64 inches in January, for a total mean annual precipitation of 11.27 inches (WRCC 2005). Snowfall is typically light with an average annual snowfall at Moro of 20.1 inches (WRCC 2005).

2.3 VEGETATION

The Columbia Basin Ecoregion (where the project would be located) is characterized by steppe and shrub-steppe vegetation types, but these have often been modified heavily by human

activities (Kagen *et al.* 1999). In general, shrub-steppe vegetation (where shrubs and bunchgrasses co-dominate) occurs in the middle of the ecoregion, while steppe vegetation (where bunchgrasses dominate) occurs around the eastern rim of the ecoregion (Franklin and Dyrness 1988, Daubenmire 1970).

Historical land cover maps from the Oregon Gap Analysis Program place the lease area within the 'Perennial Bunchgrass' type (Kagen *et al.* 1999). However, the program's Current Land Cover maps show the lease area to be primarily composed of the agricultural type, with minor inclusions of shrub cover types.

The above descriptions of generalized vegetation zones and associations are based on climax communities, which typically develop over time in the absence of anthropogenic disturbance. Within the lease area (as in most of the steppe and shrub-steppe regions) many of the plant communities have been significantly modified due to numerous disturbance factors. The vast majority of the ground is under dry land wheat production. Very little acreage of native plant communities remain within the lease area, occurring predominantly along the plateau margins and steep side slopes of Grass Valley Canyon. These communities consist of sagebrush and rabbitbrush dominated shrub lands and native bunchgrass grasslands, each with varying degrees of invasive species present. Agricultural areas that are enrolled under the Conservation Reserve Program (CRP) are located throughout the lease area, occurring as narrow strips in previously plowed drainageways, and as large blocks in other areas. CRP areas have been planted with a mix of native and non-native bunch grasses with the primary intent of increasing wildlife habitat in the area.

2.4 LAND USE

Agriculture, particularly dry land wheat, is the predominant land use. However, there are a few residential dwellings and agriculture related structures within the lease area. In addition, limited recreational use of the private lands may occur.

3. METHODS

3.1 AREA ADDRESSED

The rare plant survey area was designed to take in all ground potentially disturbed by the project. For the purposes of the rare plant investigation, the rare plant survey area includes all lands within at least 150 feet of the centerline of all linear proposed facilities. This includes proposed turbine strings, underground and overhead electrical lines, and access roads. In most cases, the resultant survey corridors are 300 feet wide, although in some areas, several project facilities are proposed to be located along side each other, resulting in a wider survey corridor. For non-linear proposed facilities (staging areas, substation sites, etc.), the entire proposed disturbance footprint of the facility was surveyed, as well as an additional 150 foot buffer on all sides. In addition, a proposed mitigation parcel adjacent to project facilities was surveyed (including a 150 foot

buffer around the parcel). The map presented in Figure 1 shows the rare plant survey area which was considered.

Within the rare plant survey area, however, only those portions that contain potential habitat for the target species were searched by pedestrian transect. This included all ground not currently in cultivation, including all grassland and shrubland habitat (both native- and non-native-dominated), as well as all CRP ground. The only areas that were not traversed on foot within the rare plant survey area are agricultural fields currently planted to monoculture crops (as these areas are not thought to have potential for occurrence of any of the target species). All proposed new or existing access roads likely to be upgraded by the project are included in the survey area.

Although for the purposes of impact analysis, only the rare plant survey area was considered, a larger area (the analysis area) was addressed during the prefield review in determining which rare plant species had potential for occurrence within the survey area. This was necessary to analyze the project in a regional context, and ensure that the target species list for the investigation was complete. The analysis area takes in all lands within five miles of proposed project facilities.

3.2 TARGET SPECIES

For the rare plant investigation, the target species include all vascular plant taxa listed as 'Endangered', or 'Threatened' by the US Fish and Wildlife Service (USFWS). In addition, taxa that have been formally proposed, or are candidates, for such federal listing are also considered target species. Target species also include all vascular plant taxa defined as 'Endangered', 'Threatened', or 'Candidate' by the Oregon Department of Agriculture (ODA). Finally, taxa contained on lists 1, 2, or 3 of the Oregon Natural Heritage Information Center's (ORNHIC) rare plant lists are also considered target species for this investigation. Taxa meeting the above criteria were targeted by the investigation to determine their presence or absence within the rare plant survey area. Determinations of status for rare plant species were based on the ORNHIC's list of tracked plant species (ORNHIC 2004, 2003, 2001), and entries published in the US Federal Register.

3.3 PREFIELD REVIEW

As part of the investigation, a review of available literature and other sources was conducted to identify the rare plant species potentially found within the analysis area. As per Section 7(c)(1) of the US Endangered Species Act of 1973 (16 USC 1531, *et seq.*, as amended), a letter was sent to the USFWS requesting a list of federally Threatened, Endangered, or Proposed taxa which have potential to occur within the analysis area. In addition, the ORNHIC was contacted to obtain element occurrence records for any known rare plant populations in the analysis area. To supplement the information provided by the above agencies, a number of other sources were consulted. These sources provided additional information on the potential rare plant species for the project, including critical information such as habitat preferences, morphological characteristics, phenologic development timelines, and species ranges. Sources included: taxonomic keys and species guides (Washington Natural Heritage Program [WNHP] 2004, Flora

ID Northwest 2001, USFWS 2001, Hickman 1993, Cronquist *et al.* 1977-1997, Hitchcock and Cronquist 1973, Hitchcock *et al.* 1955-1969); online databases of common and rare plant species (USDA 2005, ECCI 2004); permitting documents from Klondike I and II (Johnson 2004, Johnson *et al.* 2002, 2001), and Natural Resources Conservation Service (NRCS) soils data (NRCS 2004).

Using data collected during the prefield review, a list of rare plant species potentially occurring in the analysis area was compiled. Habitat preferences and identification periods were derived from the literature for each potential species. Using this information, along with topographic maps of the lease area, a field survey plan was developed to guide the timing and intensity of the field surveys.

3.4 FIELD INVESTIGATION

Field surveys were performed within the rare plant survey area on May 4 and 5, 2005. All field work was performed by the principal investigator and an additional botanist. Both individuals have extensive experience performing rare plant surveys in the region for numerous wind power projects.

This survey covered the entire rare plant survey area (excepting the currently cultivated fields), and was designed to locate those target species that are identifiable in the spring (which includes all of the upland-associated species of concern). The investigators surveyed all ground using an 'intuitive controlled' pedestrian survey pattern. The 'intuitive controlled' pattern is a variable intensity survey protocol designed to cover all ground within a given study area at a level sufficient to locate all occurrences of the identifiable target species. The botanists, working in tandem or singly, walked each survey corridor, crossing back and forth from one edge of the corridor to the other in a zig-zag pattern. The intensity of the pattern, and the speed at which the surveyors walk, was variable, and depended on the structural complexity of the habitat, the visibility of the target species, and the probability of target species occurrence in a given area. In some higher-probability, low visibility habitats, a tight grid pattern was walked. Care was taken to thoroughly search all unique features and any high probability habitats encountered.

During all the surveys, the investigators kept a list of all vascular plants encountered, and made informal collections of unknown species for later identification in the laboratory. *Vascular Plants of the Pacific Northwest* (Hitchcock *et al.* 1955-1969) and *Flora of the Pacific Northwest* (Hitchcock and Cronquist 1973) were used as the primary authorities for vascular plant species identification. Updated taxonomy was referenced in the NRCS PLANTS database (which also serves as the source for the common plant names used in this document) (USDA 2005). Notes were also recorded regarding plant associations, land use patterns, unusual habitats, etc.

4. RESULTS

4.1 PREFIELD REVIEW

The USFWS Section 7 response letter did not contain any federally endangered, threatened, proposed, or candidate plant species with potential for occurrence in the analysis area (USFWS 2005). However, the USFWS letter did contain two plant 'Species of Concern', which may potentially occur in the analysis area: *Mimulus evanescens* (disappearing monkeyflower) and *Myosurus minimus* ssp. *apus* (little mousetail) (also known as *Myosurus sessilis*). The USFWS's 'Species of Concern' are "...those taxa whose conservation status is of concern to the Service (many previously known as Category 2 candidates), but for which further information is still needed" (USFWS 2005). These two species were added to the target species list for the project.

The ORNHIC reported eleven element occurrence (EO) records for six different tracked plant taxa in the analysis area (although none were within the rare plant survey area itself) (ORNHIC 2005). The five occurrences are described below:

- *Artemisia campestris* ssp. *borealis* var. *wormskioildii* (field sagewort) - Two EOs: The first EO is an historical occurrence, which was last seen in 1941. The species is believed to be extirpated from the state. The site is located along the Columbia River, approximately two miles west of Rufus, Oregon. The site is over 1.5 miles away from the proposed BPA substation on Klondike Lane (at the terminus of the project transmission line), and over ten miles away from the nearest proposed project turbine location. The second EO is also historical, last seen in 1932 at the mouth of John Day River. This site is over eight miles away from the nearest proposed turbine location.
- *Heliotropium curassavicum* (salt heliotrope) - One EO: This occurrence is based on an herbarium collection for which no collection date was given. Although site locational data is not exact for this occurrence, it is believed to be located near the town of Moro, over five miles away from the nearest proposed project turbine.
- *Astragalus collinus* var. *laurentii* (Laurent's milkvetch) - Two EOs: Both EOs are historical occurrences based on herbarium collections from 1950. The first site is located along the John Day River, approximately three miles from the nearest proposed project turbine. The second EO site is also located along the John Day River approximately six miles from the nearest project turbine location.
- *Mimulus jungermannioides* (liverwort monkeyflower) - Four EOs: All four EOs are recent populations (last visited in 1986 through 1998). They are all located either along the John Day River, or near the Columbia River.
- *Mimulus evanescens* (disappearing monkeyflower) - One EO: This is an historical occurrence based on a number of undated herbarium collections. The locational data is imprecise, but the site directions place it somewhere in the vicinity of Cottonwood

Canyon. The site would therefore be at least 3.5 miles from the nearest proposed project turbine.

- *Allium robinsonii* (Robinson's onion) - One EO: This is an historical occurrence based on an herbarium record from 1942. The EO is located along the Columbia River near the mouth of the John Day River.

The final list of rare plant species thought to have potential for occurrence within the Klondike III Wind Power analysis area is presented in Table 1. It includes all of the species discussed in this section, as well as a number of others which were suggested by additional contacts and references consulted during the prefield review (see Section 3.3 for a list of references consulted). Although rare plant species other than those listed in Table 1 were not thought to have potential for occurrence within the analysis area, all rare plant species known or suspected to occur in Oregon were considered during the field survey. The species listed in Table 1, however, received the most focus during the investigation.

4.2 FIELD INVESTIGATION

The field investigations did not locate any rare plant target species within the survey area. As noted previously, the majority of ground within the survey area is currently in cultivation and, as such, contains no potential habitat for target plant species. Most of the remaining non-cultivated habitat is in the CRP program, and has been planted to a variety of native and non-native grass and forb species with varying success (Figure 2). The balance of the habitat is grassland or grassland/shrubland habitat at varying seral stages. The small inclusions of better-quality habitat are dominated by native shrubs or grasses, but usually with a significant component of non-native species (primarily *Bromus tectorum* [cheatgrass]) in the understory (Figures 3 and 4). Other non-cultivated areas are dominated by non-native species with few or no natives present (Figures 5 and 6).

Overall, the rare plant survey area contains low potential for any of the species on the target rare plant list. Most of the non-cultivated habitat was found to be dominated by non-native species and contained low species diversity. The small areas of native dominated habitat found, had significant components of non-native invaders, and showed evidence of repeated past and/or present vegetation disturbance. Table 2 contains a summary of the habitats within the rare plant survey area. The segments described in the table refer to the Map Points delineated on the map in Figure 1. Appendix 1 contains a comprehensive list of all vascular plant species identified within the survey area during the 2005 spring survey.

5. DISCUSSION

5.1 SURVEY TIMING AND COVERAGE

The timing of the May, 2005 survey was thought to be sufficient to allow for location and identification of all of the target species within the upland habitats. All of these upland target species were presumably identifiable when the spring survey was conducted. This assumption is based on the typical flowering times for these species, and observed phenological development of the other plant species in the area.

The spring survey occurred too early to identify all of the riparian-associated target species (which typically are only identifiable in mid- to late-summer). However, only one small area of wetland vegetation was found, and it is not expected that this area will receive any direct impacts from the proposed project. Therefore, it is not expected that a summer survey will be needed.

As noted in Section 3, the rare plant survey area was designed to cover all ground potentially impacted by the project. This includes an appropriate buffer around all proposed project facilities, access roads, and other potentially impacted areas. The survey corridors were derived based on the proposed project layout as of April 29, 2005. If the proposed project layout is changed so that ground or vegetation disturbance would take place outside of the surveyed area, additional rare plant surveys would need to be conducted at the appropriate time of year.

5.2 TARGET PLANT SPECIES WITHIN THE RARE PLANT SURVEY AREA

Based on a thorough survey of all potential rare plant habitat likely to be impacted by the project, as well as on a review of existing rare plant element occurrence records for the area, no known rare plant populations exist in the survey area. Given the poor quality of most of the habitats at the site (primarily cultivated or in CRP), it is highly unlikely that undiscovered rare plant populations exist there.

5.3 POTENTIAL PROJECT IMPACTS TO TARGET PLANT SPECIES

Given the absence of any populations of target plant species, no direct project-related impacts are anticipated to any federally Endangered, Threatened, Proposed, or Candidate plant species. Likewise, no direct project-related impacts are predicted for any ODA Endangered, Threatened, or Candidate plant species.

5.4 SIGNIFICANCE OF IMPACTS

The proposed project will have no effect on federally listed, proposed or candidate plant species. Likewise, the project will not adversely impact designated critical habitat for such species. No ODA Endangered, Threatened, or Candidate plant species will be affected by the project, nor will recovery efforts for these species be adversely impacted.

6. RECOMMENDED MITIGATION MEASURES

Because no direct project-related impacts to any federal or state Endangered, Threatened, Sensitive, Proposed, or Candidate plant species are anticipated, no species-specific mitigation measures are proposed at this time. However, several general measures are recommended to mitigate possible indirect effects to other species of concern (if any) potentially in the vicinity, outside of the survey corridors.

1. Because noxious weeds can have numerous detrimental effects on native plant populations, measures should be implemented to control the introduction and spread of undesirable plants during and after construction. Noxious weed control measures may include: quickly revegetating habitats temporarily disturbed during construction, and actively controlling noxious weeds that have established themselves as a result of the project. The prudent course of action is to work with the Sherman County Weed Control manager to take appropriate measures to prevent the invasion, during and after project construction, of any weeds on the Sherman County noxious weed list.
2. Indirect project-related impacts to plant species of concern may also occur as a result of changes in fire frequency patterns in the area. Project access roads can act as fire breaks, thereby decreasing the size of a wildfire. Likewise, the project roads may allow fire crews to access small fires faster, and more effectively fight larger fires. Conversely, project operation and maintenance activities have the potential to ignite wildfires if precautions are not taken. Because it is not clear if these effects would have a positive or negative effect on native plants in the vicinity, the most prudent course of action would be to develop a fire management plan. While certain factors are out of the control of the applicant, steps can be taken to minimize the risk of wildfire during both the construction and operation phases of the project. A comprehensive fire management plan should be developed, and implemented project-wide over the life of the project. The fire control plan should take into account the dry nature of the region, and address risks on a seasonal basis.

7. LIST OF PREPARERS

- Randall S. Krichbaum, Project Manager, Eagle Cap Consulting Inc. (Principal author)
- Margaret A. Horvath, Biologist/Geographer, Eagle Cap Consulting Inc.

In addition, paragraphs relating to the project description and site conditions have been provided by David Evans & Associates. They are included in this document, with only slight modifications.

REFERENCES

- Beeson, M. H., T. L. Tolan, and J. L. Anderson. 1989. The Columbia River Basalt Group in western Oregon; geologic structures and other factors that controlled flow emplacement patterns, *in* Reidel, S. P., and Hooper, P. R., eds., *Volcanism and tectonism in the Columbia River flood-basalt province*. Geological Society of America Special Paper 239.
- Cronquist, A., N. H. Holmgren, P. K. Holmgren, A. H. Holmgren, and J. L. Reveal. 1977-1997. Intermountain flora: Vascular plants of the Intermountain West, U.S.A. (volumes 3A, 3B, 4, 5, 6). The New York Botanical Garden, Bronx, New York.
- Daubenmire, R. 1970. Steppe vegetation of Washington. Originally Agriculture Experiment Station Publication XT0062. Reprinted in 1988 as EB1446, U.S. Department of Agriculture and Home Economics, Washington State University, Pullman. 132 pp.
- Eagle Cap Consulting Inc. (ECCI). 2004. Unpublished database of Northwest plant species. Eagle Cap Consulting Inc., Beaverton, Oregon.
- Flora ID Northwest. 2001. Computer-based expert ID system for the plants of the Northwest. Flora ID Northwest, Pendleton, Oregon.
- Franklin, J. F. and C. T. Dyrness. 1988. Natural vegetation of Oregon and Washington. Oregon State University Press, Corvallis, Oregon. 452 pp.
- Hickman, J. C. *ed.* 1993. The Jepson manual. University of California Press, Berkeley, California. 1,400pp.
- Hitchcock, C. L., and A. Cronquist. 1973. Flora of the Pacific Northwest. University of Washington Press, Seattle, Washington. 730pp.
- Hitchcock, C. L., A. Cronquist, M. Ownbey, and J. W. Thompson. 1955-1969. Vascular plants of the Pacific Northwest (5 volumes). University of Washington Press, Seattle, Washington.
- Johnson, G. D. 2004. Analysis of potential wildlife and habitat impacts from the Klondike II Project, Sherman County, Oregon. CH2M Hill, Portland, Oregon. 19 pp.
- Johnson, G. D., W. P. Erickson, K. Bay, and K. Kronner. 2002. Final report: Baseline ecological studies for the Klondike Wind Project, Sherman County, Oregon (dated May 29, 2002). Northwestern Wind Power, Goldendale, Washington. 51 pp.
- Johnson, G. D., W. P. Erickson, and K. Kronner. 2001. Interim report: Baseline ecological studies for the proposed Klondike Wind Project, Sherman County, Oregon. Northwestern Wind Power, Goldendale, Washington. 29 pp. plus appendices.
- Kagan, J.S., J.C. Hak, B. Csuti, C.W. Kiilsgaard, and E.P. Gaines. 1999. Oregon Gap Analysis Project final report: A geographic approach to planning for biological diversity. Oregon Natural Heritage Information Center, Portland, Oregon. 72 pp. + appendices.

- Natural Resources Conservation Service (NRCS). 2004. Soil Survey Geographic (SSURGO) database for Sherman County, Oregon. USDA Natural Resources Conservation Service, Ft. Worth, Texas.
- Oregon Natural Heritage Information Center (ORNHIC). 2005. Letter to Phil Rickus (David Evans & Associates) from Cliff Alton (Conservation Information Assistant) dated March 14, 2005.
- Oregon Natural Heritage Information Center (ORNHIC). 2004. Vascular plant rare, threatened and endangered species list. ORNHIC, Portland, Oregon.
<<http://oregonstate.edu/ornhic/data/vascular.html>>
- Oregon Natural Heritage Information Center (ORNHIC). 2003. Plant list changes and comments: results of the 2003 meeting to discuss changes to the ORNHIC rare plant list. ORNHIC, Portland, Oregon. 12 pp. < <http://oregonstate.edu/ornhic/plantchange.pdf>>
- Oregon Natural Heritage Information Center (ORNHIC). 2001. Rare, threatened and endangered plants and animals of Oregon. ORNHIC, Portland, Oregon. 94 pp.
- Orr, E. L., W. N. Orr, and E. M. Baldwin. 1992. Geology of Oregon, Fourth Edition. Kendall/Hunt Publishing. Dubuque, Iowa.
- US Department of Agriculture (USDA). 2005. The PLANTS Database: Version 3.5. National Plant Data Center, Baton Rouge, LA. <<http://plants.usda.gov>>
- US Department of Agriculture (USDA). 1964. Soil Survey of Sherman County, Oregon. Soil Conservation Service.
- US Fish and Wildlife Service (USFWS). 2005. Letter to Phil Rickus (David Evans & Associates) from Kemper M. McMaster (USFWS Oregon State Supervisor) date stamped January 28, 2005.
- US Fish and Wildlife Service (USFWS). 2001. Section 7 Guidelines – Snake River Basin Office: *Spiranthes diluvialis* Ute Ladies'-tresses (threatened): dated April 24, 2001. USFWS Snake River Basin Office, Boise, Idaho.
- Washington Natural Heritage Program (WNHP). 2004. Field Guide to selected rare vascular plants of Washington. Washington Department of Natural Resources, Olympia, Washington.
- Western Regional Climate Center (WRCC). 2005. Period of record monthly climate summary: Moro, Oregon station (355734): period of record: 1/1/1928 to 9/30/2004.
<<http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ormoro>>

TABLES

Table 1: Rare Plant Species with potential for occurrence in the Klondike III Wind Power Analysis Area

Name	Status ¹	Habitat	ID Period
<i>Achnatherum hendersonii</i> Henderson's needlegrass	USFWS: SC ODA: C TNC: G3/S2 ORNHIC: 1	Dry, rocky, shallow soil, in sagebrush or ponderosa pine	May-June
<i>Allium robinsonii</i> Robinson's onion	USFWS: SC TNC: G3/SH ORNHIC: 2-ex	Sandy/gravelly soils along the Columbia river and lower benches	Apr-May
<i>Ammannia robusta</i> grand redstem	TNC: G5/SNR ORNHIC: 3	Wet places, drying ponds, and ditch margins	July-Sept
<i>Artemisia campestris</i> ssp. <i>borealis</i> var. <i>wormskioldii</i> field sagewort	USFWS: C ODA: LE TNC: G5T1/SX ORNHIC: 1-ex	Basaltic, cobbly, or sandy shrub-steppe along the Columbia River	Apr-May
<i>Astragalus collinus</i> var. <i>laurentii</i> Laurent's milkvetch	USFWS: SC ODA: LT TNC: G5T1/S1 ORNHIC: 1	Basaltic grassland and sagebrush desert	May-June
<i>Astragalus revertiformis</i> Yakima milkvetch	TNC: G5/SNR ORNHIC: 3	Sagebrush desert, stony flats, hilltops, grassy hillsides, and ponderosa pine forests	Apr-June
<i>Camissonia pygmaea</i> dwarf suncup	USFWS: SC ODA: C TNC: G3/S1 ORNHIC: 1	Unstable soil or gravel, steep talus, dry washes, banks, and roadcuts in sagebrush-steppe	May-Aug
<i>Carex hystericina</i> bottlebrush sedge	TNC: G5/S2 ORNHIC: 2	Wet ground near streams	May-June
<i>Cryptantha leucophaea</i> gray cryptantha	TNC: G2G3/SH ORNHIC: 2-ex	Dry sagebrush/grassland plains; sandy soils	May-June
<i>Escobaria vivipara</i> var. <i>vivipara</i> spinystar	TNC: G5T4/S1 ORNHIC: 2	Desert valleys and hills	May-June
<i>Heliotropium curvassavicum</i> salt heliotrope	TNC: G5/S2 ORNHIC: 2	Saline places at low elevations; dried ponds	June-Sept
<i>Lesquerella douglasii</i> Douglas' bladderpod	TNC: G4?/SNR ORNHIC: 3	Sagebrush desert and ponderosa pine forest	Mar-July
<i>Lomatium watsonii</i> Watson's desertparsley	TNC: G4/S1 ORNHIC: 2	Open hillsides, often with sagebrush	May

<i>Mimulus evanescens</i> disappearing monkeyflower	USFWS: SC ODA: C TNC: G2S2 ORNHC: 1	Seasonally moist areas in and near sagebrush plant communities	May-Sept
<i>Mimulus jungermannioides</i> liverwort monkeyflower	ODA: C TNC: G2/S2 ORNHC: 1	Shaded seeps along cliffs	Apr-June
<i>Myosurus sessilis</i> vernal pool mousetail	USFWS: SC ODA: C TNC: G2S1 ORNHC: 1	Vernal pools, alkali flats, and grasslands	Apr-May
<i>Navarretia leucocephala</i> whitehead navarretia	TNC: G5/SNR ORNHC: 3	Vernal pools and margins of ponds	July
<i>Penstemon deustus</i> var. <i>variabilis</i> scabland penstemon	TNC: G5T1T2/SNR ORNHC: 3	Dry foothills and lowlands	May-July

Nomenclature follows the USDA - PLANTS database (USDA 2005)

¹Status:

USFWS=US Fish and Wildlife Service Status

- LE: Listed Endangered
- LT: Listed Threatened
- C: Candidate for listing
- SC: Species of Concern (Former C1 candidate species recently removed from consideration)

ODA=Oregon Department of Agriculture Status

- LE: Listed Endangered
- LT: Listed Threatened
- C: Candidate for listing

TNC=The Nature Conservancy Ranking (ranked on a rarity scale of 1[few] to 5 [abundant])

- G: Global distribution
- T: Trinomial distribution (*i.e.* distribution of subspecies or variety)
- S: State distribution
- Q: Indicates taxonomic questions exist regarding this species, variety or subspecies
- H: Indicates species represented by a historical occurrence which has not recently been verified
- X: Presumed extirpated or extinct
- NR: Not ranked yet

ORNHC=Oregon Natural Heritage Information Center Status

- 1: Taxa which are endangered or threatened throughout their range
- 2: Taxa which are threatened, endangered or extirpated from Oregon but are stable elsewhere
- 3: Taxa for which addition information is needed before status can be determined
- 4: Taxa which are not currently threatened, but may require monitoring
- ex: Presumed extirpated from Oregon
- X: Presumed extinct

Table 2: General description of habitats encountered within the rare plant survey area during the 2005 spring survey

Segment*	Habitat Description
Map Point 5 to 6	<p>This segment passes through deep-soiled CRP land which is dominated by planted rows of <i>Thinopyrum intermedium</i> (intermediate wheatgrass) mixed with <i>Bromus tectorum</i>. Occasional shrubs include <i>Artemisia tridentata</i> (big sagebrush) and <i>Ericameria nauseosa</i> (rubber rabbitbrush). Other native and non-native grasses and forbs are scattered throughout, including <i>Poa bulbosa</i> (bulbous bluegrass), <i>Poa secunda</i> (Sandberg bluegrass), <i>Agropyron cristatum</i> (crested wheatgrass), <i>Salsola kali</i> (Russian thistle), <i>Erodium cicutarium</i> (redstem stork's bill), and <i>Achillea millefolium</i> (common yarrow). There are also several areas of somewhat thinner, rockier soil, where <i>Festuca ovina</i> (sheep fescue) has been planted in place of the <i>Thinopyrum</i>.</p>
Map Point 7 to 8	<p>Most of this segment contains grazed bunchgrass habitat with a very few stunted <i>Chrysothamnus/Ericameria</i> spp. (rabbitbrush) and <i>Artemisia tridentata</i> shrubs. The grass layer is a mix of native and non-native species including <i>Pseudoroegneria spicata</i> (bluebunch wheatgrass), <i>Poa secunda</i>, <i>Bromus tectorum</i>, and <i>Poa bulbosa</i>.</p> <p>At the southern end of this segment, there is a small (100' x 100') area of poor-quality shallow-soiled habitat. This area is dominated by <i>Eriogonum</i> species (buckwheat) and <i>Poa secunda</i>.</p>
Map Point 10 to 11	<p>The southern quarter of this segment contains deep soiled CRP that has been planted with <i>Poa ampia</i> (alkali bluegrass). Other dominant species include <i>Pseudoroegneria spicata</i> (which also appears to have been planted), <i>Bromus tectorum</i>, <i>Erodium cicutarium</i>, and <i>Sisymbrium altissimum</i> (tall tumbled mustard). Other scattered native and non-native forbs are also present. A few small relatively bare areas of shallower, rocky soils are dominated by <i>Erodium cicutarium</i>. The remainder of this segment is in cultivation.</p>
Map Point 11 to 20	<p>This segment follows an existing road and is a proposed route for an electrical line. Toward the east, the non-cultivated portions of this segment are heavily grazed shrub-grassland containing primarily <i>Bromus tectorum</i> with some <i>Poa secunda</i> and stunted <i>Chrysothamnus/Ericameria</i> species. Scattered <i>Artemisia tridentata</i> shrubs are also present.</p> <p>Toward the west, there is a dry pasture with little vegetation present.</p> <p>Near the townsite of Webfoot, there is a dry draw, with a small wet area below a ranch-house. Although the wet area has a predominance of hydrophytic vegetation (<i>Typha latifolia</i>, <i>Veronica americana</i> [American speedwell], and others), the entire draw is heavily grazed and most plants are clipped to ground level.</p>
Map Point 20 to 21	<p>This cultivated segment contains one very narrow, rocky, weedy creekbed which was dry at the time of survey. <i>Bromus tectorum</i> and <i>Poa bulbosa</i> dominate.</p>
Map Point 21 to 14	<p>This segment is also mostly in cultivation, except for an area by the road that appears to have once been the site of a homestead. Annual non-native grasses dominate (<i>Poa bulbosa</i> and <i>Bromus tectorum</i>), and there is a scattered mix of planted ornamental shrubs such as <i>Prunus</i> sp. (plum) and <i>Lonicera</i> sp. (honeysuckle), as well as a few stunted <i>Robinia pseudoacacia</i> (black locust) and <i>Pinus ponderosa</i> (ponderosa pine) trees. Other native and non-natives species</p>

Segment*	Habitat Description
Near Map Point 25	<p>including <i>Amsinckia lycopoides</i> (tarweed fiddleneck) and <i>Taeniatherum caput-medusae</i> (medusahead) are also present.</p> <p>Most of this area is mesic, weedy, roadside habitat. A dry (at the time of survey) creekbed runs along most of the length, switching sides of the road at the east end. Large amounts of <i>Secale cereale</i> (cereal rye), <i>Salsola kali</i>, and <i>Anthriscus caucalis</i> (burr chervil) are present. Shrub/trees such as <i>Elaeagnus angustifolia</i> (Russian olive), <i>Robinia pseudoacacia</i>, and various introduced shrubs are also present. At the time of the survey, there was no standing water in the creekbed, but an area of <i>Juncus</i> species (rush), and dried, dead, <i>Typha latifolia</i> was found. It was assumed that no wetland-associated vegetation would be present later in the summer.</p> <p>Above this ditch/creekbed, on the south side, there is a patch of CRP dominated by <i>Thinopyrum intermedium</i> and <i>Poa ampla</i>. The CRP is in fair condition.</p>
Map Point 25 to 45	<p>There is a small, grassy, dry draw that crosses the road in this segment. Only non-native species were found (<i>Thinopyrum intermedium</i>, <i>Bromus tectorum</i>, etc.).</p>
Map Point 29 to 36	<p>There is a small area of weedy habitat near Map Point 29. This area is dominated by non-native species (<i>Bromus tectorum</i>, <i>Salsola kali</i>, etc.). No shrubs are present.</p> <p>Near Map Point 36, there is a small, varied patch of non-cultivated ground. Near the road, weeds and non-native species dominate. Further from the road, there are some inclusions of native species (<i>Festuca idahoensis</i> [Idaho fescue] and <i>Delphinium andersonii</i> [Anderson's larkspur] among others), as well as introduced leguminous shrubs and several <i>Pinus ponderosa</i> trees.</p>
Map Point 37 to 38	<p>There is a small, dry draw in this segment containing all non-native grasses and forbs.</p>
Map Point 38 to 39	<p>Near Map Point 39 there is a small, dry draw containing all non-native or weedy native species (<i>Thinopyrum intermedium</i>, <i>Vulpia</i> spp. [fescue], and <i>Bromus tectorum</i> among others).</p>
Map Point 44 to 45	<p>Along the road there is an abandoned ranch-house and associated buildings (which are currently in use). The area is dominated by non-native species and ornamentals, although several <i>Pinus contorta</i> (lodgepole pine) trees are present near the house.</p>
Map Point 44 to 35	<p>This segment is entirely under cultivation except for a small graveled area by the road surrounding some grain bins.</p>
Map Point 44 to 43	<p>Near Map Point 43, the southernmost turbine spur has a small (25' x 50') patch of shallow-soiled habitat in a depression, which is dominated by <i>Poa secunda</i>, <i>Achnatherum thurberianum</i> (Thurber's needlegrass), <i>Eriogonum</i> species, and <i>Pseudoroegneria spicata</i>. This area contains mostly native species, but significant <i>Bromus tectorum</i> is present.</p> <p>The rest of this final turbine spur is mature <i>Artemisia tridentata</i> shrubland, with patches of relatively large <i>Pseudoroegneria spicata</i> and <i>Achnatherum thurberianum</i>. The understory contains large amounts of <i>Poa secunda</i>, but <i>Bromus tectorum</i> and <i>Poa bulbosa</i> are also present.</p> <p>North of this turbine spur, there is a band of CRP dominated by <i>Thinopyrum</i></p>

Segment*	Habitat Description
Map Point 46 to 47	<p><i>intermedium</i>, <i>Agropyron cristatum</i>, <i>Bromus tectorum</i>, <i>Taeniatherum caput-medusae</i>, and others.</p> <p>At the southernmost end of the proposed turbine string (near Map Point 46) there is a patch of mature <i>Artemisia tridentata</i> with an understory of <i>Achnatherum thurberianum</i>, <i>Poa secunda</i>, <i>Bromus tectorum</i>, and <i>Poa bulbosa</i>.</p> <p>North of this shrubland habitat, there is a section of <i>Thinopyrum intermedium</i> dominated CRP with a few small scattered <i>Chrysothamnus/Ericameria</i> shrubs.</p>
Map Point 50 to 51	<p>The southern half of this segment is mature CRP with a variety of native and non-native bunchgrasses.</p> <p>The northern half of this segment is in cultivation except for a small area north of Highway 206. A strip of weedy shrub-steppe runs along the road, and the remainder of the non-cultivated area is taken up by CRP. The dominant species by the road are <i>Ericameria nauseosa</i>, <i>Bromus tectorum</i>, and <i>Sisimbrion altissimum</i>. <i>Poa ampla</i> dominates the CRP, with <i>Agropyron cristatum</i>, <i>Bromus tectorum</i>, and <i>Thinopyrum intermedium</i> also common. A few scattered <i>Ericameria nauseosa</i> shrubs are present in the CRP, as well as occasional forbs such as <i>Medicago sativa</i> (alfalfa).</p>
Map Point 51 to 56	<p>This segment is almost entirely in cultivation, except for one very narrow, deep soiled, shallow draw. This area is being used to park farm equipment, and is dominated by <i>Thinopyrum intermedium</i> and <i>Poa bulbosa</i>, with other weedy species such as <i>Bromus tectorum</i> and <i>Salsola kali</i> also present.</p>
Map Point 53 to 54	<p>The southernmost end of this string (near Map Point 53) is shallow-soiled and rocky, and contains <i>Pseudoroegneria spicata</i> along with <i>Balsamorhiza careyana</i> (Carey's balsamroot), and some <i>Achnatherum thurberianum</i>. The understory is composed primarily of <i>Bromus tectorum</i> and <i>Vulpia</i> spp.</p> <p>This habitat grades to the north into a band of diverse native/non-native CRP ground. The grasses are a mix of <i>Thinopyrum intermedium</i>, <i>Agropyron cristatum</i>, <i>Achnatherum thurberianum</i>, <i>Poa secunda</i>, and <i>Bromus tectorum</i>.</p>
Map Point 58	<p>This is the proposed mitigation parcel above Grass Valley Canyon. The parcel is vegetatively varied. At the top, there is a band of CRP, primarily dominated by non-native species such as <i>Thinopyrum intermedium</i> and <i>Agropyron cristatum</i>. However, there are some inclusions of native grasses such as <i>Poa ampla</i> and <i>Pseudoroegneria spicata</i>. The understory is primarily non-native (<i>Bromus tectorum</i>, <i>Vulpia</i> spp., etc.).</p> <p>Lower down the canyon side there are some patches of <i>Chrysothamnus/Ericameria</i>, with <i>Bromus tectorum</i> and scattered bunchgrass species. Also at this level (primarily in the NW corner of the parcel) are scattered patches heavily dominated by weeds and non-natives (<i>Bromus tectorum</i>, <i>Poa bulbosa</i>, <i>Salsola kali</i>, etc.).</p> <p>Further down, the grade steepens, and there are several dry draws. Soils are shallower and rocky along these draws and support species such as <i>Poa secunda</i>, <i>Pseudoroegneria spicata</i>, <i>Achnatherum thurberianum</i>, <i>Balsamorhiza careyana</i>, and <i>Eriogonum</i> species. There was no true riparian vegetation at the time of the survey in these draws, but there were some areas supporting more mesic species such as <i>Philadelphus lewisii</i> (Lewis' mock orange) and <i>Anthriscus caucalis</i>.</p>

* The segments are defined by the Map Points shown in Figure 1. These are arbitrary points added for the purposes of discussion only. Only the segments containing non-cultivated habitat are discussed in this table. If a segment is not listed in this table, it was found to be cultivated along its entire length.

FIGURES

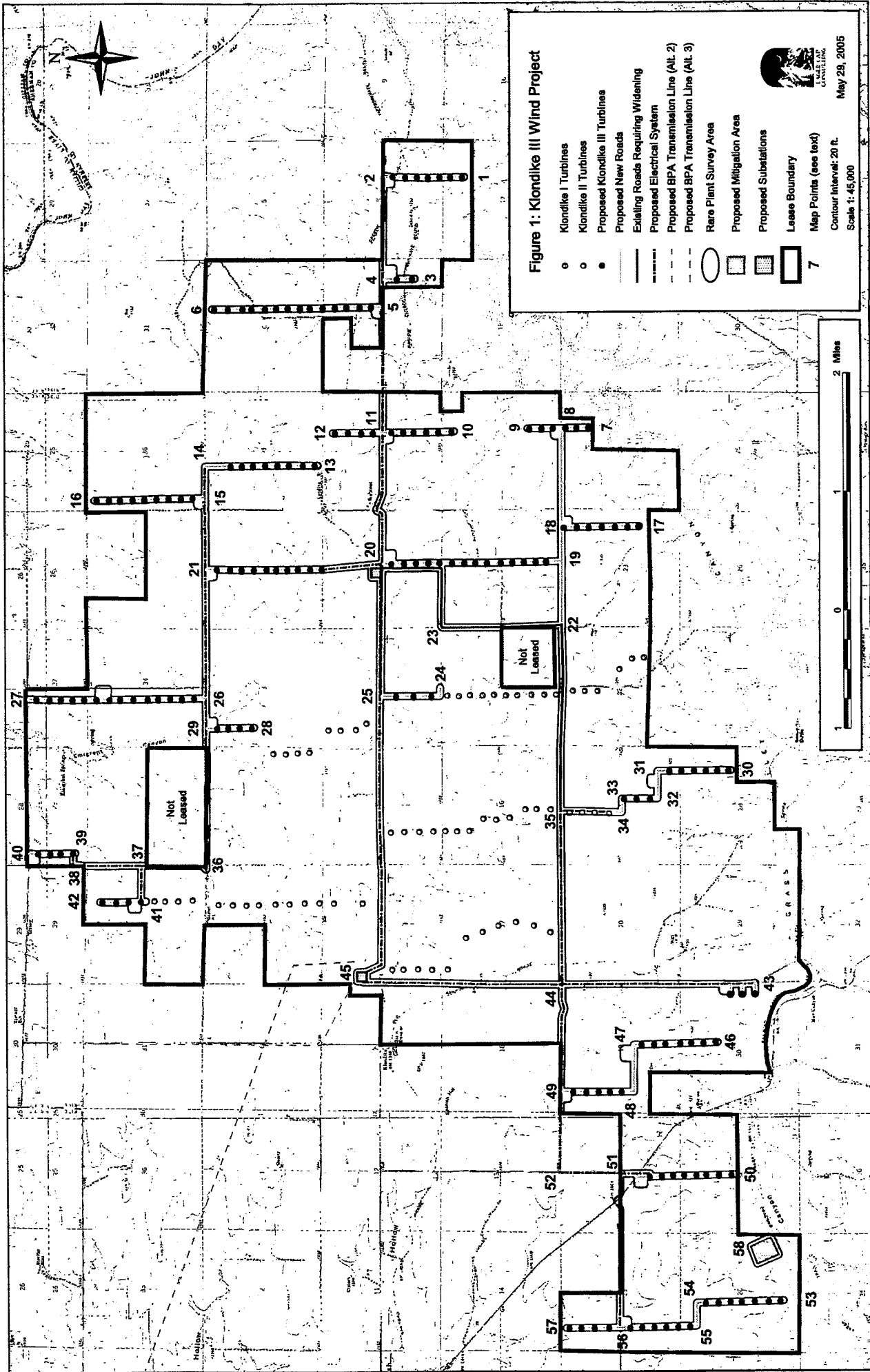


Figure 2: Photo of typical CRP habitat in the survey area

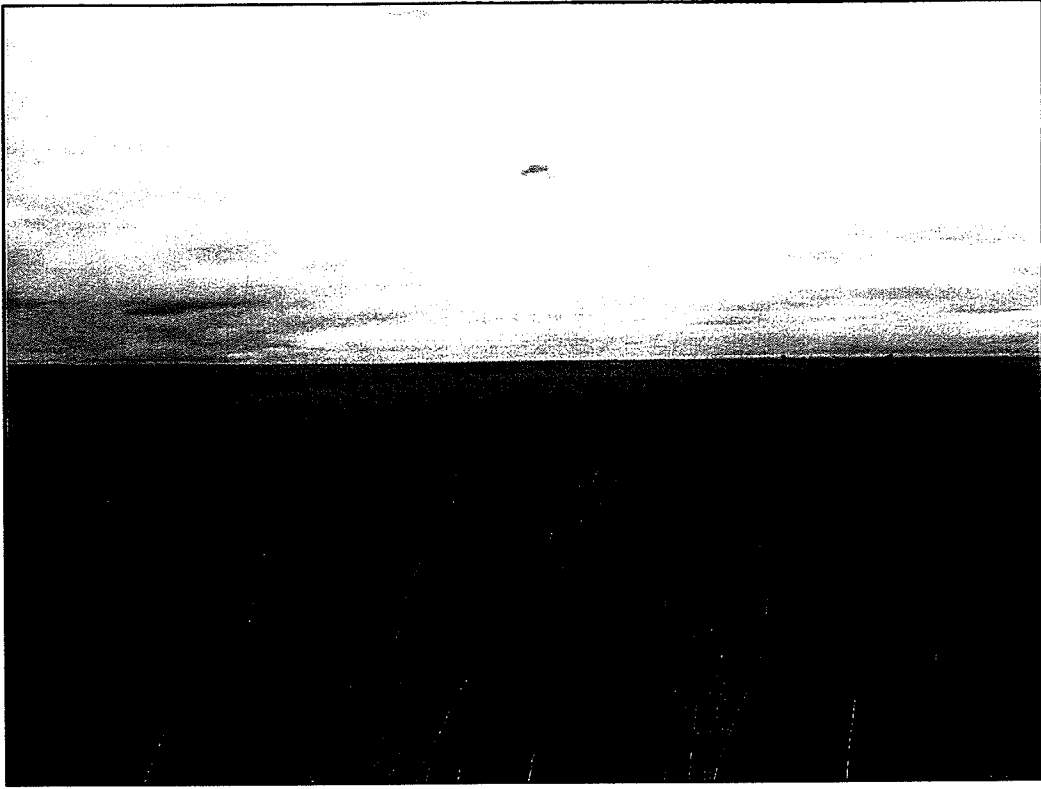


Figure 3: Photo of shrub dominated habitat in SW corner of the survey area



Figure 4: Photo of bunchgrass dominated habitat in SW corner of the survey area



Figure 5: Photo of non-native-dominated habitat near cultivated field

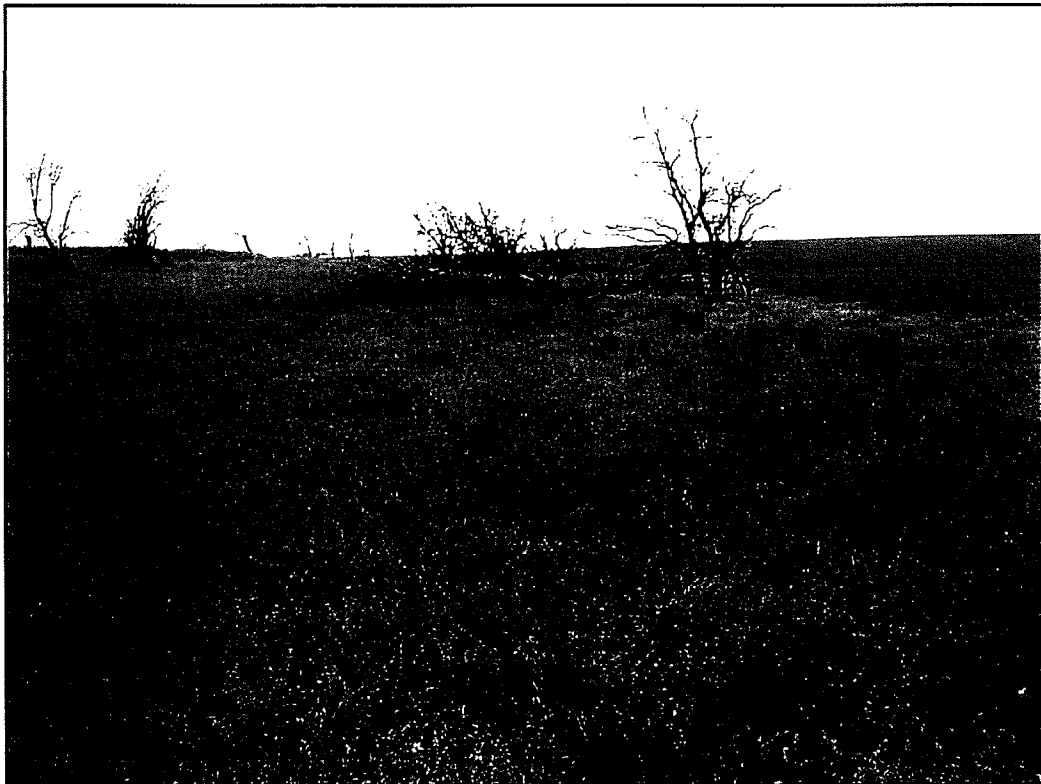
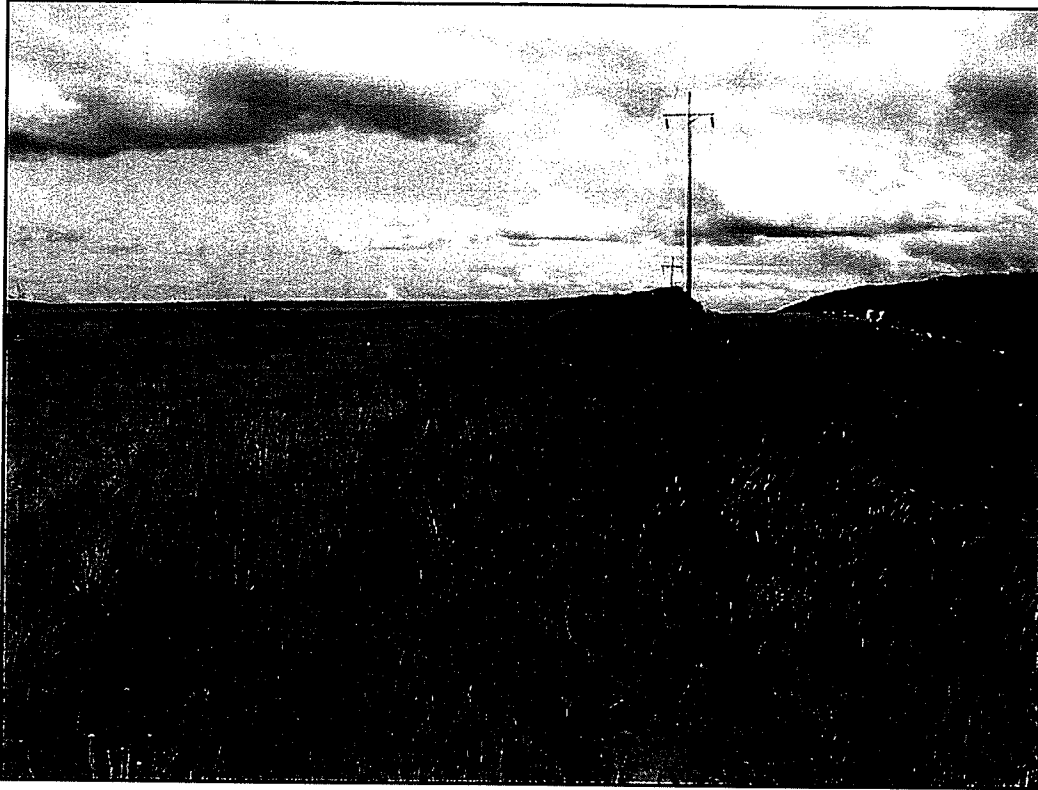


Figure 6: Photo of non-native-dominated habitat along existing access road



APPENDICES

Appendix 1: Vascular plant species found within the rare plant survey area (Spring 2005 survey)

Vascular Plant Species
Klondike III Special Status Plant Survey
 Survey Date(s): May 4-5, 2005

Botanical nomenclature follows the USDA Natural Resources Conservation Service PLANTS Database (<http://plants.usda.gov>)

* = introduced plants

Family	Scientific Name	Common Name
APIACEAE	* <i>Anthriscus caucalis</i>	burr chervil
	<i>Lomatium grayi</i>	Gray's biscuitroot
	<i>Lomatium macrocarpum</i>	bigseed biscuitroot
	<i>Lomatium nudicaule</i>	barestem biscuitroot
ASTERACEAE	<i>Achillea millefolium</i>	common yarrow
	<i>Agoseris heterophylla</i>	annual agoseris
	<i>Antennaria dimorpha</i>	low pussytoes
	<i>Artemisia tridentata</i>	big sagebrush
	<i>Balsamorhiza careyana</i>	Carey's balsamroot
	<i>Blepharipappus scaber</i>	rough eyelashweed
	* <i>Centaurea diffusa</i>	white knapweed
	<i>Chaenactis douglasii</i> var. <i>douglasii</i>	Douglas' dustymaiden
	<i>Chrysothamnus viscidiflorus</i>	yellow rabbitbrush
	* <i>Cirsium arvense</i>	Canada thistle
	<i>Cirsium</i> sp.	thistle
	* <i>Cirsium vulgare</i>	bull thistle
	<i>Crepis atribarba</i>	slender hawksbeard
	<i>Ericameria nauseosa</i>	rubber rabbitbrush
	<i>Erigeron filifolius</i> var. <i>filifolius</i>	threadleaf fleabane
	<i>Erigeron poliospermus</i> var. <i>poliospermus</i>	purple cushion fleabane
	<i>Erigeron pumilus</i> ssp. <i>intermedius</i> var. <i>intermedius</i>	shaggy fleabane
<i>Lagophylla ramosissima</i>	branched lagophylla	
<i>Nothocalais troximoides</i>	weevil prairie-dandelion	
* <i>Taraxacum officinale</i>	common dandelion	
<i>Tetradymia canescens</i>	spineless horsebrush	
* <i>Tragopogon dubius</i>	yellow salsify	
BORAGINACEAE	<i>Amsinckia lycopsoides</i>	tarweed fiddleneck
BRASSICACEAE	* <i>Chorispora tenella</i>	crossflower
	<i>Descurainia</i> sp.	tansymustard
	<i>Draba verna</i>	spring draba
	* <i>Lepidium perfoliatum</i>	clasping pepperweed
	* <i>Sisymbrium altissimum</i>	tall tumbledustard
	<i>Thysanocarpus curvipes</i>	sand fringedpod

Family	Scientific Name	Common Name
CAPRIFOLIACEAE	* <i>Lonicera sp.</i> <i>Sambucus nigra ssp. cerulea</i>	honeysuckle blue elderberry
CARYOPHYLLACEAE	* <i>Holosteum umbellatum</i>	jagged chickweed
CHENOPODIACEAE	* <i>Salsola kali</i>	Russian thistle
CONVOLVULACEAE	* <i>Convolvulus arvensis</i>	field bindweed
ELAEAGNACEAE	* <i>Elaeagnus angustifolia</i>	Russian olive
FABACEAE	<i>Astragalus filipes</i> <i>Astragalus purshii</i> <i>Lupinus bingenensis var. subsaccatus</i> <i>Lupinus caudatus</i> * <i>Medicago sativa</i> * <i>Robinia pseudoacacia</i>	basalt milkvetch woollypod milkvetch Bingen lupine tailcup lupine alfalfa black locust
GERANIACEAE	* <i>Erodium cicutarium</i>	redstem stork's bill
HYDRANGEACEAE	<i>Philadelphus lewisii</i>	Lewis' mock orange
JUNCACEAE	<i>Juncus sp.</i>	rush
LILIACEAE	<i>Fritillaria pudica</i>	yellow fritillary
ONAGRACEAE	<i>Epilobium brachycarpum</i>	tall annual willowherb
PINACEAE	<i>Pinus contorta</i> <i>Pinus ponderosa</i>	lodgepole pine ponderosa pine
PLANTAGINACEAE	<i>Plantago patagonica</i>	woolly plantain
POACEAE	<i>Achnatherum thurberianum</i> * <i>Agropyron cristatum</i> * <i>Bromus tectorum</i> <i>Festuca idahoensis</i> <i>Festuca ovina</i> * <i>Hordeum murinum ssp. leporinum</i> <i>Leymus cinereus</i>	Thurber's needlegrass crested wheatgrass cheatgrass Idaho fescue sheep fescue leporinum barley basin wildrye

Family	Scientific Name	Common Name
POACEAE	* <i>Leymus racemosus</i>	mammoth wildrye
	<i>Poa ampla</i>	alkali bluegrass
	* <i>Poa bulbosa</i>	bulbous bluegrass
	<i>Poa secunda</i>	Sandberg bluegrass
	* <i>Polypogon monspeliensis</i>	annual rabbitsfoot grass
	<i>Pseudoroegneria spicata</i>	bluebunch wheatgrass
	* <i>Secale cereale</i>	cereal rye
	* <i>Taeniatherum caput-medusae</i>	medusahead
	* <i>Thinopyrum intermedium</i>	intermediate wheatgrass
	* <i>Triticum aestivum</i>	common wheat
	* <i>Vulpia bromoides</i>	brome fescue
	<i>Vulpia microstachys</i>	small fescue
* <i>Vulpia myuros</i>	rat-tail fescue	
POLEMONIACEAE	<i>Phlox viscida</i>	sticky phlox
POLYGONACEAE	<i>Eriogonum heracleoides</i>	parsnipflower buckwheat
	<i>Eriogonum sp.</i>	buckwheat
	<i>Eriogonum sphaerocephalum var. sphaerocephalum</i>	rock buckwheat
	* <i>Rumex crispus</i>	curly dock
PORTULACACEAE	<i>Claytonia perfoliata</i>	miner's lettuce
RANUNCULACEAE	<i>Delphinium andersonii</i>	Anderson's larkspur
ROSACEAE	<i>Amelanchier alnifolia</i>	Saskatoon serviceberry
	* <i>Prunus sp.</i>	plum
	* <i>Rosa sp.</i>	rose
RUBIACEAE	<i>Galium aparine</i>	stickywilly
SALICACEAE	<i>Salix sp.</i>	willow
SCROPHULARIACEAE	<i>Veronica americana</i>	American speedwell
TYPHACEAE	<i>Typha latifolia</i>	broadleaf cattail

REVISED EXHIBIT R

KLONDIKE III WIND PROJECT

September 16, 2005



EXHIBIT R - Revised

SCENIC AND AESTHETIC VALUES

OAR 345-021-0010(1)(r)

TABLE OF CONTENTS

	Page
R.1 INTRODUCTION.....	1
R.2 APPLICABLE FEDERAL LAND MANAGEMENT PLANS AND LOCAL LAND USE PLANS.....	2
R.3 IDENTIFICATION AND DESCRIPTION OF SCENIC AND AESTHETIC VALUES IDENTIFIED AS SIGNIFICANT OR IMPORTANT	3
R.3.1 Management Plan for the Columbia River Gorge National Scenic Area, September 1992, revised May 10, 2004	3
R.3.2 Proposed Two Rivers Resource Management Plan Final Environmental Impact Statement, September 1985 (Record of Decision issued June 1986), and John Day Proposed Management Plan, Two Rivers and John Day Resource Management Plan Amendments and Final Environmental Impact Statement, June 2000 (Record of Decision issued February 2001) 4	4
R.3.3 Management and Use Plan Update Final Environmental Impact Statement Oregon National Historic Trail and Mormon Pioneer National Historic Trail, August 1999 (Record of Decision issued November 1999)	4
R.3.4 Lower Deschutes River Management Plan and Final Environmental Impact Statement, January 1993 (Record of Decision issued February 1993).....	5
R.3.5 Lower Klickitat River Wild and Scenic River Management Plan and Final Environmental Impact Statement, November 1991	5
R.3.6 Proposed Spokane Resource Management Plan Amendment Final Environmental Impact Statement, 1992	5
R.3.7 Sherman County [Oregon] Comprehensive Land Use Plan 1994, revised June 2003.....	5
R.3.8 Journey Through Time Management Plan, April 1996.....	6
R.3.9 Comprehensive Plan for Wasco County [Oregon], August 25, 1983	6
R.3.10 Gilliam County [Oregon] Comprehensive Land Use Plan, October 25, 2000	7
R.3.11 Morrow County [Oregon] Comprehensive Plan, January 30, 1986.....	7
R.3.12 Klickitat County [Washington] Comprehensive Plan, August 1977.....	7
R.3.13 Yakima County [Washington] Policy Plan, May 20, 1997, amended December 28, 1998.....	7

R.3.14 Summary of Important or Significant Scenic and Aesthetic Values 8

R.4 SIGNIFICANT POTENTIAL ADVERSE IMPACTS TO SCENIC AND AESTHETIC VALUES..... 8

R.5 OPPORTUNITY FOR MITIGATION..... 15

R.6 MAP 15

R.7 MONITORING 16

R.8 CONCLUSION 16

R.9 REFERENCES 16

R.9.1 Telephone Contacts/Personal Interviews 16

R.9.2 Website/Document References 17

TABLES

Table R- 1. Scenic and Aesthetic Values within Analysis Area and Their Approximate Minimum Distance from the Proposed Facility 8

Table R- 2. Visible Turbines and Distances from Viewpoints on the John Day River..... 10

APPENDICES

R-1 FIGURES

R-2 MANAGEMENT PLAN EXCERPTS

R-3 PHOTOGRAPHS

R-4 BLM CORRESPONDENCE

Foreword

Exhibit R was originally submitted in May 2005 as part of the application made by Klondike Wind Power III LLC to the Oregon Department of Energy (ODOE) for approval of the 273 MW Klondike III Wind Project. This Exhibit has been revised in response to Request for Additional Information No. 1 submitted by ODOE to the Applicant on July 8, 2005. The Exhibit has been substantially revised to extend the analysis area into Washington,¹ to document all scenic and aesthetic values in the analysis area whether the proposed facility would be visible to these resources or not, and to describe the computer modeling and visibility analyses used to determine potential impacts in more detail.

R.1 INTRODUCTION

Exhibit R addresses impacts the proposed facility would have on Scenic and Aesthetic Values in the analysis area. The exhibit responds to the requirements of OAR 345-021-0010(1)(r), as follows:

OAR 345-021-0010(1)(r) *An analysis of significant potential impacts of the proposed facility, if any, on scenic and aesthetic values identified as significant or important in applicable federal land management plans or in local land use plans for the analysis area, providing evidence to support a finding by the Council as required by OAR 345-022-0080, including;*

Response: Pursuant to OAR 345-022-0080(1), “the Council must find the design, construction, operation and retirement of the facility, taking into account mitigation, are not likely to result in significant adverse impact to scenic and aesthetic values identified as significant or important in applicable federal land management plans or in local land use plans in the analysis area described in the project order.”

This Exhibit is organized in accordance with the application requirements contained in OAR 345-021-0010(1)(r) and provides evidence to support a finding by the Council as required by OAR 345-022-0080. All figures cited herein are included in Appendix R-1. All photographs cited herein are included in Appendix R-3.

¹ In its First Request for Additional Information, the Department of Energy took the position that the analysis area for impacts to scenic and aesthetic resources discussed in this Exhibit R includes the area within the site boundary and 30 miles from the site boundary, including resources that are in Washington, and further requested that this Exhibit R provide an analysis of any scenic resources within the analysis area in Washington. While the Applicant has provided the requested information and analysis for Washington in this revised Exhibit R, the Applicant hereby reserves and expressly does not waive the right to argue, if necessary, that the analysis area should not extend into Washington, that the applicable statutes and rules do not require an analysis of significant potential impacts on scenic and aesthetic resources in Washington, and that the Energy Facility Siting Commission findings with respect to the requirements contained in OAR 345-022-0080 need not take into account such analysis.

R.2 APPLICABLE FEDERAL LAND MANAGEMENT PLANS AND LOCAL LAND USE PLANS

OAR 345-021-0010(1)(r)(A) *Identification of the applicable federal land management plans and local land use plans:*

Response: The analysis area for Exhibit R includes the area within the site boundary and extends 30 miles beyond the site boundary in Oregon. As requested by ODOE, the analysis area has also been expanded into Washington as shown in Figure R-1. The following federal land management plans and local land use plans intersect the analysis area:

- Management Plan for the Columbia River Gorge National Scenic Area, September 1992, revised May 10, 2004
- John Day Proposed Management Plan, Two Rivers and John Day Resource Management Plan Amendments and Final Environmental Impact Statement, June 2000 (Record of Decision issued February 2001)
- Management and Use Plan Update Final Environmental Impact Statement Oregon National Historic Trail and Mormon Pioneer National Historic Trail, August 1999 (Record of Decision issued November 1999)
- Lower Deschutes River Management Plan and Final Environmental Impact Statement, January 1993 (Record of Decision issued February 1993)
- Proposed Two Rivers Resource Management Plan Final Environmental Impact Statement, September 1985 (Record of Decision issued June 1986)
- Lower Klickitat River Wild and Scenic River Management Plan Final Environmental Impact Statement, November 1991
- Proposed Spokane Resource Management Plan Amendment Final Environmental Impact Statement, 1992
- Sherman County [Oregon] Comprehensive Land Use Plan 1994, revised June 2003
- Journey Through Time Management Plan, April 1996 (State Scenic Byway Management Plan referenced in Sherman County Comprehensive Plan)
- Comprehensive Plan for Wasco County [Oregon], August 25, 1983
- Gilliam County [Oregon] Comprehensive Land Use Plan, October 25, 2000
- Morrow County [Oregon] Comprehensive Plan, January 30, 1986
- Klickitat County [Washington] Comprehensive Plan, August, 1977

- Yakima County [Washington] Policy Plan, May 20, 1997, amended December 28, 1998

The Yakama Reservation intersects the analysis area in Washington. Based on extensive project experience working with the Confederated Tribes and Bands of the Yakama Indian Nation, the Applicant is not aware of any tribal plan regarding the identification or management of scenic or aesthetic resources on reservation lands (McMahan 2005).

R.3 IDENTIFICATION AND DESCRIPTION OF SCENIC AND AESTHETIC VALUES IDENTIFIED AS SIGNIFICANT OR IMPORTANT

OAR 345-021-0010(1)(r)(B) *Identification and description of the scenic and aesthetic values identified as significant or important in the applicable plans;*

Response: Significant or important scenic and aesthetic values identified in the applicable plans are illustrated in Figures R-2 and R-3 for Oregon and Washington, respectively. In some cases, multiple plans govern the same resources. For example, the John Day River is designated a Federal Wild and Scenic River, and a State Scenic Waterway; the rim-to-rim area is designated an Area of High Visual Quality by BLM has also determined the canyon to be an Area of High Visual Quality, and the Sherman and Gilliam County Comprehensive Plans identify the rim rocks and outcrops as important resources. When this happens, the management unit boundaries from each plan are shown in Figures R-2 and R-3; however, the resource is later summarized as a single entity (e.g., “John Day Canyon”) for purposes of determining and discussing potential impacts on to the resource.

Summaries and/or excerpts from each management plan describing the values are provided below. When appropriate, more lengthy excerpts from the management plans are included in Appendix R-2.

R.3.1 Management Plan for the Columbia River Gorge National Scenic Area, September 1992, revised May 10, 2004

The Columbia River Gorge National Scenic Area (CRGNSA) is managed for an “unparalleled combination of scenery, geology, plants, wildlife, and multicultural history” (Columbia River Gorge Commission and USDA 1992). The exceptional beauty of this region is largely derived from its diverse character. Key viewing areas (KVAs) are important viewpoints open to the public offering opportunities to view the Gorge. KVAs within the analysis area include Historic Columbia River Highway, Interstate 84 (I-84), Washington State Route 14 (SR-14), the Columbia River, and Rowena Plateau (i.e., Tom McCall Preserve). Scenic Travel Corridors in the analysis area include the Historic Columbia River Highway, SR-14 and Washington State Route 142 (SR-142), and I-84. The CRGNSA as seen from Mayer State Park on the Columbia River near the analysis area’s west boundary is shown in Photo R-1.

Excerpts from this management plan describing the scenic and aesthetic resources are included in Appendix R-2.

R.3.2 Proposed Two Rivers Resource Management Plan Final Environmental Impact Statement, September 1985 (Record of Decision issued June 1986), and John Day Proposed Management Plan, Two Rivers and John Day Resource Management Plan Amendments and Final Environmental Impact Statement, June 2000 (Record of Decision issued February 2001)

The John Day River system includes more than 500 river miles and is one of the longest free-flowing river systems in the continental United States (USDI 2001). The main stem from its mouth at the Columbia River to approximately river mile 89 runs through the analysis area. The landscape within the analysis area features high desert communities of sagebrush and juniper with intermingled private ranches adding visual interest along the river (USDI 2000) (Photos R-2, R-3). The John Day River Canyon (i.e., the area rim-to-rim) is identified as an “area of high visual quality” (USDI 1986). The Bureau of Land Management (BLM) manages its lands in this area as a Visual Resource Management (VRM) Class II resource, meaning management activities resulting in changes to the existing character of the landscape may be allowed, provided they do not attract the attention of the casual observer (USDI 2000).

Beginning at Tumwater Falls near river mile 10 upstream through the analysis area, the river is a designated Federal Wild and Scenic River (WSR) and classified as Recreational, meaning that at the time of designation, the segment was readily accessible by road or railroad, may have some shoreline development, and may have undergone some impoundment or diversion in the past. Outstanding remarkable values in this segment include “scenic, recreation, fish, wildlife, geological, paleontological, and archaeological” values; botanical and ecological values are also deemed significant (USDI 2001). The segment is designated as a State Scenic Waterway pursuant to the Oregon State Scenic Waterways Act, ORS 390.805-390.925.

The Two Rivers Resource Management Plan Record of Decision identifies two Special Management Areas relevant to this Exhibit: the Oregon Trail Historic Sites at Fourmile Canyon and McDonald Crossing, and the John Day River Canyon. For the trail sites, “the unusual qualities of these sites will be maintained and protected” (USDI 1996). For the canyon, “areas of high visual and natural quality will continue to be protected while allowing other compatible uses in the same area” (USDI 1996).

Excerpts from these management plans are included in Appendix R-2.

R.3.3 Management and Use Plan Update Final Environmental Impact Statement Oregon National Historic Trail and Mormon Pioneer National Historic Trail, August 1999 (Record of Decision issued November 1999)

In 1978, Congress authorized the Oregon National Historic Trail to commemorate this significant travel route and to promote its preservation, interpretation, public use, and appreciation (USDI 1999). The management plan is a coordinating document that provides broad-based policies, guidelines, and standards for administering the trail to guide its protection, interpretation, and continued use. Within the analysis area, the plan identifies five High-Potential Sites based on “historic significance, the presence of visible

historic remnants, scenic quality, and relative freedom from intrusion” (USDI 1999). These sites include Fourmile Canyon, John Day River Crossing (a.k.a. McDonald Ferry), Biggs Junction, Deschutes River Crossing, and The Dalles Complex. The plan does not identify specific scenic or aesthetic values in the analysis area beyond these five sites.

Photo R-4 depicts the BLM interpretive facility near McDonald Crossing. Photo R-5 depicts typical conditions (i.e., dry land winter wheat agricultural lands intersected by local roads) along the historic trail alignment near the proposed facility.

Excerpts from this management plan are included in Appendix R-2.

R.3.4 Lower Deschutes River Management Plan and Final Environmental Impact Statement, January 1993 (Record of Decision issued February 1993)

The Lower Deschutes River is a designated Federal Wild and Scenic River and Oregon State Scenic Waterway. The Lower Deschutes Canyon “contains a diversity of landforms, vegetation and color” (USDI 2001) where the river has carved a dramatic canyon through rugged Columbia River basalt flows. Riparian vegetation provides stark contrast against the broken reddish brown canyon walls. Transportation corridors (roads and railroad), and rural development occur in several areas throughout the canyon.

Excerpts from this management plan are included in Appendix R-2.

R.3.5 Lower Klickitat River Wild and Scenic River Management Plan and Final Environmental Impact Statement, November 1991

The lower ten miles of the Klickitat River from its confluence with Wheeler Creek, near the town of Pitt, to its confluence with the Columbia River is designated a Federal Wild and Scenic River with a Recreational classification. Outstandingly remarkable resources include the river’s free flowing nature, resident and anadromous fish and their habitats, Native America dip-net fishing, and the geology of the lower gorge (USDA 1991).

Excerpts from this management plan are included in Appendix R-2.

R.3.6 Proposed Spokane Resource Management Plan Amendment Final Environmental Impact Statement, 1992

Personal communication with BLM Recreation Planner Diane Priebe confirmed that the BLM does not manage its land in the analysis area for scenic quality. A small area in the Wahkiacus drainage of the Klickitat River canyon is designated as a wildflower viewing area (Priebe 2005), but topography would screen the proposed facility from the wildflower viewing area.

R.3.7 Sherman County [Oregon] Comprehensive Land Use Plan 1994, revised June 2003

Physical Characteristics - Section XI of the Sherman County Comprehensive Land Use Plan (Comp Plan) identifies important landscape features within the county. These include rock outcroppings, trees, and the John Day and Deschutes River Canyons

(Sherman County 2003). The Comp Plan also acknowledges the state Scenic Byway designation for US 97, but provides no guidance regarding scenic or aesthetic values. The Comp Plan also identifies segments of State Highway 206 as a state Scenic Byway; however, the Oregon Department of Transportation, which administers the Scenic Byway Program, does not identify State Highway 206 as a Scenic Byway.

The County's Goal X is to "preserve the integrity of the Sherman County Landscape." Policy I of Goal X states "trees should be considered an important feature of the landscape and therefore the County Court shall encourage the retention of this resource when practical" (Sherman County 2003).

Goal XII is to "provide for the rational use of all resources within the designated Deschutes and John Day Oregon State Scenic Waterways." Policy I of Goal XII states "designation of the John Day and Deschutes River to the National Wild and Scenic River System shall be opposed" (Sherman County 2003).

Additionally, Section XV states the County finds it has wind resources that have not been utilized since widespread use of electricity was introduced. Under Goal XVIII to conserve energy resources, the County defines a policy to "cooperate with public agencies and private individuals in the use and development of renewable resources" (Sherman County 2003).

R.3.8 Journey Through Time Management Plan, April 1996

The Journey Through Time Management Plan (JTTMP) is administered through the Oregon Department of Transportation Scenic Byway Program. It is included in this Exhibit because it is referenced in the Sherman County Comp Plan. The JTTMP speaks to the rural heritage and history of the 286-mile route through north central Oregon. The plan establishes four goals: create jobs; maintain rural lifestyles (i.e., support traditional industries of agriculture and timber); protect important values (i.e., historical attractions); and build identity for the north central Oregon region. The plan identifies the communities of Wasco, Moro, and Grass Valley, the Historic Oregon Trail and Barlow Road, and the Sherman County Museum as points of interest within the analysis area. Photos R-6 and R-7 depict conditions near milepost 12 on the scenic byway.

Excerpts from this management plan are included in Appendix R-2.

R.3.9 Comprehensive Plan for Wasco County [Oregon], August 25, 1983

The Wasco County Comprehensive Plan identifies the Deschutes and John Day Scenic Waterways, the White River Canyon, and the Columbia River Gorge as important scenic resources. The White River Canyon and the portion of the John Day River corridor within Wasco County are outside the analysis area. The Columbia River Gorge has been discussed in Section R.3.1; the Deschutes River in Section R.3.4.

R.3.10 Gilliam County [Oregon] Comprehensive Land Use Plan, October 25, 2000

Part Five of the Gilliam County Comp Plan focuses on conservation of open space and natural and scenic resources, intending to comply with statewide planning Goal 5 (Open Spaces, Scenic and Historic Areas, and Natural Resources) and Goal 8 (Recreation Needs) (Gilliam County 2000).

In Finding 2 of Part 5, the County identifies “rock outcroppings marking the rim and walls of steep canyon slopes as an important characteristic of the county’s landscape” (Gilliam County 2000). In Finding 7 of Part 5, the County identifies the John Day River corridor as an important scenic resource. The County defers to the Oregon State Scenic Waterways Act (ORS 390.805-390.925) to govern this resource and deems additional regulation unnecessary. As a point of clarification, the Oregon State Scenic Waterways Act and its land management rules for the John Day River are included in the John Day River Proposed Management Plan, Two Rivers and John Day Resource Management Plan Amendments and Final Environmental Impact Statement described above.

Policy 2 of Part 5 is relevant to Exhibit R and states “it is the policy of Gilliam County to publicize provisions of state law relative to Scenic Waterways, to render all possible assistance in enforcement of the laws, rules and regulations pertaining to State designated Scenic Waterways and to otherwise aid in the implementation of the declared policy of the State of Oregon with respect to such waterways. Conflicts between agricultural and recreational uses in this area should be resolved in favor of agriculture” (Gilliam County 2000).

R.3.11 Morrow County [Oregon] Comprehensive Plan, January 30, 1986

Personal communication with Morrow County Planning Director Carla McKane confirmed that Morrow County has no scenic or aesthetic resources or applicable management objectives in the analysis area (McKane 2005).

R.3.12 Klickitat County [Washington] Comprehensive Plan, August 1977

Personal communication with Klickitat County Planning Director Curt Dryer confirmed that Klickitat County has no scenic or aesthetic resources or applicable management objectives in the analysis area (Dryer 2005).

R.3.13 Yakima County [Washington] Policy Plan, May 20, 1997, amended December 28, 1998

The portion of Yakima County within the analysis area is completely within the Yakama Reservation, which has no management plan for visual resources. The Yakima County Policy Plan does not identify specific resources within the analysis area (Yakima County 1998).

R.3.14 Summary of Important or Significant Scenic and Aesthetic Values

Many of the management plans address the same resources and/or cross-reference each other. Where multiple plans address the same resource, the resource has been defined as a single scenic or aesthetic resource. Although the JTTMP does not identify significant or important scenic resources, the Journey Through Time Scenic Byway has been included for the sake of completeness. Table R-1 summarizes important or significant scenic or aesthetic values in the analysis area and their approximate minimum distance from the site boundary of the proposed facility.

Table R- 1. Scenic and Aesthetic Values within Analysis Area and Their Approximate Minimum Distance from the Proposed Facility

Scenic or Aesthetic Value	Direction and Distance from Klondike III site (miles)
Columbia River Gorge National Scenic Area	NW, 12.2
John Day River Canyon	E, 0.8
Oregon National Historic Trail High Potential Sites:	
Fourmile Canyon	E, 20.0
John Day River Crossing (a.k.a. McDonald Ferry)	E, 2.0
Biggs Junction	NW, 11.0
Deschutes River Crossing	NW, 13.5
The Dalles Complex	W, 28.0
Lower Deschutes River Canyon	W, 8.0
Lower Klickitat River Canyon	NW, 17.5
Journey Through Time Scenic Byway	W, 0.5
Trees (Sherman County)	Scarce and varied

R.4 SIGNIFICANT POTENTIAL ADVERSE IMPACTS TO SCENIC AND AESTHETIC VALUES

OAR 345-021-0010(1)(r)(C) *A description of significant potential adverse impacts to the scenic and aesthetic values identified in (B), including, but not limited to, potential impacts such as:*

- (i) *Loss of vegetation or alteration of the landscape as a result of construction or operation;*

Response: Construction will result in the conversion of dry land winter wheat agricultural lands and some Conservation Reserve Program (CRP) lands to access roads and turbine pads and their appurtenances. The design, construction, operation, and retirement of the facility are not anticipated to impact trees or rock outcroppings. Therefore, there will be no significant adverse impacts to vegetation or alteration of the landscape.

- (ii) *Visual impacts of facility structures, including cooling tower or other plumes, if any; and*

Response: Determining potential visual impacts of the proposed facility has used an integrated approach including computer modeling and visibility analyses, field investigation, interviews with local, state, and federal agency staff, and, where deemed necessary, visual simulations. This response first describes the computer modeling methods used and presents their results. The results are then applied to the important or significant scenic or aesthetic resources in the analysis area to determine the significance of any potential impact.

Computer Modeling Method and Results

Visibility analyses were conducted for the analysis area using Geographic Information Systems (GIS) technology and US Geological Survey (USGS) Digital Elevation Models (DEMs). Visibility analyses and modeling techniques were used to determine areas from which the proposed facility would potentially be visible. The DEMs used in the analyses have 30-meter and 10-meter resolutions, meaning the ground is represented by a grid of squares that are 30m x 30m or 10m x 10m, and each square is assigned a single elevation. As such, the resolution of the DEMs is a limiting factor in the precision of these analyses. The models used in the analyses also do not include vegetation or structures, and do not account for variable climatic conditions. Therefore, it should be noted that these analyses generally overestimate areas of visibility.

The analyses spanned the entire analysis area in Oregon and were limited to only the areas where important or significant scenic or aesthetic resources occurred in Washington. The results of these analyses are presented in Figures R-4 and R-5 for Oregon and Washington, respectively.

Although the models indicate some portion of the proposed facility would potentially be visible from the CRGNSA, field investigation and the relative distance from accessible viewing areas suggest impacts, if any, would be insignificant as described later in this Exhibit. The models also indicate portions of the project would be visible from the John Day Canyon. Due to the relative proximity of the proposed facility to the canyon a refined visibility analysis was conducted for John Day Area of High Visual Quality (AHVQ). Field investigation, consideration of applicable management plan goals and/or objectives, and personal communication with local, state, and federal agency staff indicated that additional analysis was not warranted for the remaining scenic or aesthetic resources in the analysis area.

The results of the refined analysis for the John Day AHVQ indicate that the proposed facility would be visible from an approximately 0.1 mile segment near McDonald Crossing and an approximately 0.9 mile segment between river miles 15.9 and 16.8, as are shown in Figure R-6. From this information, it was determined that portions of Turbines 76, 95, 96, 97, 103, 104, 122, 123, 124, and

125 would be visible from the river. Individual visibility analyses were then run for these ten turbines. Figures R-7 through R-16 illustrate the results of these analyses and show areas from which *any* portion of the turbine would be visible within the AHVQ. These individual analyses were then aggregated to determine points along the river from which one, two, three, four, or more than four turbines would be visible. Five viewpoints were established in the aggregated areas to best represent “worst case scenarios” (i.e., locations from which the most turbines would be visible at any given time). The aggregate results and viewpoints are depicted in Figure R-17. Table R-2 lists turbines that are visible from each viewpoint and the distance from the viewpoint to the turbines. Turbine 122 is not listed in Table R-2 because it is not visible from Viewpoint 1.

Table R- 2. Visible Turbines and Distances from Viewpoints on the John Day River

Viewpoint	Turbine	Distance to Turbine (miles)
1	123	2.47
	124	2.50
	125	2.51
2	76	3.79
	95	3.84
	96	3.88
3	97	3.82
	103	2.54
4	103	2.45
	104	2.53
5	103	2.18

Determination of Significance of Potential Impacts

Potential impacts to the significant or important scenic or aesthetic resources are as follows:

Columbia River Gorge National Scenic Area

The visibility analyses for Oregon and Washington indicate some portion of the proposed facility would potentially be visible from the CRGNSA. The principal investigator visited several locations to ground-truth the models. Site visits to the Wasco County Museum, I-84, US Highway 30, and Cherry Heights Road (west of The Dalles) indicate the proposed facility would not be visible as indicated by the visibility analysis results, or would be visible at such great distances (approximately 20 miles or greater) that impacts, if any, would be negligible. Photos R-8, R-9, and R-10 depict views from the museum, US 30, and Cherry Heights Road, respectively, toward the project area. The proposed facility would be sited behind the predominant ridgelines seen in these photos. Almost without

exception, topography or vegetation would screen the proposed facility from view.

For comparative purposes, Photos R-11 and R-12 depict images of the existing Klondike I Wind Project (Klondike I) viewed from Gordon Ridge east of the Deschutes Canyon and from a viewpoint along Hwy 206 near the community of Ajax. The distance from Gordon Ridge to Klondike I is approximately 12 miles; from the Hwy 206 viewpoint approximately 16 miles. The Klondike I turbines are barely discernible from Gordon Ridge, and not discernible from the Hwy 206 viewpoint. The proposed facility would be located between approximately 12 and 30 miles from potential viewing areas in the CRGNSA.

The model also suggests portions of the proposed facility would be visible within the CRGNSA in Oregon nearer the Deschutes River. Access to these areas is very limited, so opportunities to view the proposed facility are negligible. If visible, the turbines would be subordinate to the landscape setting for the reasons stated above.

In Washington, the proposed facility would not be visible from SR-142 in the analysis area, and may be intermittently visible from SR-14 near the east end of CRGNSA. Further, access to the other areas within the CRGNSA from which the proposed facility would be visible is very limited, if existent at all. Opportunities to view the proposed facility are not significant. If visible, the turbines would be subordinate to the landscape setting for the reasons stated above.

In conclusion, topography and vegetation would substantially screen the proposed facility from the majority of the CRGNSA. It is possible that the proposed facility would be visible in the distant background from some areas with limited to very limited access and opportunities for viewing. In these areas, the proposed facility would be subordinate to the landscape setting that typically includes significant anthropocentric development such as interstate and rail transportation corridors, transmission corridors, and urban and rural development in the foreground and middleground. In consideration of this information, the proposed facility would have negligible, if any, impacts on the CRGNSA.

John Day River Canyon

In considering the proposed facility's compatibility with scenic or aesthetic management goals and objectives identified in the applicable plans, it should be noted the proposed facility occurs on private land (outside the BLM's designated AHVQ) and is therefore not subject to BLM jurisdiction. The Oregon State Scenic Waterways Act also does not govern the facility, because the facility will be located beyond the Act's jurisdiction, which extends to all land within one-fourth of one mile of the bank on each side of the scenic waterway. ORS 390.805(1), 390.845(2)(e); see also OAR 736-040-0015(5) and (10). Guidance provided by the United States Department of the Interior (USDI) regarding Federal Wild and Scenic Rivers states "management principles may apply to private lands only to the extent required by other laws such as local zoning and air

and water pollution regulations” (Federal Register 1982). The proposed facility is outside the Federal Wild and Scenic Rivers Act’s jurisdiction because the site boundary is beyond the designated WSR corridor and because the Sherman County Comp Plan does not place additional restrictions on development relevant to the WSR designation.

The Bureau of Land Management (BLM) administers the majority of public lands within the John Day canyon and has indicated that its concern would be visual impacts seen from the John Day River (Mottl, H. 2005) (Appendix R-4). Therefore, the following assessment keys on impacts to the river and its shoreline and does not consider impacts to the canyon walls that have very limited access. Portions of the proposed facility would be visible from locations along the upper portions of the canyon walls with the highest likelihood occurring downstream of McDonald Crossing (approximately river mile 20.7).

The computer modeling and analyses indicate portions of the proposed facility would be visible from two river segments, as illustrated in Figures R-7 through R-17 and summarized in Table R-2. The first segment occurs near McDonald Crossing (Viewpoint 1), the second between approximately river miles 15.9 and 16.8 (Viewpoints 2 – 5).

A visual simulation from Viewpoint 1 near McDonald Crossing toward the subject turbines has been modeled and is represented in Figure R-18. **It must be noted that all turbines shown in the simulations (Figures R-18 through R-22) are actually situated behind the ridgelines seen in the simulations.** Because the visible portions of many turbines are so small and could be overlooked, the turbines have been superimposed in front of the ridgeline to illustrate their relative scale and silhouette in the landscape. **Only the portions of the turbines above the ridgelines would actually be seen from the viewpoints.**

From Viewpoint 1, the visibility analyses and simulation indicate the blade tips of turbines 123 and 125 would be visible. The nacelle and blades of turbine 124 would be visible. For clarification, blade tips of turbine 122 would also be visible in the vicinity of Viewpoint 1, but not from Viewpoint 1. The turbines would not be visible from the nearby BLM interpretive facility for the Historic Oregon Trail or its access road. From the boater’s perspective, viewing the turbines would require looking back up the canyon. Assuming a floating speed of four miles per hour (mph), the turbines would be in view for approximately one and one-half minutes. The turbines would appear small in scale in the background compared to other anthropocentric impacts in the canyon (e.g., irrigated pasture, farm and irrigation equipment, farm houses, trailers, fences, livestock, power lines) that are visible in the foreground and middleground from the river. Other factors contributing to the minimal contrast of the proposed facility include viewing distance, angle of observation, light conditions, and atmospheric conditions, which have the effect of making the turbines less visible when the sun is in the west or when views are obscured by precipitation, haze, dust, smoke, or fog.

In consideration of this information, the proposed facility as seen from McDonald Crossing would have a weak contrast and would therefore be compatible with

BLM's VRM Class II management objective: "management activities resulting in changes to the existing character of the landscape may be allowed, provided they do not attract the attention of the casual observer" (USDI 2000).

The second area of impact occurs between approximately river miles 15.9 and 16.8. Visual simulations from Viewpoints 2 through 5 toward the subject turbines have been modeled and are represented in Figures R-19 through R-22.

The visibility analyses and simulations indicate that the blade tips of turbines 76, 95, 96, 97, 103, and 104 would be visible at different times for different durations through the approximately 0.9 mile segment. Most turbines would be visible for much less of the 0.9 mile segment as shown in Figures R-7 through R-16. Turbine 103 would be the most visible for the longest duration. Assuming a floating speed of four mph, the viewer would move through this 0.9 mile segment in approximately 14 minutes.

In many cases, the turbines' silhouettes will be barely discernible, if at all. Similar to the turbines' effects at McDonald Ferry, the turbines in this segment would appear small in scale compared to other anthropocentric development in the canyon and to the scale of the canyon in general. The distance from the viewer to the turbines, angle of observation, light conditions, and atmospheric conditions would further reduce perceived contrast and impacts. Based on the available information, the potential impacts in this segment would be weak and would therefore be compatible with BLM's VRM Class II management objectives.

The John Day River system includes over 500 river miles. Approximately 1.0 river miles, or 0.2 percent of the entire system, would be affected by the proposed facility. Impacts resulting from the proposed facility are relatively weak and would occur in the lower 40 river miles that are interspersed with significant private lands. Nearly all developed and undeveloped recreation sites within the river corridor occur upstream of river mile 40 and are screened from the proposed facility by topography and vegetation. Given the significantly small portion of river that would be affected and the weak nature of the potential impacts, the design, construction, operation, and retirement of the proposed facility would not significantly affect the scenic and aesthetic resources in the John Day River canyon.

Oregon National Historic Trail

Computer modeling results, field investigations, and interviews with agency staff have indicated that the proposed facility would not be visible at Fourmile Canyon, Biggs Junction, the Deschutes River Crossing, and the Dalles Complex (Anderson 2005, Fitzwater 2005). Therefore, there would be no visual or aesthetic impacts to these resources.

Based on computer modeling and a visual simulation, portions of turbines 122, 123, 124, and 125 would be visible from the John Day River and small portions of its banks at McDonald Crossing. The proposed facility would not be visible from

the BLM interpretive site near McDonald Crossing or from the road accessing the interpretive site. As illustrated in Figure R-18 and described above, factors including the limited length of viewing time, relative small size and scale of the impact, and spatial relationships significantly limit the contrast of the proposed facility against the existing landscape. Other factors including the angle of observation, light conditions, and atmospheric conditions will also limit the significance of the impact. Considering these factors, the proposed facility would not have a significant adverse impact on the resource.

Lower Deschutes River Canyon

Computer modeling results, field investigations, and interviews with agency staff have indicated that the proposed facility would not be visible from the Lower Deschutes River Canyon (Anderson 2005, Fitzwater 2005, Houck 2005, Mottl, T. 2005). Therefore, there would be no visual or aesthetic impact to this resource.

Lower Klickitat River Canyon

Computer modeling results have indicated that the proposed facility would not be visible from the Lower Klickitat River Canyon. Therefore, there would be no visual or aesthetic impact to this resource.

Journey Through Time Scenic Byway

As illustrated in the visibility analysis (Figure R-2), portions of the proposed facility would be visible from the byway. Although portions of some turbines would be visible, the proposed facility would be compatible with the JTTMP's stated goals. Portions of the proposed facility may be visible from Wasco and its immediate surroundings, but existing buildings and topography would likely screen most of the turbines from view. The visibility analysis indicates that the proposed facility would be visible from some areas near Moro. Field investigations suggest topography and vegetation would substantially block views from Moro and the Sherman County Museum. The proposed facility would not be visible from Grass Valley. Potential impacts to the Historic Oregon Trail have been previously addressed.

Because the communities of Wasco and Moro have no stated scenic or visual management goals or objectives and because the Sherman County Comp Plan Goal XVIII supports the development of wind energy (Sherman County 2003), it is concluded that the proposed facility would not have significant adverse effects on the Journey Through Time Scenic Byway. It is possible that the proposed facility would have positive impacts in support of the JTTMP by creating jobs, supporting agriculture, and providing a sense of regional identity supported by local land use plans.

Trees (Sherman County)

As described in Section R.4(i), the proposed facility would not impact trees in Sherman County. Therefore, there would be no impact to this resource.

Summary

The proposed facility would not be visible from Fourmile Canyon, Biggs Junction, the Deschutes River Crossing, The Dalles Complex, Lower Deschutes River Canyon, and Lower Klickitat River Canyon. The proposed facility would not impact trees or rock outcroppings. Portions of the proposed facility may be visible from the CRGNSA, but impacts from these distances, if any, would be negligible. Portions of ten turbines would be visible from the John Day Canyon near McDonald Crossing and approximately between river miles 15.2 and 16.8, would be visually subordinate, would result in weak contrast, and would be compatible with BLM management objectives. The proposed facility would be visible from the Journey Through Time Scenic Byway and would be compatible with the JTTMP goals. Therefore, the proposed facility would not result in significant adverse impacts to significant or important scenic or aesthetic resources in the analysis area.

- (iii) *Visual impacts from air emissions resulting from facility construction or operation, including, but not limited to, impacts on Class 1 visual resources as described in OAR 340-031-0120 [renumbered to 340-204-0050].*

Response: During construction, dust may be generated during road construction, temporary batch plant operation, and clearing activities for the turbine pads. Dust will be controlled through the construction period by watering. Any potential impacts are anticipated to be temporary and negligible. Facility operation will not create air emissions, so there will be no impact. There are no Class 1 visual resources in the analysis area.

R.5 OPPORTUNITY FOR MITIGATION

OAR 345-021-0010(1)(r)(D) *The measures the applicant proposes to avoid, reduce or otherwise mitigate any significant adverse impacts;*

Response: Impacts to vegetation on CRP lands will be mitigated as described in Exhibits I and P. Although no significant adverse impacts to scenic and aesthetic resources have been identified, the Applicant will incorporate best management practices such as using neutral white or gray finishes for the turbines to further reduce visual impacts of the proposed facility.

R.6 MAP

OAR 345-021-0010(1)(r)(E) *A map or maps showing the location of the visible scenic and aesthetic values analyzed under (B); and*

Response: The analysis area for impacts on Scenic and Aesthetic Values includes the area within the site boundary and extends 30 miles beyond the site boundary as shown in

Figure R-1. Locations of the visible scenic and aesthetic values analyzed are included in Figures R-2 and R-3.

R.7 MONITORING

OAR 345-021-0010(1)(r)(F) *The applicant's proposed monitoring program, if any, for impacts to scenic and aesthetic values.*

Response: The proposed facility would not result in significant adverse impacts to scenic and aesthetic values, and therefore, the Applicant does not propose an active monitoring program specific to the monitoring for impacts to scenic and aesthetic values. For those impacts to vegetation on CRP lands that will be mitigated as described in Exhibits I and P, monitoring, if any, will occur pursuant to Exhibits I and P. With respect to the Applicant's efforts to incorporate best management practices such as using neutral color matte finishes for the turbines, no ongoing monitoring is proposed for such practices.

R.8 CONCLUSION

The project will comply with all applicable regulatory guidelines concerning scenic and aesthetic resources as discussed in the responses above to the criteria contained in OAR 345-021-0010(1)(r)(A), (B), (C), (D), (E) and (F). Based on the above information, the Applicant has satisfied the requirements in OAR 345-021-0010(1)(r), and the Council may find that the standards contained in OAR 345-022-0080 are satisfied.

R.9 REFERENCES

R.9.1 Telephone Contacts/Personal Interviews

Anderson, Jim. Park Ranger. Deschutes River State Recreation Area, Oregon Department of Parks and Recreation. Personal interview with Sean Sullivan. February 16, 2005.

Dryer, Curt. Planning Director. Klickitat County, Washington. Telephone conversation with Kathy Hemphill. September 7, 2005.

Fitzwater, Daryl. Park Manager. Deschutes Management Unit, Oregon Department of Parks and Recreation. Telephone conversation with Sean Sullivan. February 14, 2005.

Houck, Jan. Scenic Waterway Coordinator. Oregon Department of Parks and Recreation. Telephone conversation with Sean Sullivan. March 7, 2005.

McKane, Carla. Planning Director. Morrow County, Oregon. Telephone conversation with Sean Sullivan. September 9, 2005.

McMahan, Tim. PPM Energy. Email correspondence with David Filippi. August 30, 2005.

Mottl, Heidi. Recreation Planner. Prineville District, Bureau of Land Management. Telephone conversation with Sean Sullivan. March 3, 2005; Email correspondence with Sean Sullivan. March 16, 2005.

Mottl, Tom. District Recreation Planner. Prineville District, Bureau of Land Management. Telephone conversation with Sean Sullivan. February 18, 2005.

Priebe, Diane. Recreation Planner. Wenatchee District, Bureau of Land Management. Telephone conversation with Sean Sullivan. September 7, 2005.

R.9.2 Website/Document References

Columbia River Gorge Commission and USDA Forest Service, National Scenic Area. Management Plan for the Columbia River Gorge National Scenic Area. September 1992.

Columbia River Gorge Commission and USDA Forest Service, National Scenic Area. Revisions to the Management Plan for the Columbia River Gorge National Scenic Area. May 10, 2004.

Federal Register. Wild and Scenic Rivers Guidelines. Vol. 47, No. 173. September 7, 1982.

Gilliam County, Oregon. Gilliam County Comprehensive Land Use Plan and Zoning Ordinances as Amended October 25, 2000.

Sherman County, Oregon. Comprehensive Land Use Plan 1994, revised June 2003.

USDA Forest Service. Lower Klickitat River Wild and Scenic River Management Plan Final Environmental Impact Statement. November 1991.

USDI Bureau of Land Management. Two Rivers Resource Management Plan Record of Decision. June 1986.

USDI Bureau of Land Management. John Day River Proposed Management Plan, Two Rivers and John Day Resource Management Plan Amendments and Final Environmental Impact Statement. June 2000.

USDI Bureau of Land Management. John Day River Management Plan, Two Rivers, John Day, and Baker Resource Management Plan Amendments Record of Decision. February 2001.

USDI National Park Service. Management and Use Plan Update Final Environmental Impact Statement Oregon National Historic Trail and Mormon Pioneer National Historic Trail, August 1999.

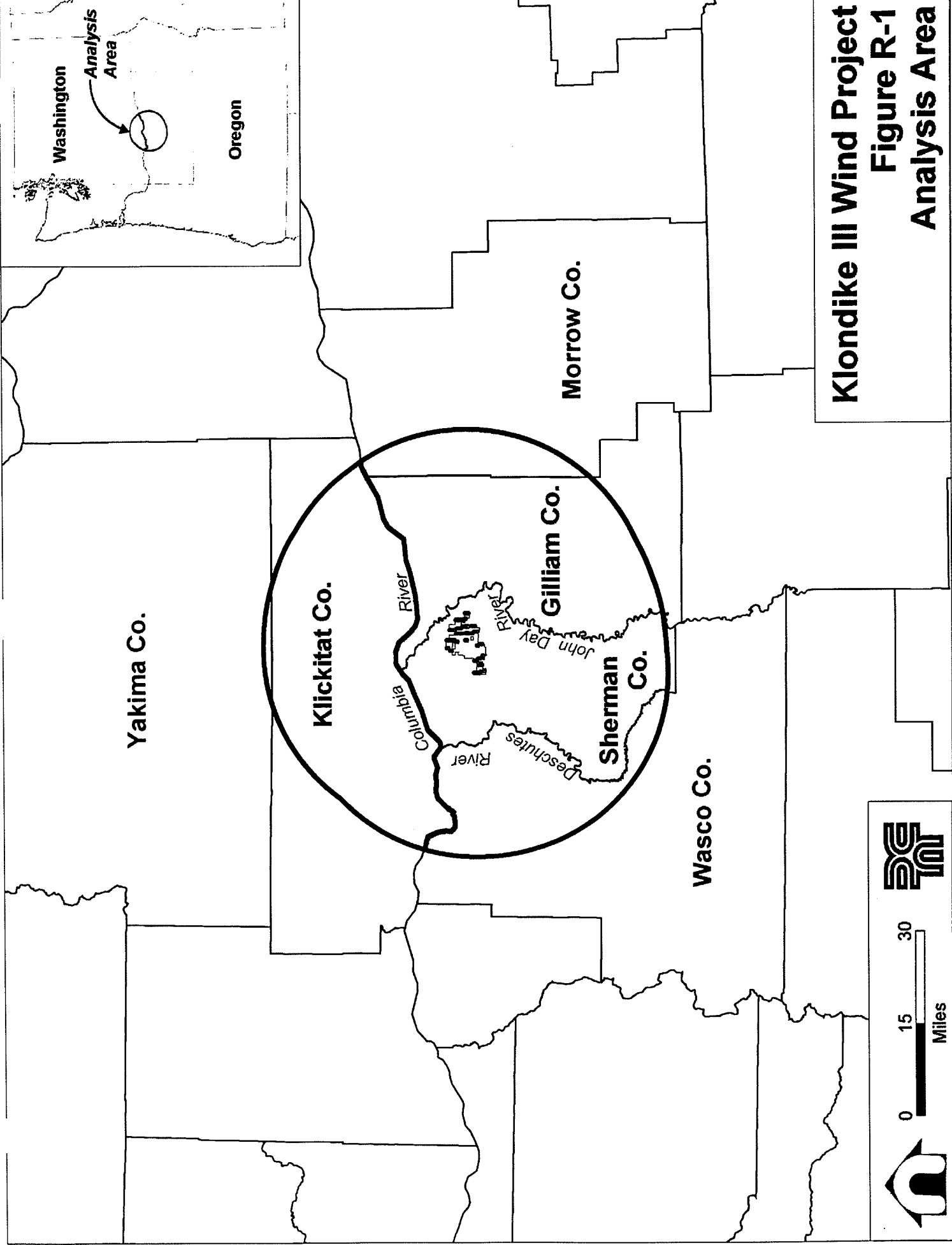
Yakima County, Washington. Policy Plan May 20, 1997, amended December 28, 1998.

APPENDIX R-1

Figures

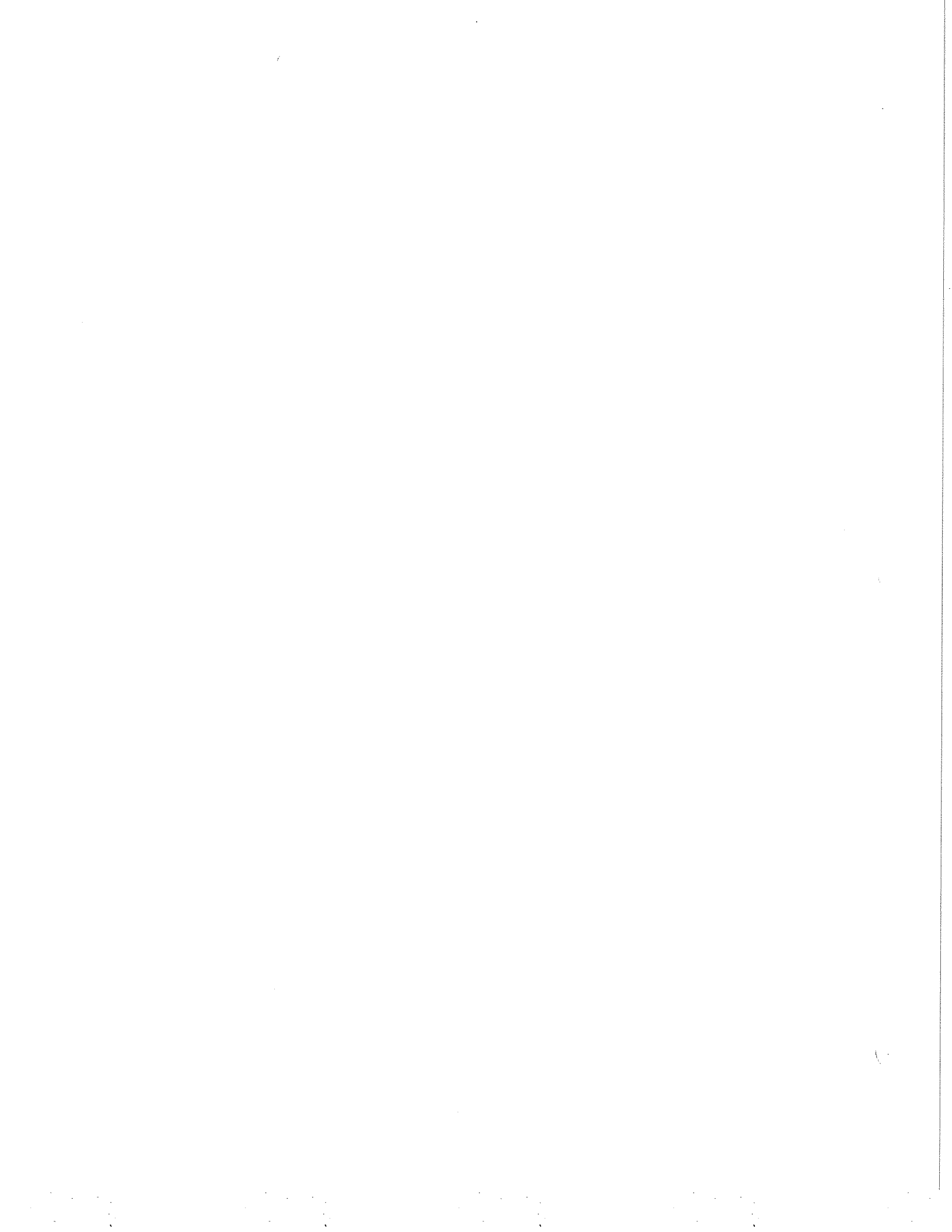
- Figure R-1: Scenic and Aesthetic Values Analysis Area**
- Figure R-2: Scenic and Aesthetic Values, Oregon**
- Figure R-3: Scenic and Aesthetic Values, Washington**
- Figure R-4: Visibility Analysis, Oregon**
- Figure R-5: Visibility Analysis, Washington**
- Figure R-6: Visibility Analysis, John Day Corridor**
- Figure R-7: Visibility Analysis, Turbine 76**
- Figure R-8: Visibility Analysis, Turbine 95**
- Figure R-9: Visibility Analysis, Turbine 96**
- Figure R-10: Visibility Analysis, Turbine 97**
- Figure R-11: Visibility Analysis, Turbine 103**
- Figure R-12: Visibility Analysis, Turbine 104**
- Figure R-13: Visibility Analysis, Turbine 122**
- Figure R-14: Visibility Analysis, Turbine 123**
- Figure R-15: Visibility Analysis, Turbine 124**
- Figure R-16: Visibility Analysis, Turbine 125**
- Figure R-17: Composite Visibility Analysis, John Day Corridor**
- Figure R-18: Visual Simulation, Viewpoint 1**
- Figure R-19: Visual Simulation, Viewpoint 2**
- Figure R-20: Visual Simulation, Viewpoint 3**
- Figure R-21: Visual Simulation, Viewpoint 4**
- Figure R-22: Visual Simulation, Viewpoint 5**

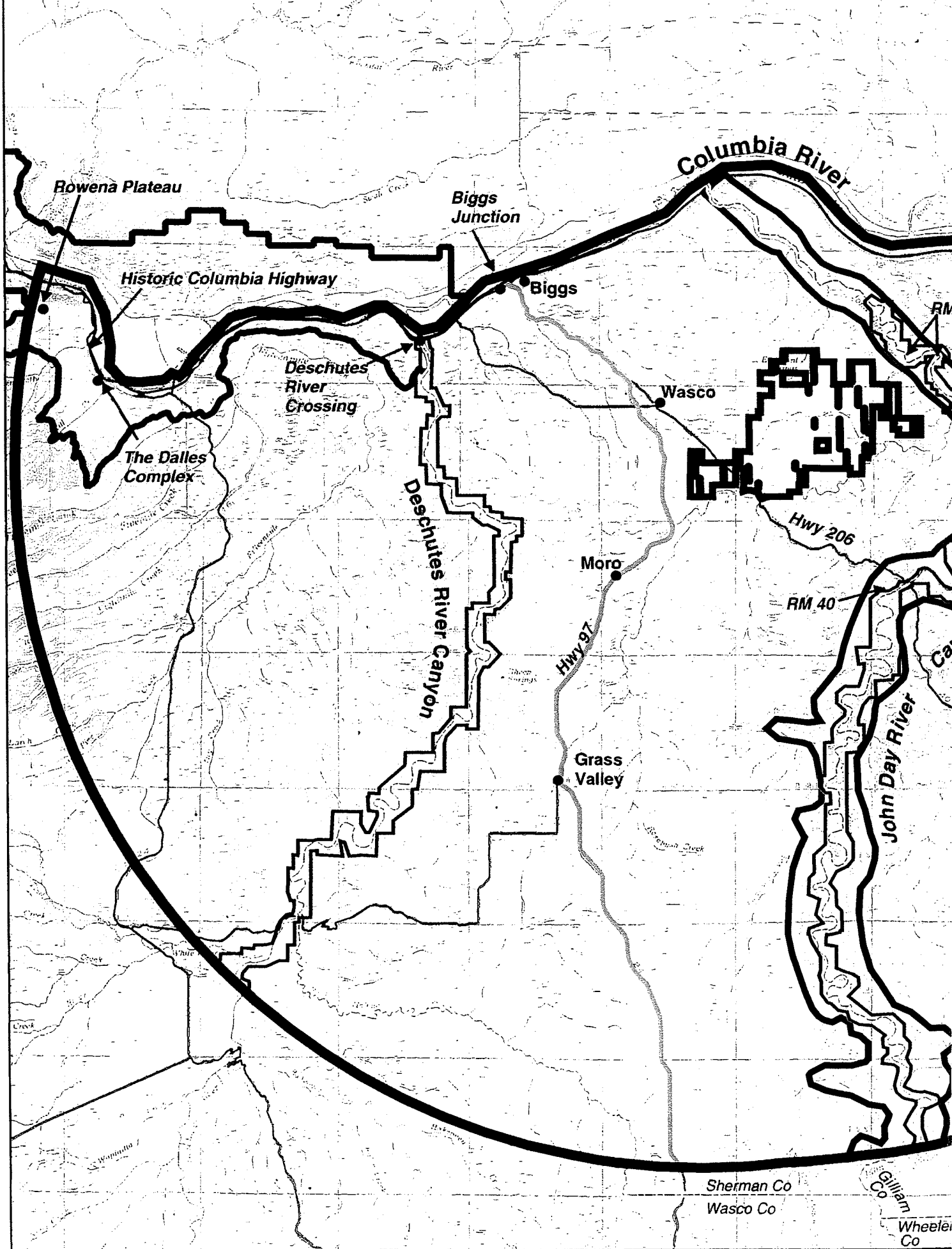


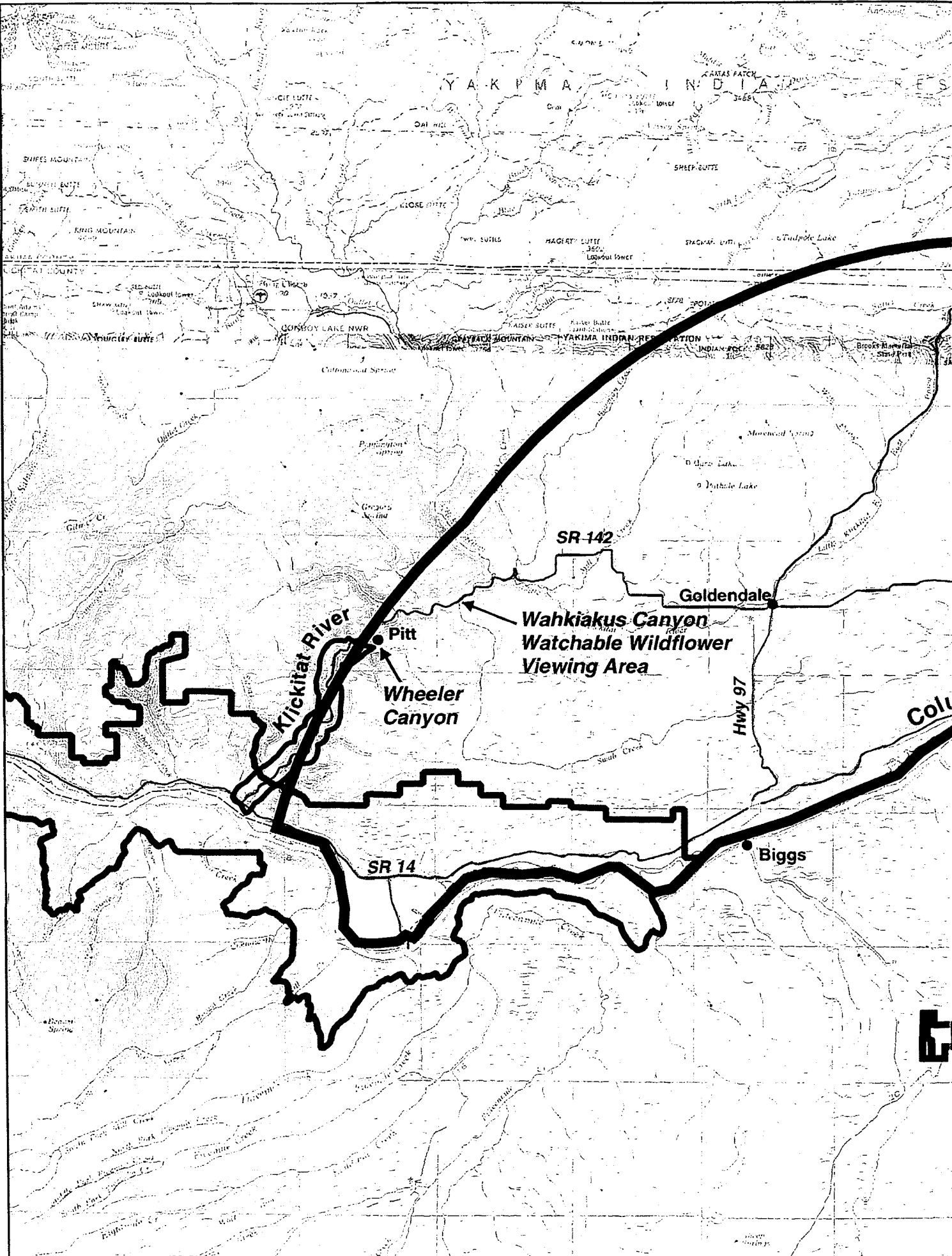


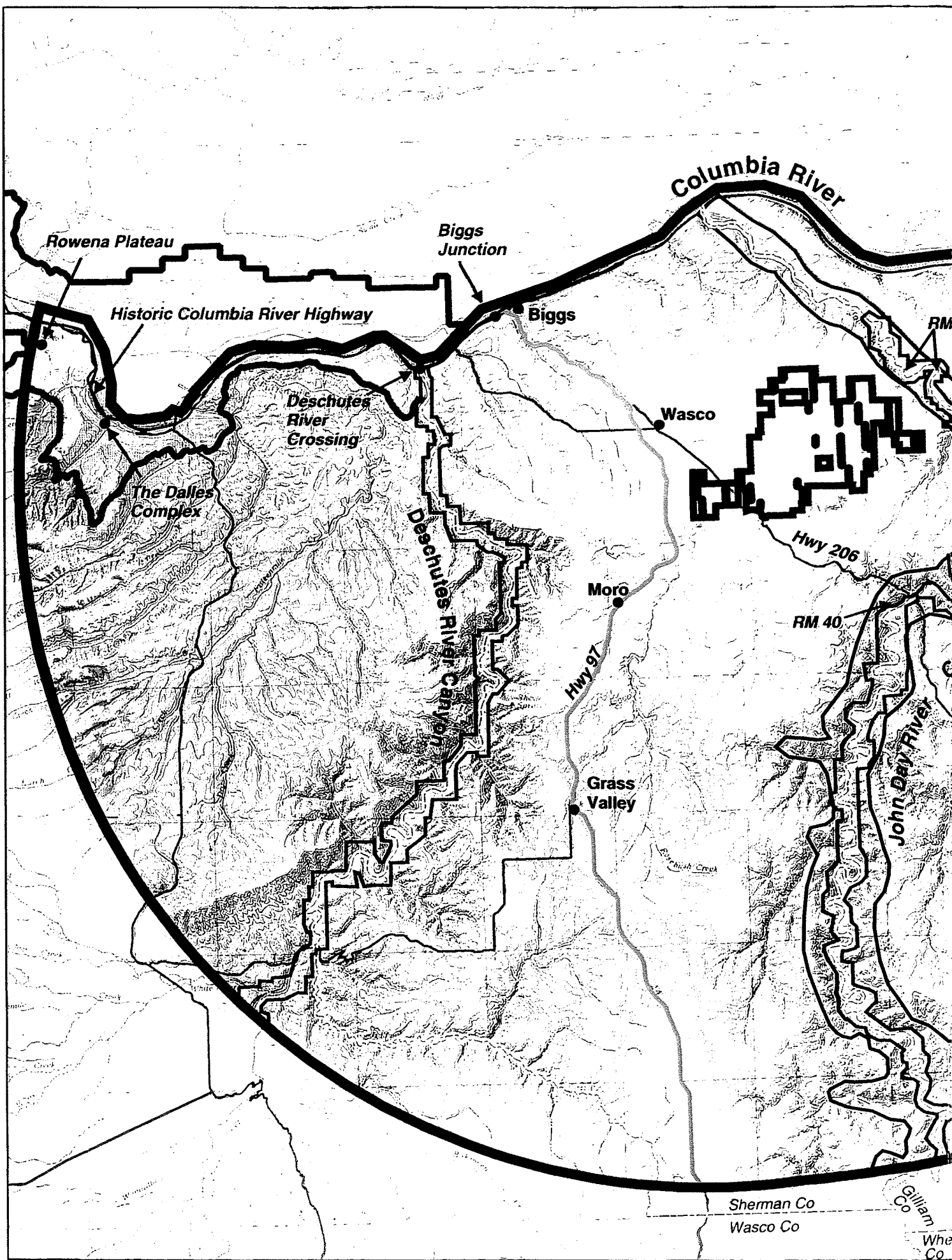
**Klondike III Wind Project
Figure R-1
Analysis Area**

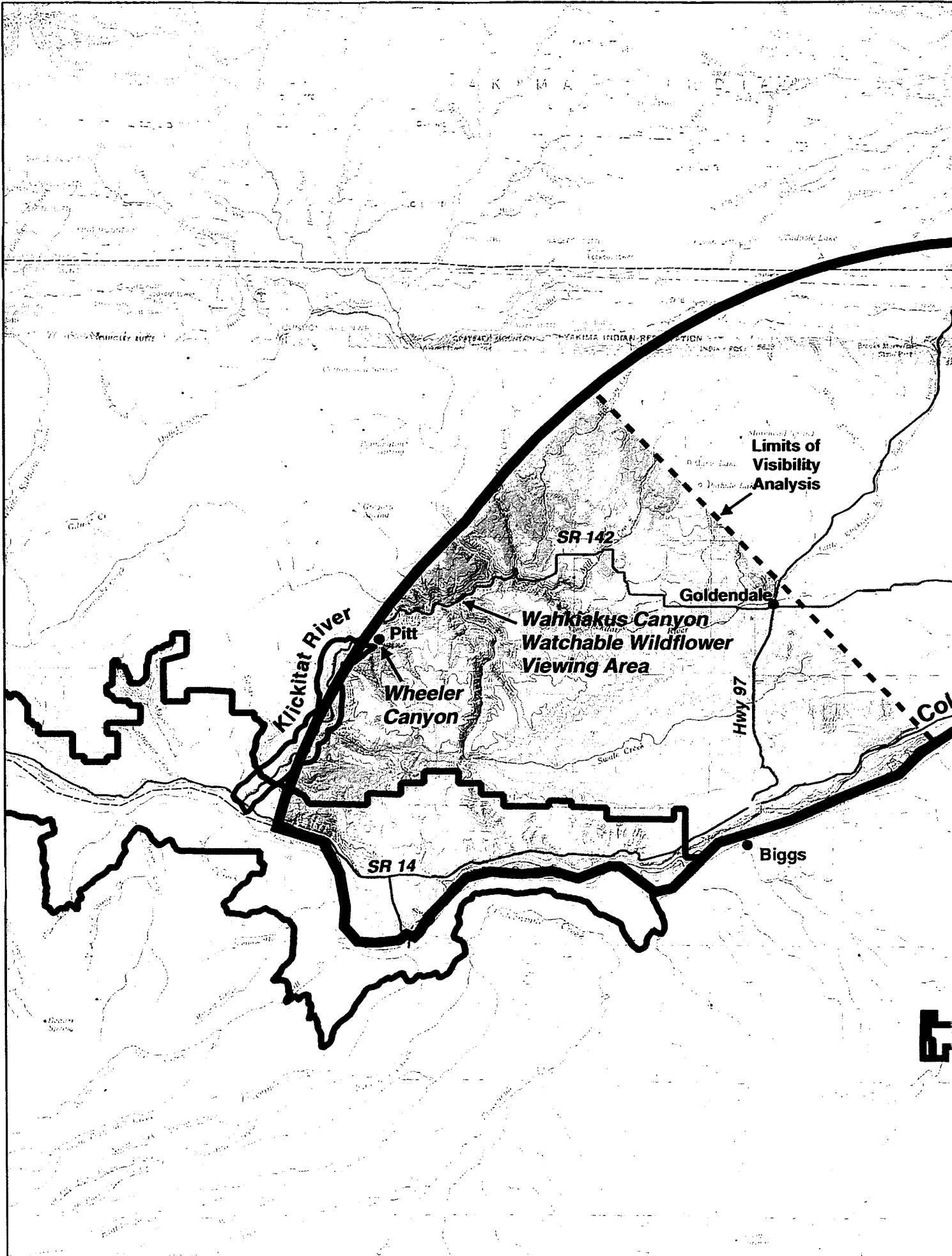
A north arrow is located at the top left of the scale bar. The scale bar is marked with **0**, **15**, and **30** miles. To the right of the scale bar is the logo for **PG&E**.

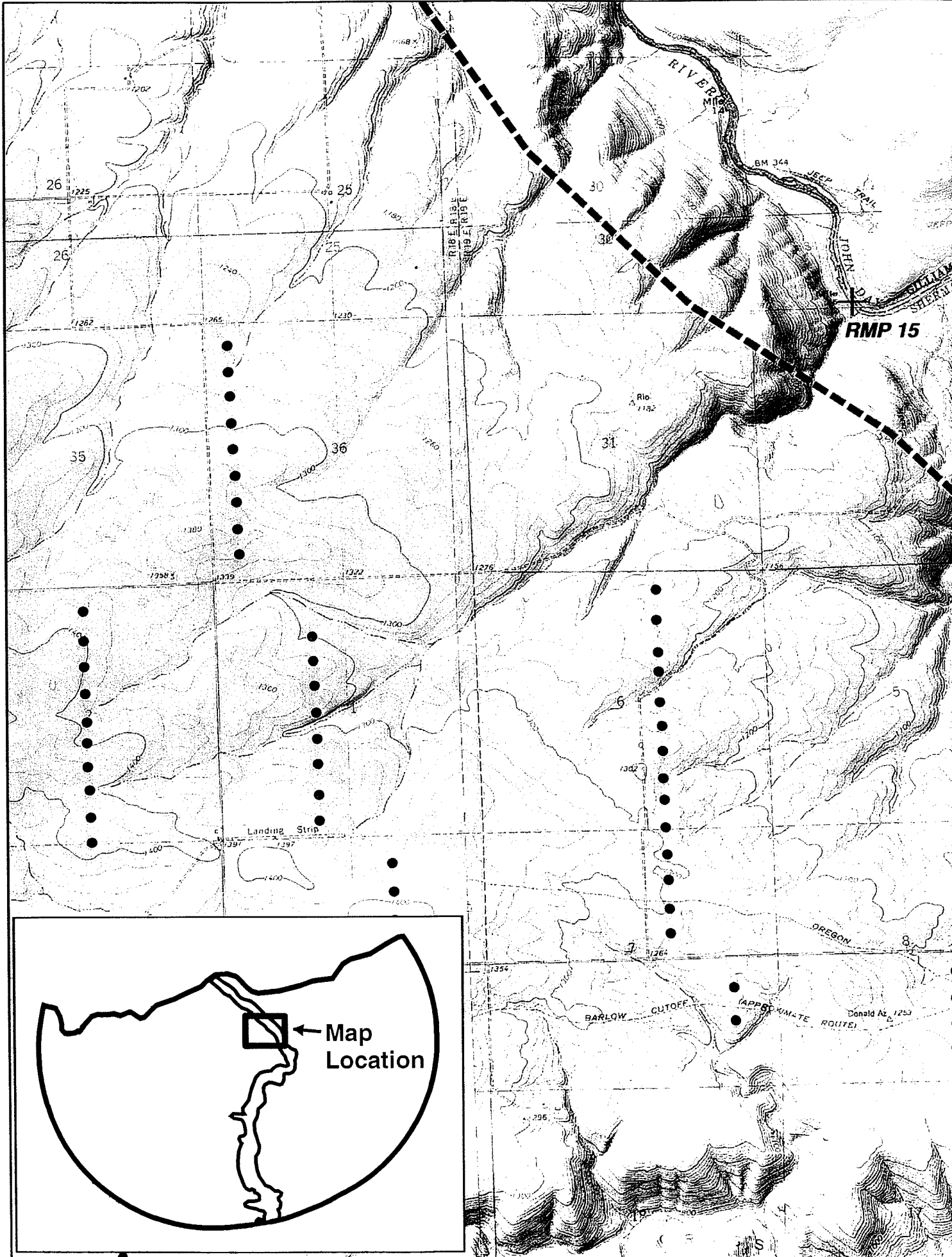


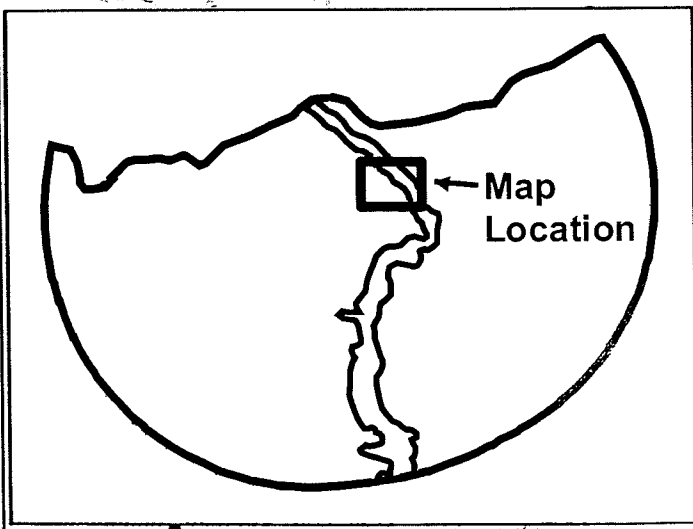
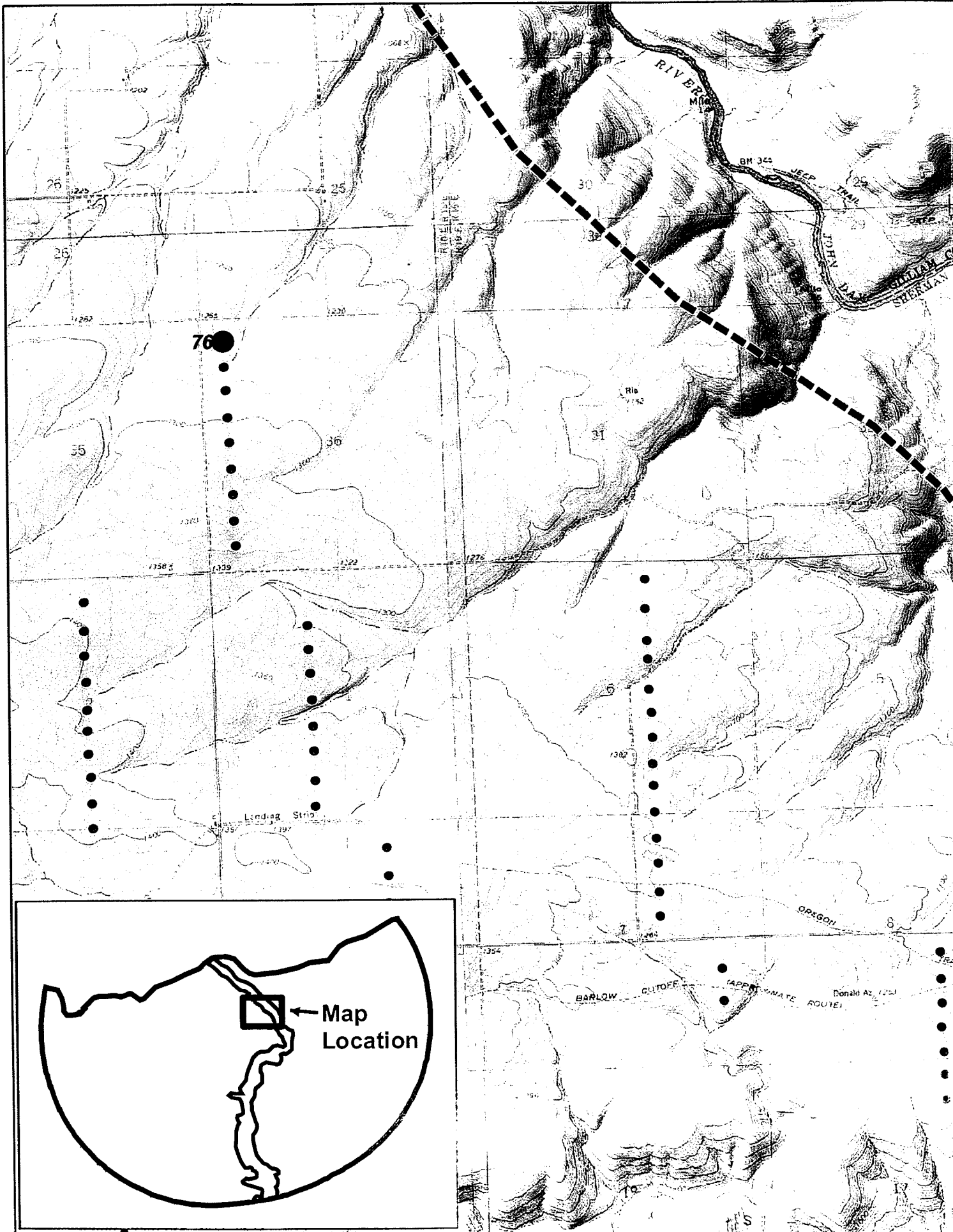


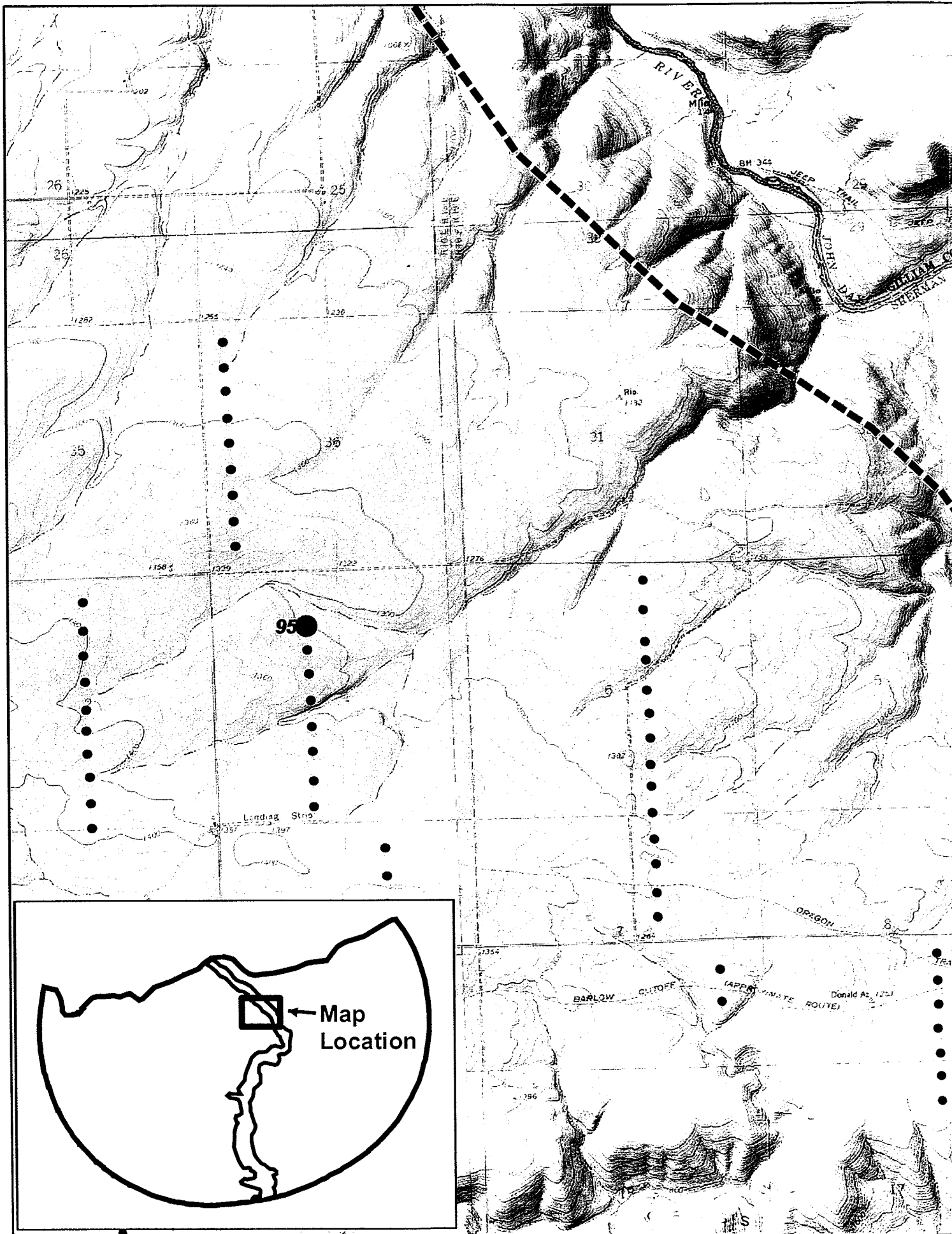


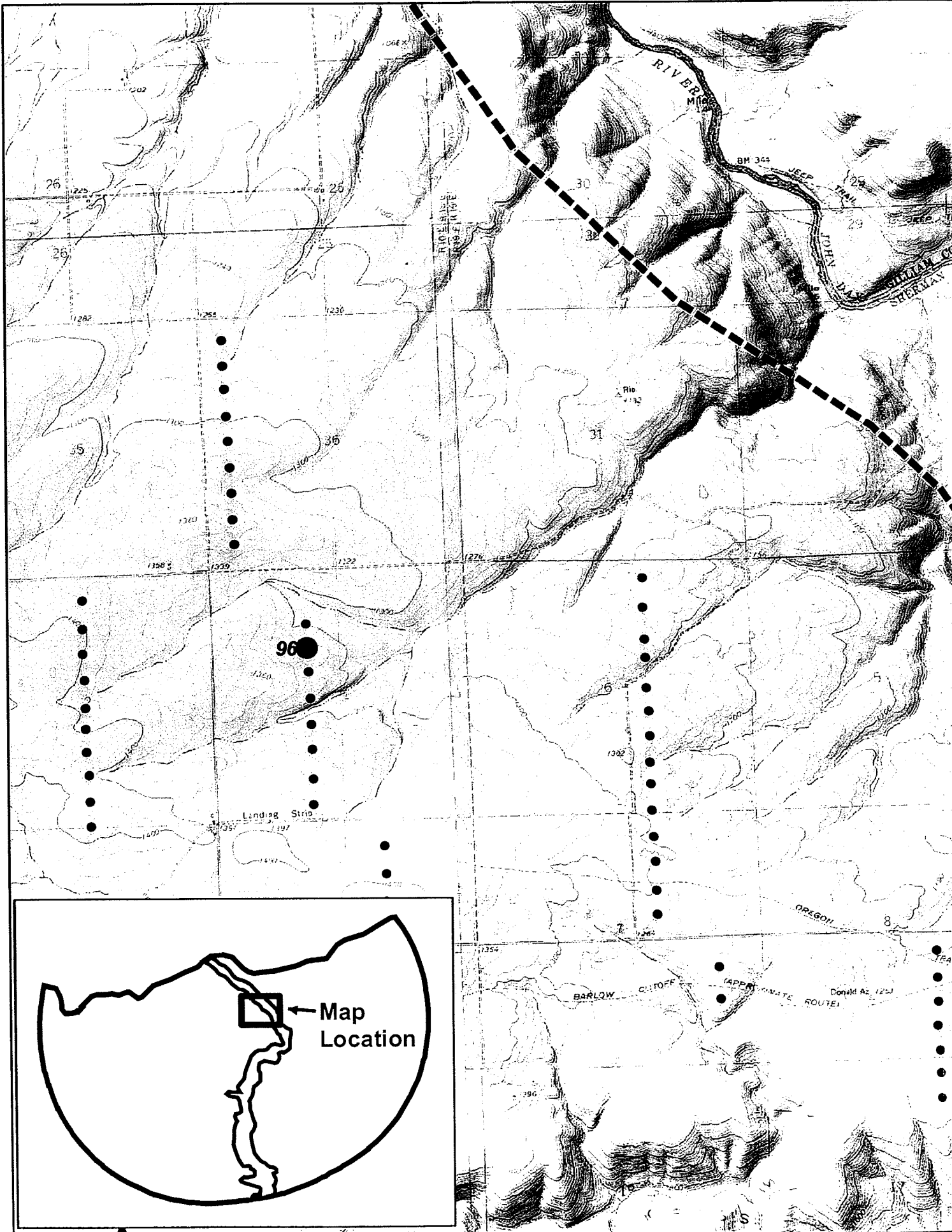


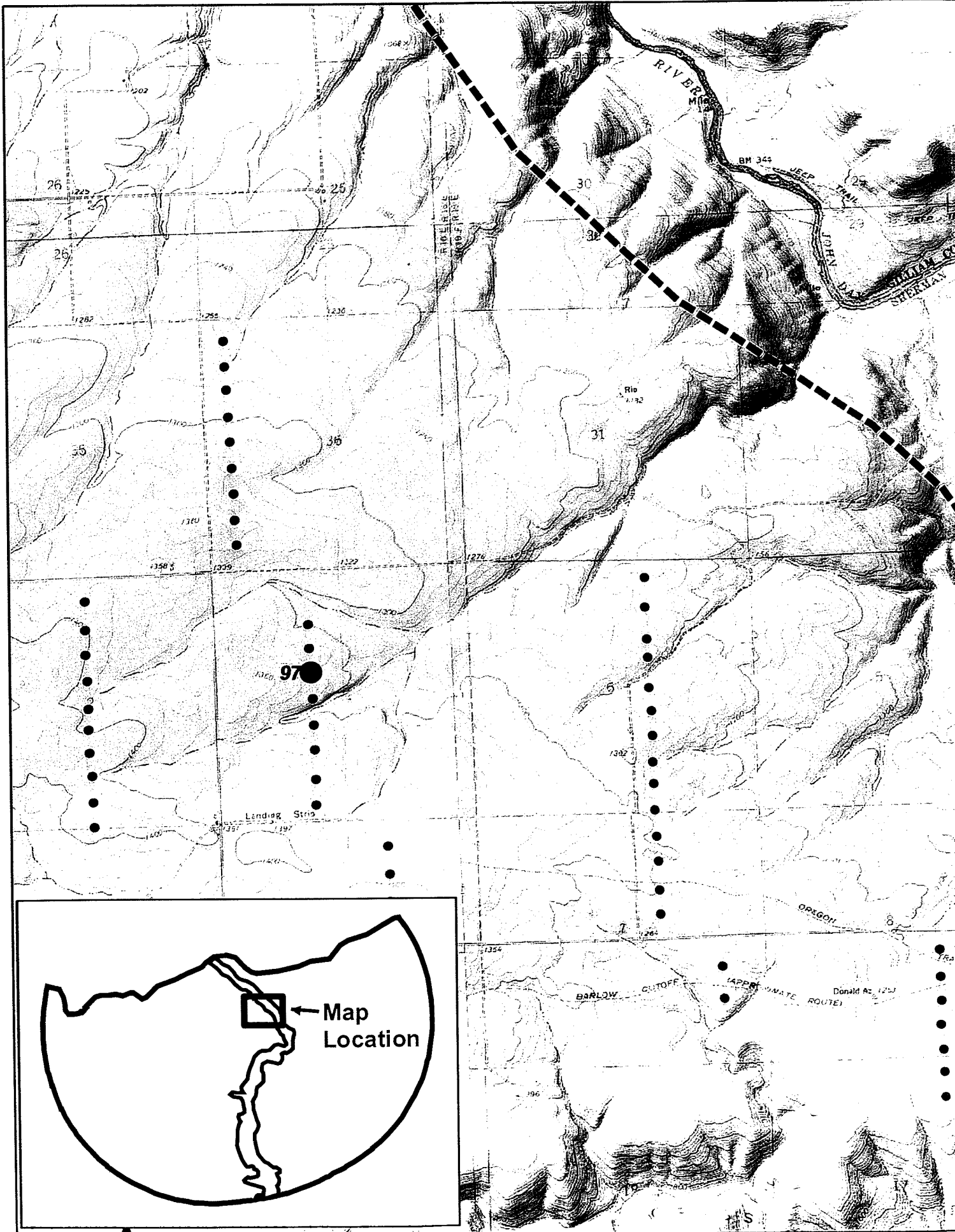


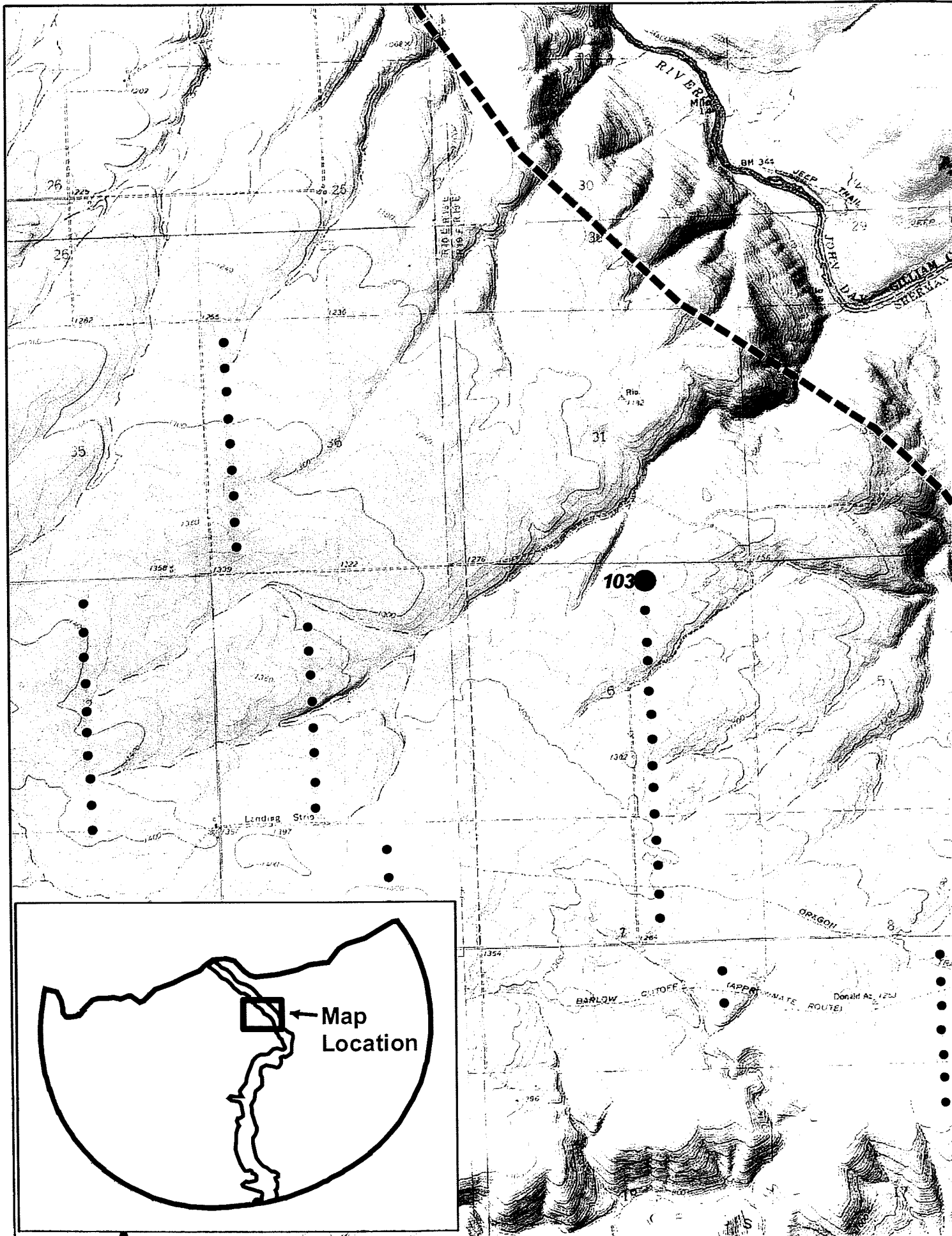


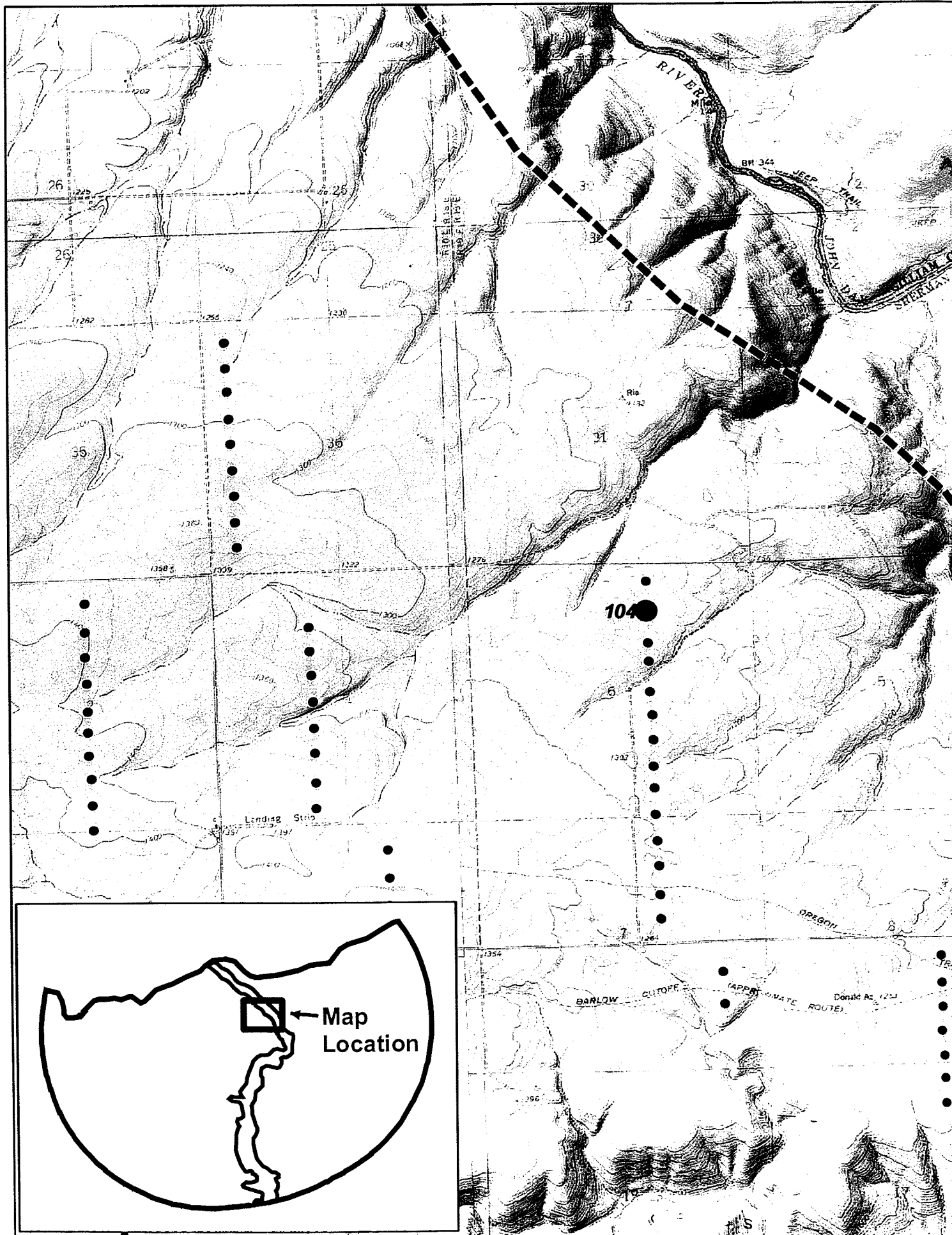


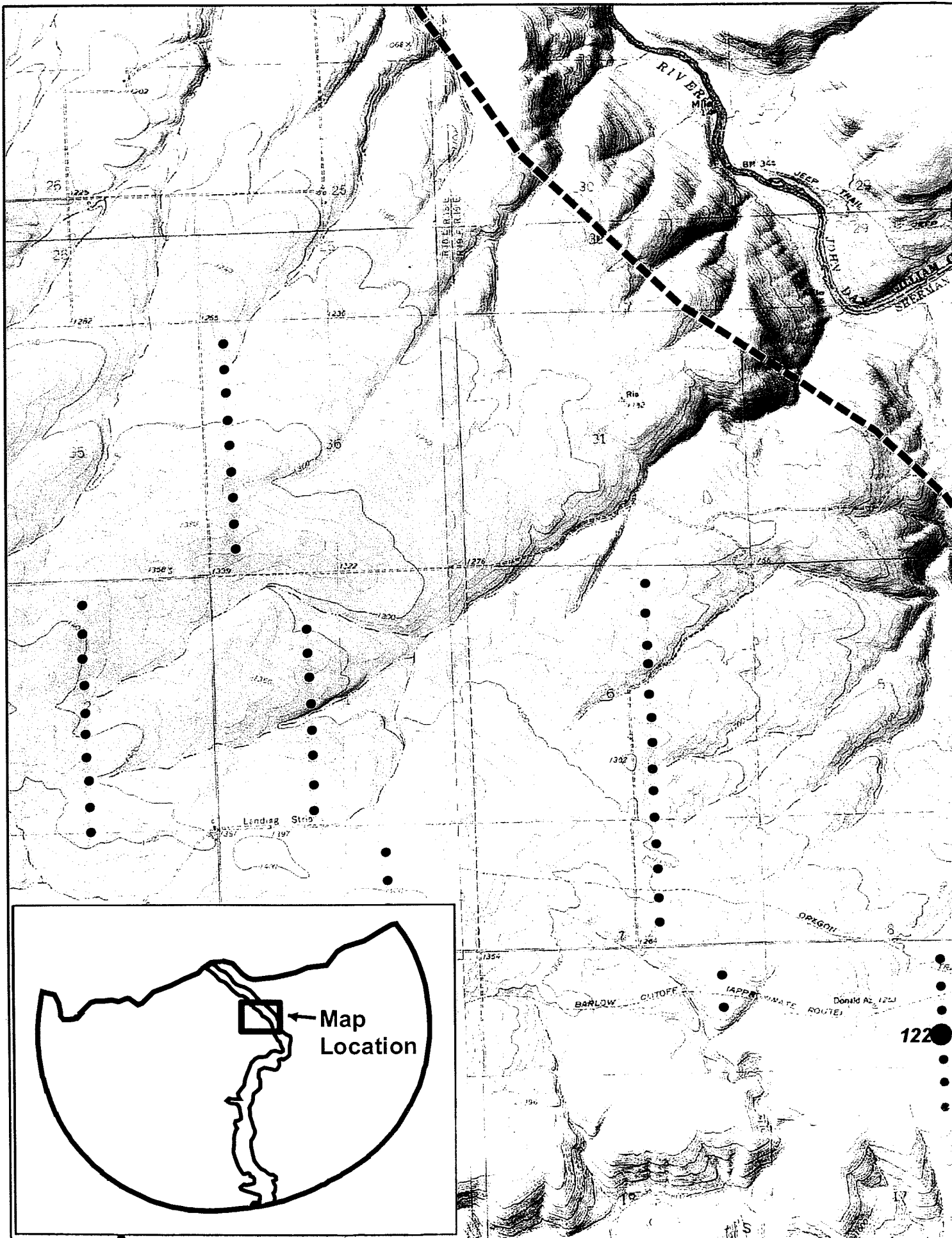


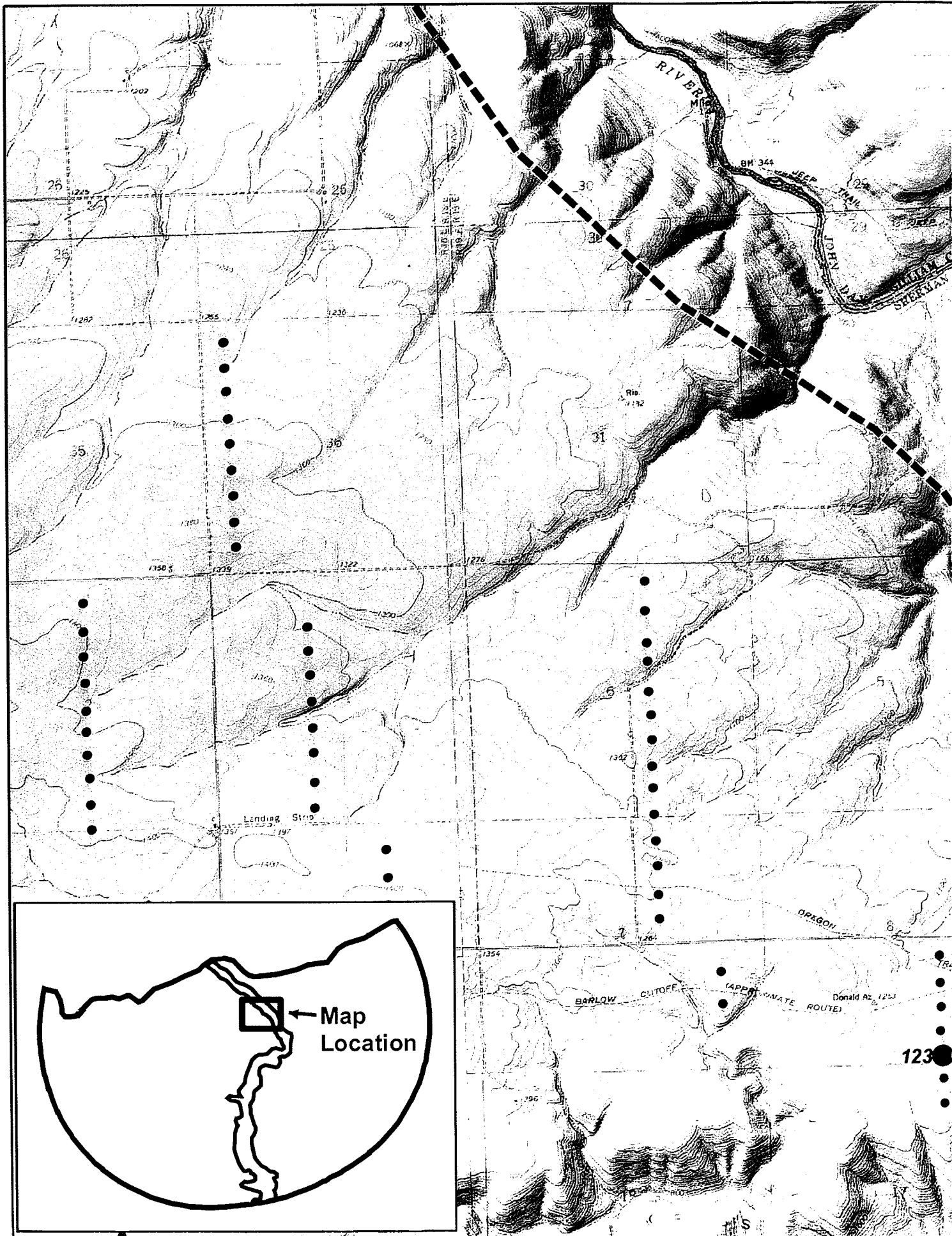


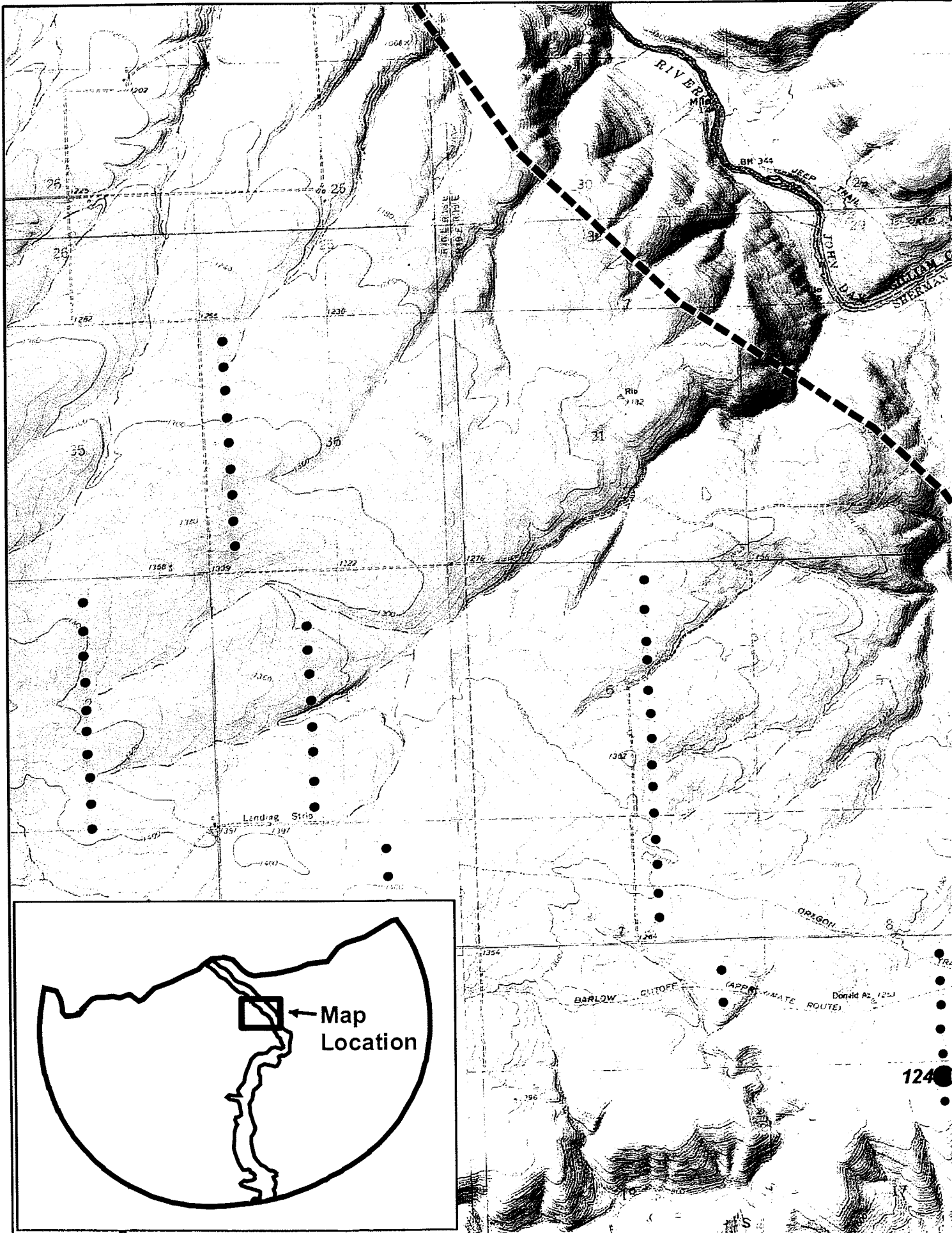


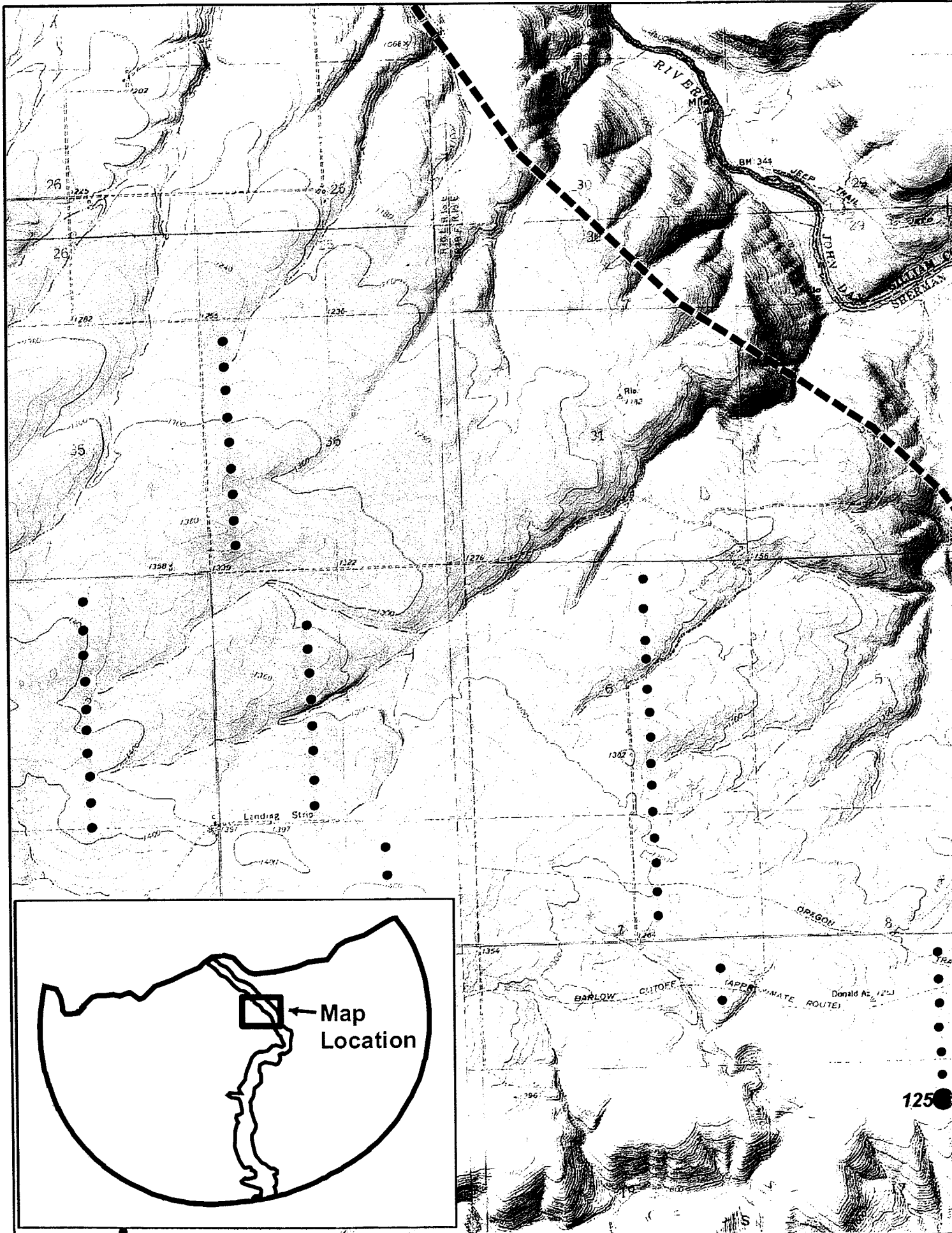


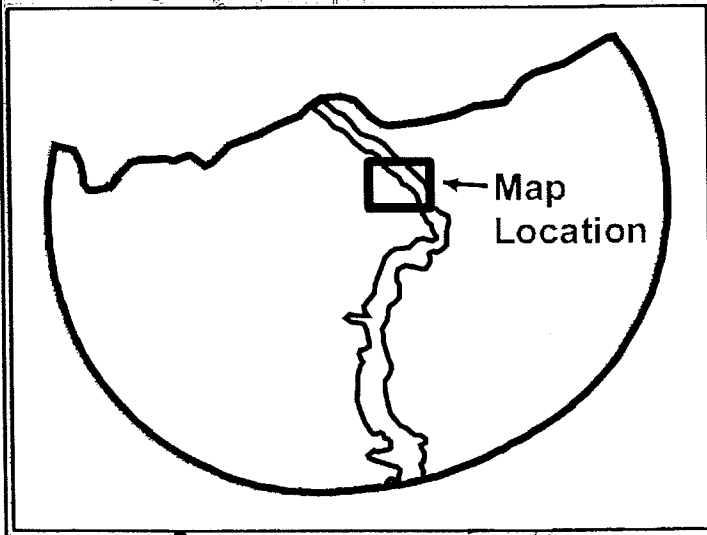
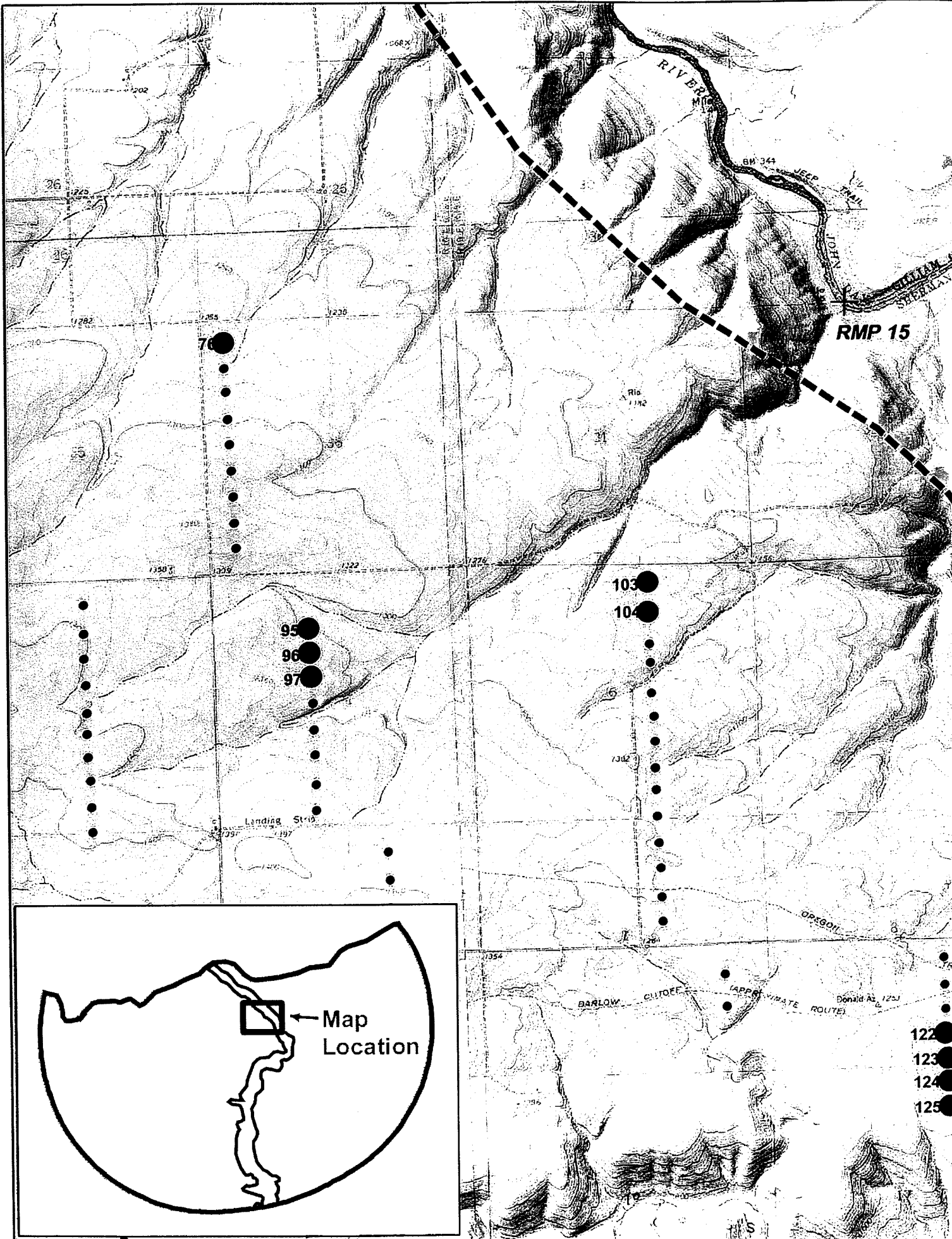


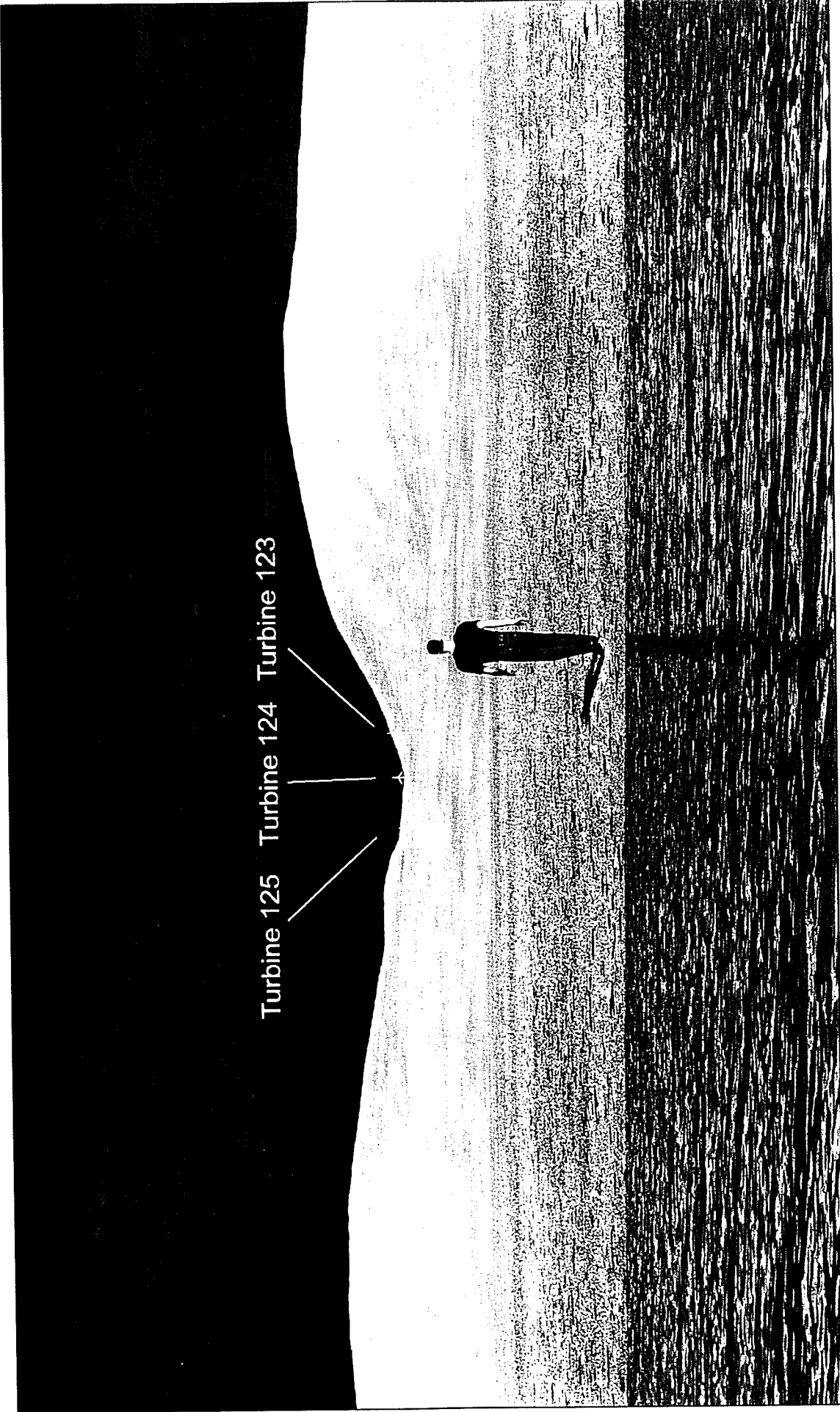










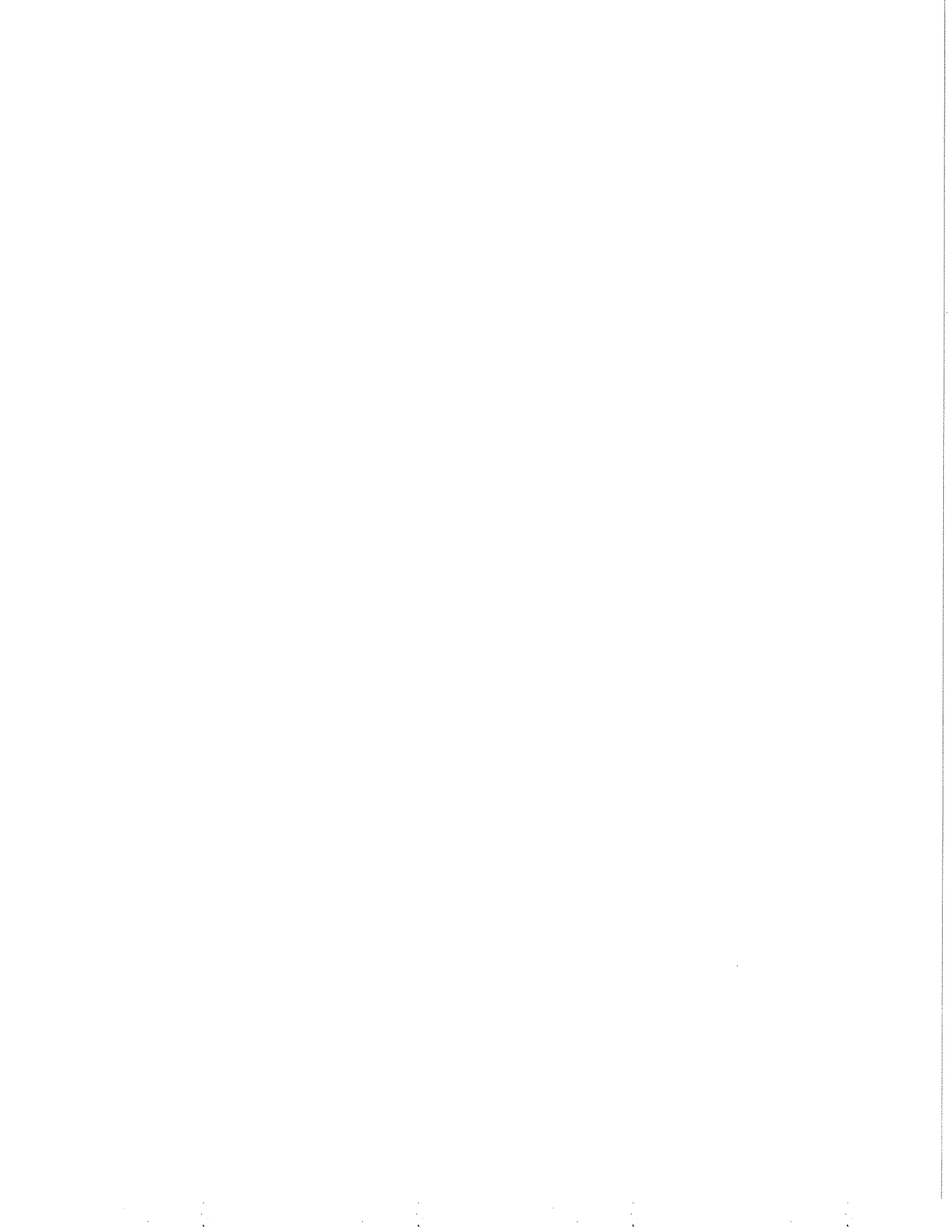


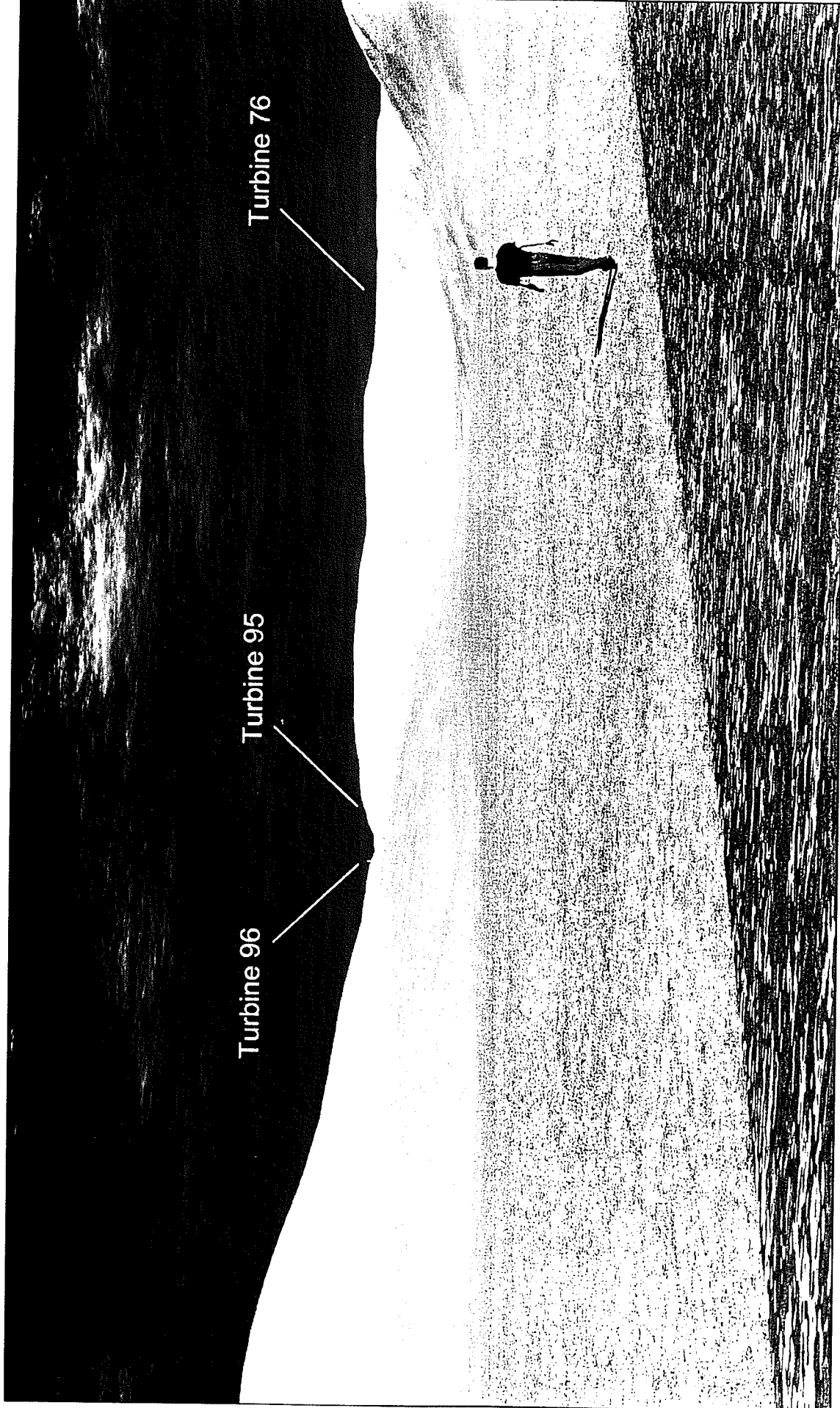
Turbine 125 Turbine 124 Turbine 123

Note: Turbines 123, 124, and 125 are actually situated behind the ridgeline seen in this simulation. Because the visible portions are so small and could potentially be overlooked by the reviewer, the turbines have been superimposed in front of the ridgeline to illustrate their relative scale of appearance. Only the portions of the turbines above the ridgeline would be seen from the viewpoint.



Klondike III Wind Project Figure R-18 *Viewpoint 1 Visual Simulation*

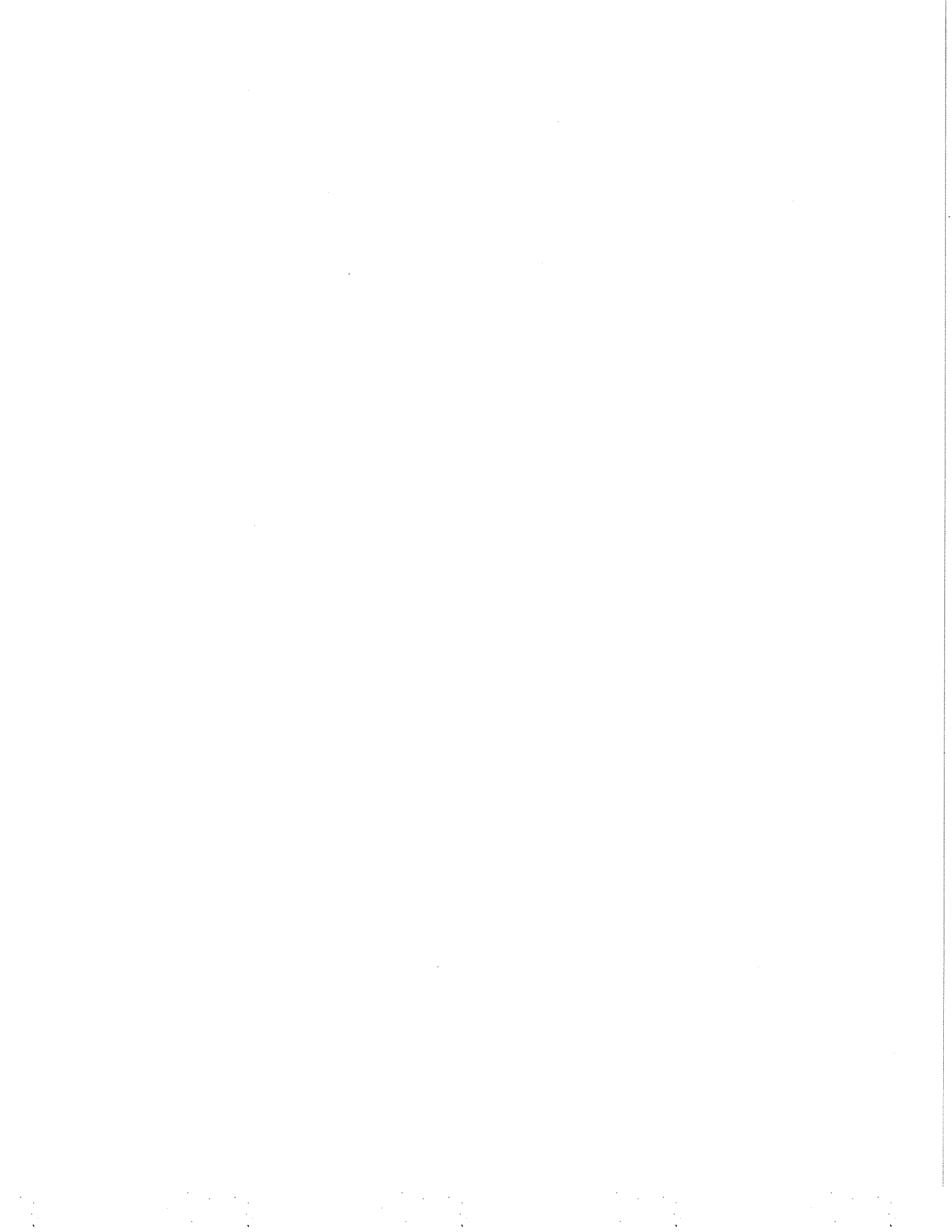


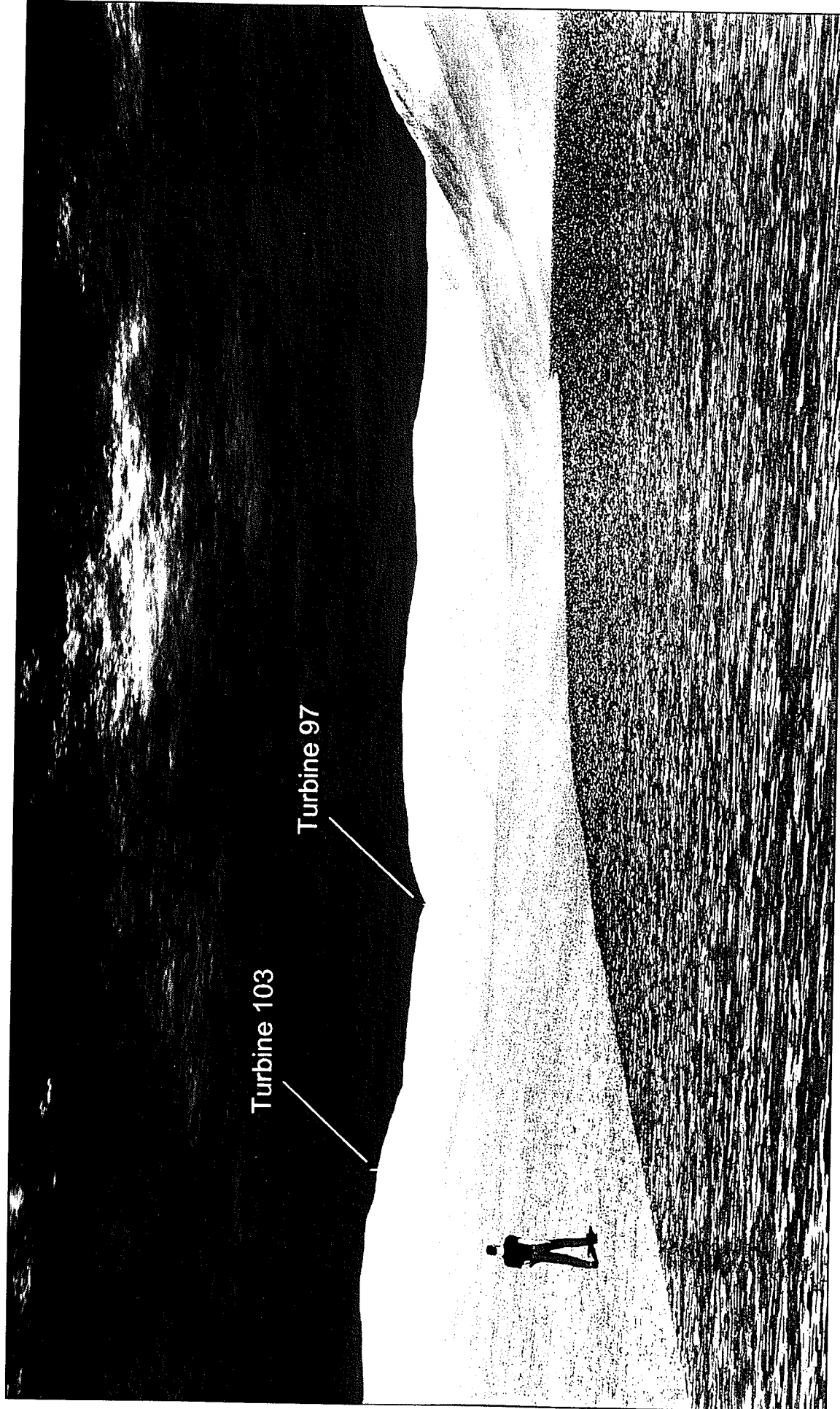


Note: Turbines 76, 95, and 96 are actually situated behind the ridgeline seen in this simulation. Because the visible portions are so small and could potentially be overlooked by the reviewer, the turbines have been superimposed in front of the ridgeline to illustrate their relative scale of appearance. Only the portions of the turbines above the ridgeline would be seen from the viewpoint.



Klondike III Wind Project Figure R-19 Viewpoint 2 Visual Simulation

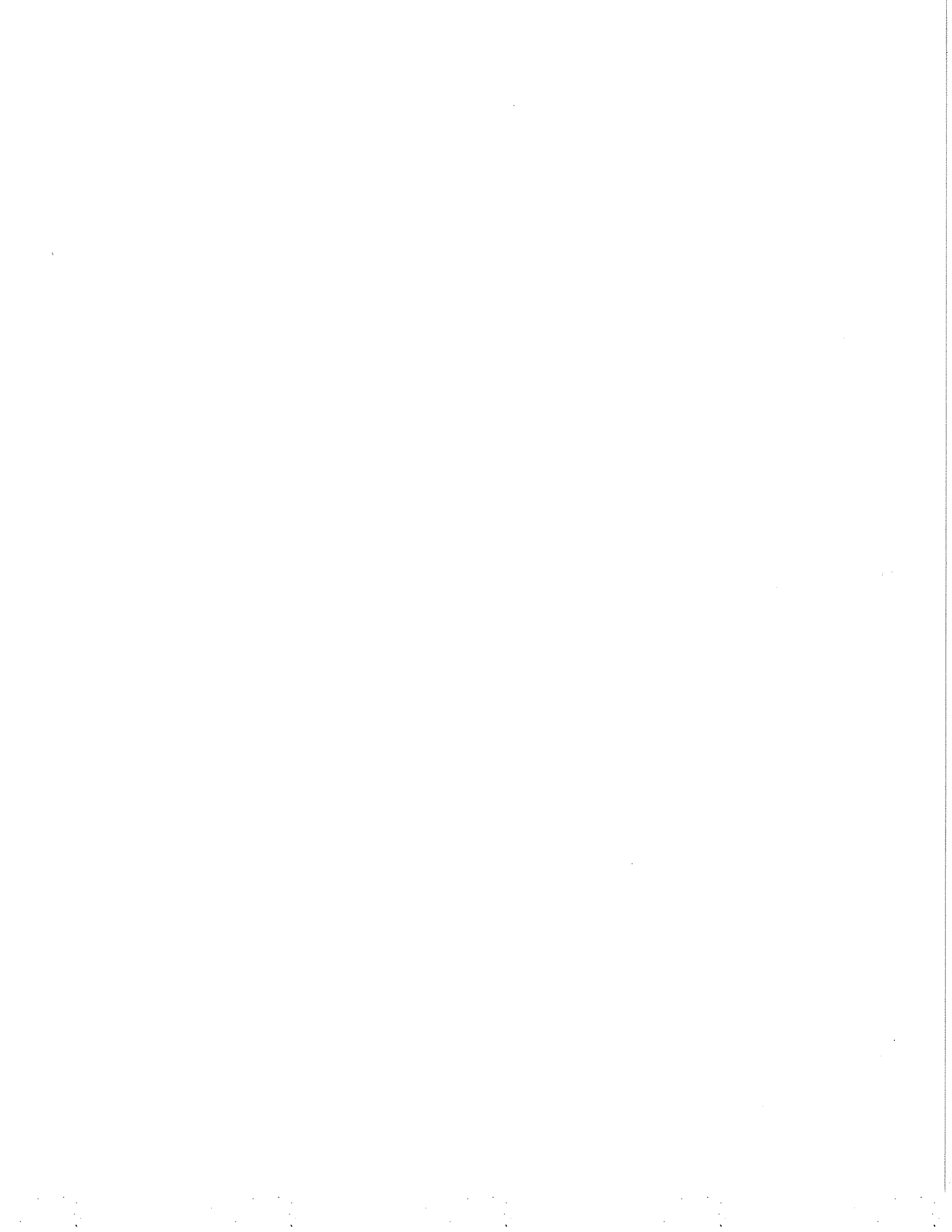


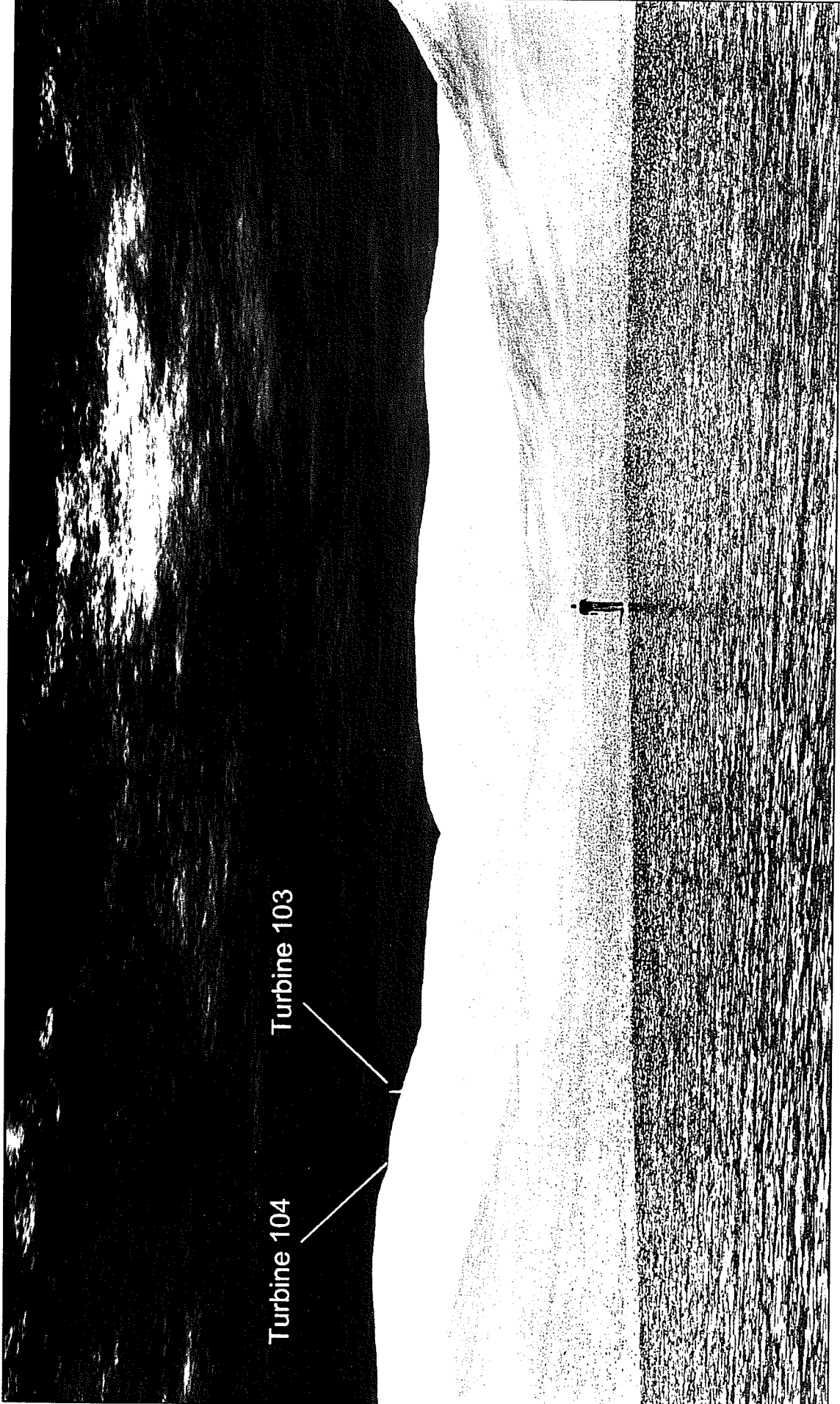


Note: Turbines 97 and 103 are actually situated behind the ridgeline seen in this simulation. Because the visible portions are so small and could potentially be overlooked by the reviewer, the turbines have been superimposed in front of the ridgeline to illustrate their relative scale of appearance. Only the portions of the turbines above the ridgeline would be seen from the viewpoint.

Klondike III Wind Project Figure R-20 Viewpoint 3 Visual Simulation



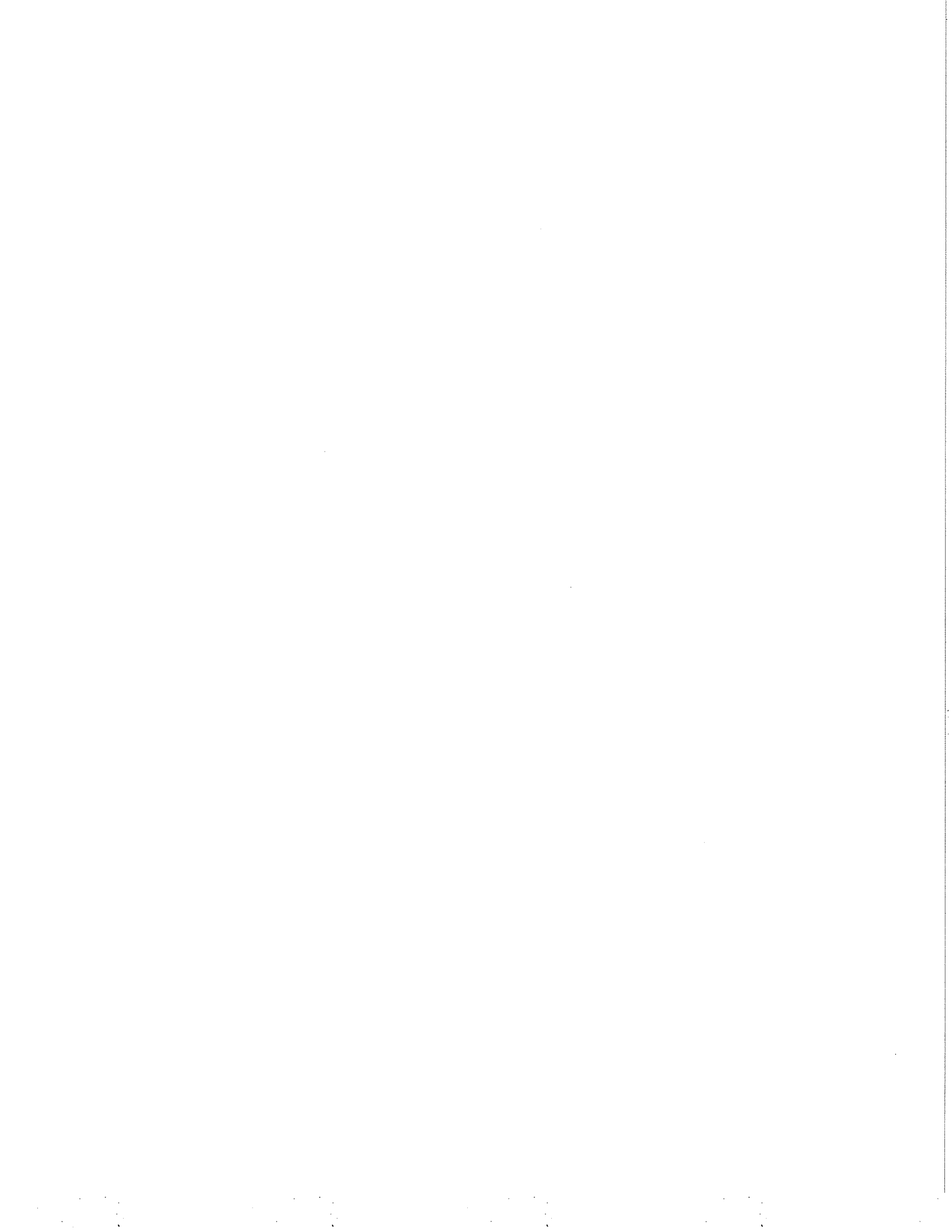


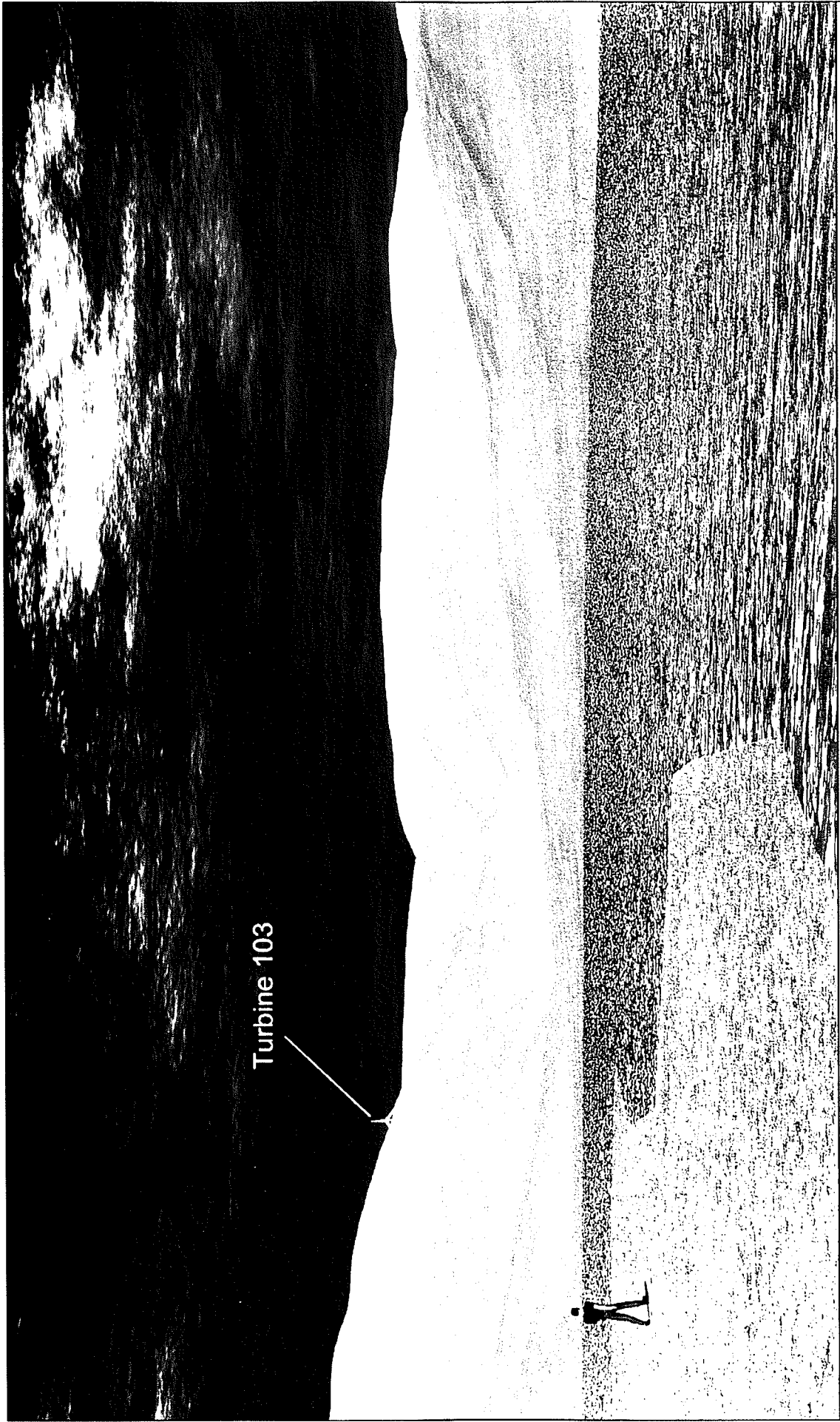


Klondike III Wind Project Figure R-21 Viewpoint 4 Visual Simulation

Note: Turbines 103 and 104 are actually situated behind the ridgeline seen in this simulation. Because the visible portions are so small and could potentially be overlooked by the reviewer, the turbines have been superimposed in front of the ridgeline to illustrate their relative scale of appearance. Only the portions of the turbines above the ridgeline would be seen from the viewpoint.





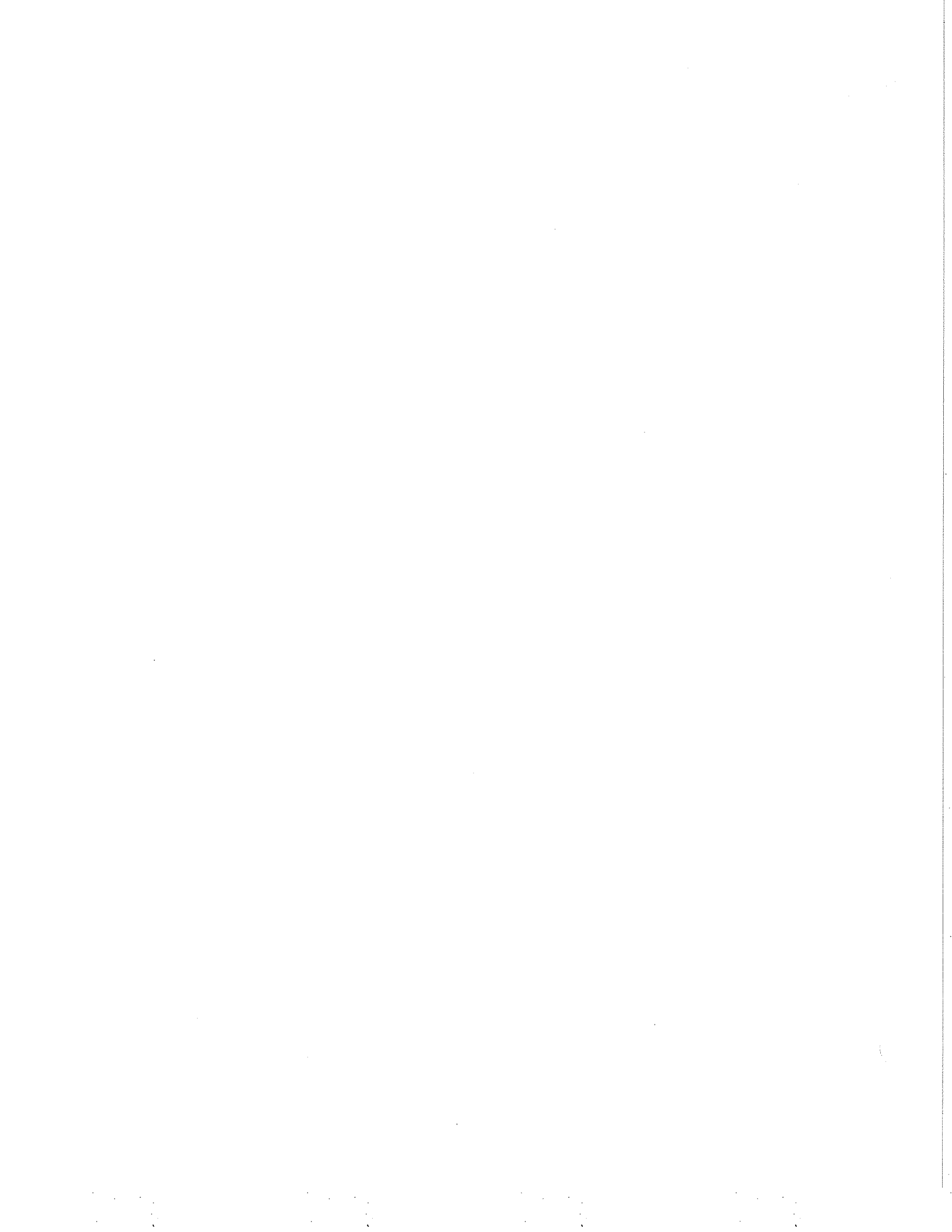


Turbine 103

Note: Turbine 103 is actually situated behind the ridgeline seen in this simulation. Because the visible portion is so small and could potentially be overlooked by the reviewer, the turbines have been superimposed in front of the ridgeline to illustrate the relative scale of appearance. Only the portions of the turbine above the ridgeline would be seen from the viewpoint.



**Klondike III Wind Project
Figure R-22
Viewpoint 5 Visual Simulation**



APPENDIX R-2

Management Plan Excerpts

Management Plan for the Columbia River Gorge National Scenic Area

Proposed Two Rivers Resource Management Plan Record of Decision

John Day Proposed Management Plan, Two Rivers and John Day Resource Management Plan Amendments and Final Environmental Impact Statement

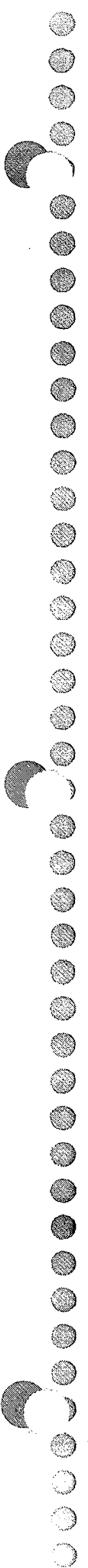
John Day River Management Plan, Two Rivers, John Day and Baker Resource Management Plan Amendments Record of Decision

Management and Use Plan Update Final Environmental Impact Statement Oregon National Historic Trail and Mormon Pioneer National Historic Trail

Lower Deschutes River Management Plan and Final Environmental Impact Statement

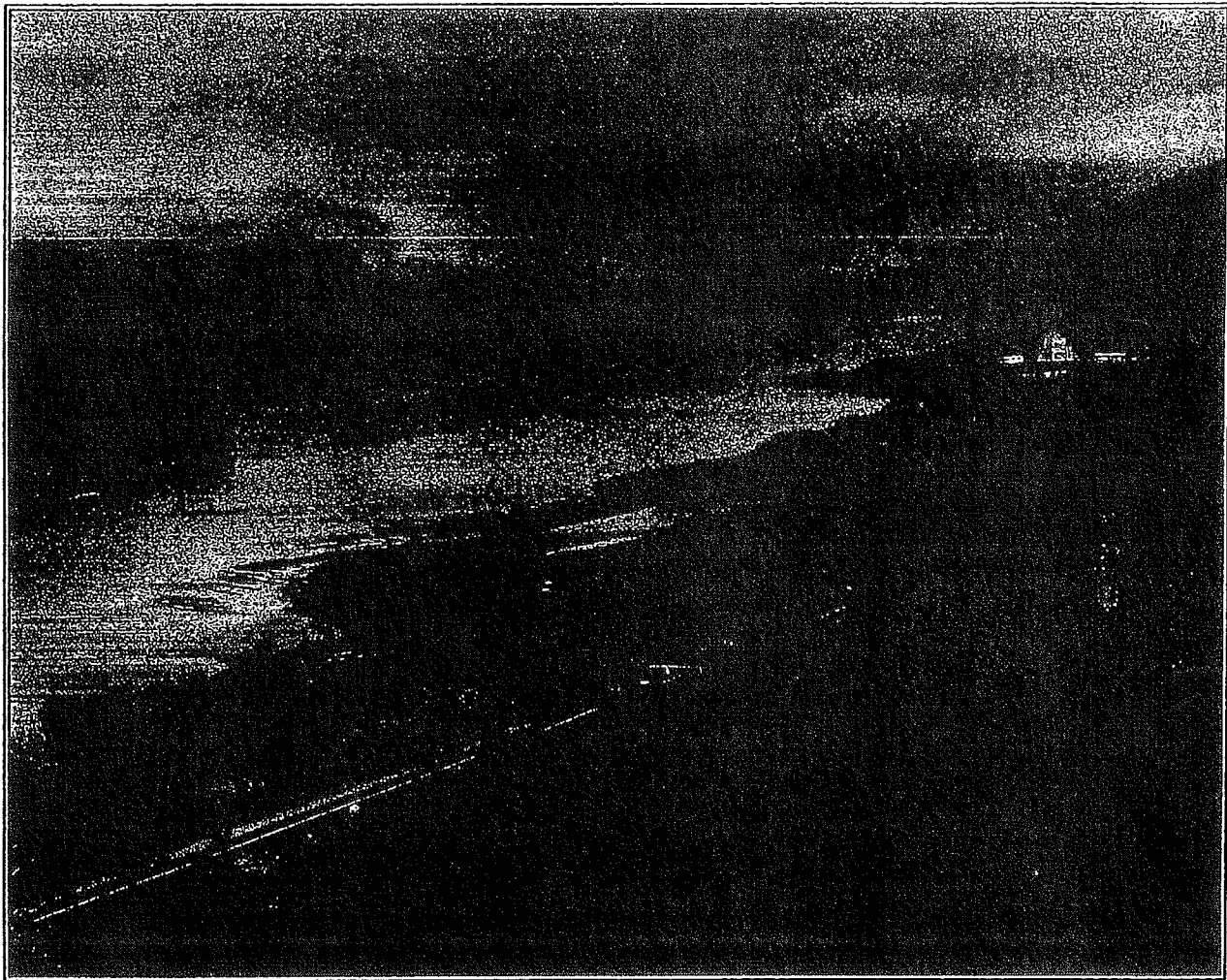
Lower Klickitat River Wild and Scenic River Management Plan and Final Environmental Impact Statement

Journey Through Time Management Plan



MANAGEMENT PLAN

for the Columbia River Gorge National Scenic Area



Please return to:
Portland Office Library
David Evans and Associates
2100 S.W. River Parkway
Portland, OR 97201



SEPTEMBER 1992

PART I

**Resource Protection
and Enhancement**

Scenic Resources

The Columbia Gorge is world renowned for its outstanding scenic beauty. The sea level chasm the Columbia River has cut through the Cascade Mountains, and the dramatic diverse landscapes it contains, create unparalleled grandeur. Within an hour's drive, one can witness towering cliffs and forests, orchards and farms, and sweeping grasslands. It is widely acknowledged that the need to protect the special scenic resources of the Gorge provided the major impetus for establishing the Scenic Area.

SCENIC AREA ACT PROVISIONS

The Scenic Area Act's first purpose, as stated in Section 3(1), includes a mandate to protect and enhance scenic resources of the Columbia River Gorge. The Act directs the Gorge Commission to inventory the scenic resources of the Gorge and protect them by establishing guidelines and designating areas as open space. Open spaces, which the Gorge Commission is charged to protect and enhance [Section 6(d)], include: "scenic. . . areas; . . . outstanding scenic views and sites; . . . and Federal and State wild, scenic, and recreation waterways" [Section 2(1)].

INVENTORIES AND STUDIES

Six maps were developed in the process of inventorying scenic resources. These maps are based on the Forest Service Visual Management System. They have been used to develop policies and guidelines that respond to the various levels of visual significance and sensitivity within the Gorge, and that highlight protection of landscapes seen by large numbers of people.

The first inventory map created, "Visual Attributes," identifies 12 predominant landscape types found in the Gorge, ranging from rural townscapes to cliffs.

The "Landscape Diversity" map gauges the variety of visual features in the landscape. A basic premise of the visual management system is that visual diversity is a key element of those landscapes people find most visually appealing and interesting. Much of the Gorge, with its steep landforms, forested slopes, waterfalls, pastoral areas, and rural townscapes, has outstanding visual diversity.

A "Seen Areas" map shows which areas are visible from key viewing areas. The key viewing areas are important public vantage points from which

Gorge landscapes are viewed. Scenic protection of lands seen from these vantage points has been emphasized since the inception of the Scenic Area planning process. The Management Plan continues this direction.

The "Landscape Significance" map combines the "Seen Areas" and "Landscape Diversity" maps, based on the concept that the most significant landscapes are those that are both visually diverse and seen from important viewpoints.

The "Visual Absorption Capability" map displays the relative ability of different Gorge landscapes to absorb change (through new development) without diminishing their scenic qualities. It is based primarily on the degree of slope and amount of vegetative cover.

"Landscape Sensitivity," the last of the six inventory maps, combines "Landscape Significance" with "Visual Absorption Capability," based on the assumption that the most visually sensitive lands are those that are both highly significant and most vulnerable to visual impacts from new development.

In addition to these inventory maps, a detailed visual inventory of the three major travel corridors in the Gorge (Interstate 84, Washington State Route 14, and the Historic Columbia River Highway) was undertaken. The "Columbia River Gorge National Scenic Area Corridor Visual Inventory," completed in April 1990, was an interagency study conducted by the Gorge Commission, the Forest Service, and the Departments of Transportation

of Oregon and Washington. It inventories different types of landscapes the corridors traverse, highly scenic features, discordant features and enhancement opportunities, places with opportunities for viewpoints and recreation sites, and other important visual aspects of the corridors' foregrounds. Specific recommendations developed during this inventory influenced the direction and substance of the "Scenic Travel Corridors" goals, objectives, and policies in the Management Plan. The landscape character types identified in the study were also an important source of information used in mapping and defining landscape settings. (Landscape settings definitions and mapping are described at the beginning of that section of this chapter.)

KEY ISSUES

Several major issues had to be addressed in developing scenic resource protection provisions. One of the greatest challenges has been the need to establish guidelines to accommodate new development in a manner that protects Gorge scenic quality in the face of significant growth pressures for residences and related development. These pressures result from a number of factors, including substantial growth of the Portland/Vancouver metropolitan area and the rapid development of the Gorge as the leading windsurfing area in North America, if not the world. The fact that the Gorge consists of many steep areas where development can be highly visible, combined with the desire for new residences with

panoramic views, poses major challenges. The need to develop provisions that address long-term, cumulative effects of new development on the character of existing landscapes is as crucial as measures addressing the impacts of individual developments.

Another issue involves meeting the Scenic Area Act's mandate to increase recreation river access while protecting scenic resources. Much of the shoreline area is both significant and sensitive from a scenic standpoint. This challenge required specific policies and guidelines that accommodate additional river-oriented recreation in a careful and sensitive manner.

OVERVIEW OF SCENIC RESOURCES PROVISIONS

In response to these mandates and challenges, the Gorge Commission and Forest Service have developed specific programs to address protection of

scenic quality on lands seen from key viewing areas, maintenance of existing landscape settings, establishment of scenic travel corridors, and provisions for signage. The goals, objectives, policies and guidelines of this chapter provide a framework to guide actions of federal, state, and local agencies and private entities that may affect scenic resources of the Scenic Area. This chapter is divided into the following sections:

GMA Provisions:

- Provisions For All New Development
- Key Viewing Areas
- Landscape Settings
- Scenic Travel Corridors
- Signs

SMA Provisions:

This section includes SMA provisions for all scenic resources.

GMA PROVISIONS

OVERALL SCENIC PROVISIONS

This section includes overall scenic provisions that apply to all new proposed developments in the GMA regardless of whether other specific provisions related to key viewing areas, landscape settings, scenic travel corridors, or signs apply. Basic site plan requirements for all new development are included in this section.

GMA Goal

Protect and enhance the scenic resources of the Scenic Area.

GMA Objectives

1. Encourage the establishment of programs offering incentives and other means of implementing scenic resource enhancement objectives and policies for existing

uses, targeting private landowners, railroad and utility companies, and transportation and other public agencies.

2. Encourage the establishment of a Scenic Area public land conservancy and/or nonprofit land trust to acquire fee interest, conservation easements, and other interests in properties whose preservation is important for protection of Gorge landscape settings and scenic values.

GMA Policies

1. Except for production and/or development of mineral resources, nothing in the key viewing areas or landscape settings guidelines in this chapter shall be used as grounds to deny proposed uses otherwise authorized by the land use designation. However, the guidelines may affect the siting, location, size, and other design features of proposed developments, and compliance with them is mandatory.
2. The goals, objectives, policies, and guidelines in this chapter shall not affect agriculture or forest practices, nor equipment or structures (other than buildings) associated with such practices, such as irrigation equipment or orchard fans.
3. New development shall be compatible with its designated landscape setting (as described in the "Landscape Settings" section of this chapter). Expansion of existing development shall be compatible with its landscape setting to the maximum extent practicable.
4. New production and/or development of mineral resources and expansion of existing quarries shall include a reclamation plan to restore the site to a natural appearance that blends with and emulates surrounding landforms to the maximum extent practicable.
5. New development shall retain existing landforms and strive to fit into the existing topography to the maximum extent feasible.
6. The Gorge Discovery Center shall be designed and constructed to be visually subordinate as seen from key viewing areas and compatible with its landscape setting to the maximum extent practicable, consistent with its mission.

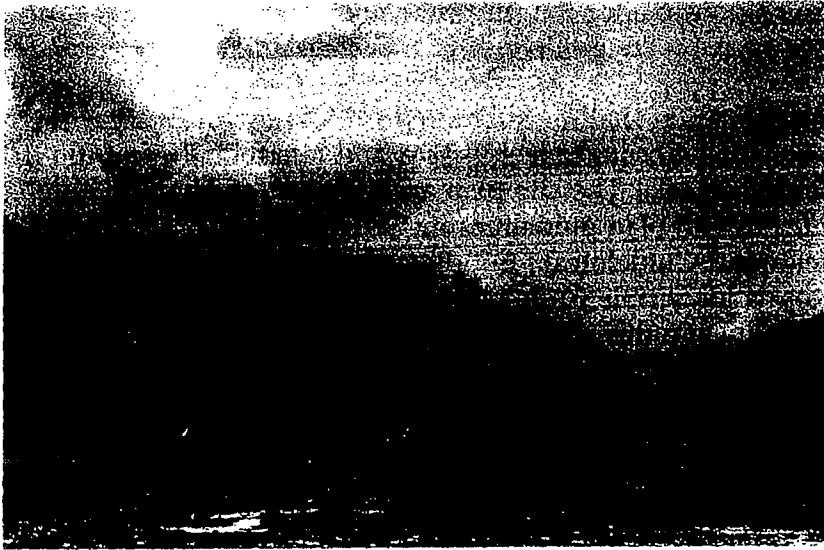
GMA Guidelines

1. New buildings and roads shall be sited and designed to retain the existing topography and to reduce necessary grading to the maximum extent practicable.
2. New buildings shall be generally consistent with the height and size of existing nearby development.

3. Project applicants shall be responsible for the proper maintenance and survival of any planted vegetation required by the guidelines in this chapter.
4. A site plan and land use application shall be submitted for all new buildings, except for buildings smaller than 60 square feet in area and less than 18 feet in height, as measured at the roof peak. The site plan and application shall include all information required in the site plan guidelines in "Review Uses" (Part II, Chapter 7: General Policies and Guidelines). Supplemental requirements for developments proposed on lands visible from key viewing areas are included in the key viewing areas guidelines in this chapter.
5. For all proposed development, the determination of compatibility with the landscape setting shall be based on information submitted in the site plan.
6. For all new production and/or development of mineral resources and expansion of existing quarries, a reclamation plan is required to restore the site to a natural appearance that blends with and emulates surrounding landforms to the maximum extent practicable.

Such a plan shall be approved by the appropriate state agency for uses under its jurisdiction, or approved by the local government, with technical assistance from applicable state agencies, for uses not under state agency jurisdiction. At a minimum, such reclamation plans shall include:

- A. A map of the site, at a scale of 1 inch equals 200 feet (1:2,400) or a scale providing greater detail, with 10-foot contour intervals or less, showing pre-mining existing grades and post-mining final grades; locations of topsoil stockpiles for eventual reclamation use; location of catch basins or similar drainage and erosion control features employed for the duration of the use; and the location of storage, processing, and equipment areas employed for the duration of the use.
- B. Cross-sectional drawings of the site showing pre-mining and post-mining grades.
- C. Descriptions of the proposed use, in terms of estimated quantity and type of material removed, estimated duration of the use, processing activities, etc.
- D. Description of drainage/erosion control features to be employed for the duration of the use.
- E. A landscaping plan providing for revegetation consistent with the vegetation patterns of the subject landscape setting, indicating the species, number, size, and location of plantings for the final reclaimed grade, as well as a description of irrigation provisions or other measures necessary to ensure the survival of plantings.



*Windsurfers challenge
the Gorge winds in
stormy weather*

KEY VIEWING AREAS

Key viewing areas are important public viewpoints, travelways, parks, and other areas open to the public that offer opportunities to view Gorge scenery. A primary emphasis of the scenic resources protection program is the preservation of scenic quality for lands visible from key viewing areas. At minimum, new development proposed in the viewshed of key viewing areas is to be pursued in a manner that blends the development with its surroundings. Design measures are provided to ensure that new development will be visually subordinate. These include provisions for siting, use of topographic features and vegetation for screening, and color and reflectivity of exterior building materials.

Key viewing areas are identified in the glossary.

GMA Goal

Emphasize protection and enhancement of Gorge landscapes seen from key viewing areas.

GMA Objectives

1. Establish scenic enhancement programs prioritizing enhancement of lands seen from key viewing areas.
2. Establish a program to phase-out existing quarries and associated activities and develop reclamation plans for such quarries at sites where the Gorge Commission determines that such uses adversely affect scenic resources on land visible from

key viewing areas. The Gorge Commission shall initiate this objective by inventorying existing quarries visible from key viewing areas. Phase-out plans may require some additional quarrying for a limited time to best achieve contours that blend with surrounding landforms. Phase-out and reclamation plans for particular quarries shall include a specified time period for completion, not to exceed 5 years from the commencement of such plans.

3. Encourage mining reclamation methods and features that enhance wildlife habitat and wetlands, ameliorate visual impacts of existing quarries, and accelerate achievement of desired visual quality objectives.
4. Encourage use of planned unit developments, clustering, lot reconfiguration and consolidation, and other techniques to reduce visual impacts of new development on lands that are visible from key viewing areas and that possess high or critical visual sensitivity.
5. Encourage plantings of native species or species characteristic of the landscape setting to screen existing development that is not visually subordinate on lands that are visible from key viewing areas and that possess high or critical visual sensitivity.

GMA Policies

1. Important public roads, parks, and other vantage points providing public scenic viewing opportunities shall be designated as key viewing areas, as identified in the glossary of the Management Plan.
2. Except for new production and/or development of mineral resources, new development on lands seen from key viewing areas shall be visually subordinate to its landscape setting. This policy shall not apply to specified developed settings that are not visually sensitive (as identified in the "Landscape Settings" section), rehabilitation or modifications to significant historic structures, shorelines on the main stem of the Columbia River that adjoin Urban Areas, or other developments expressly exempted from this requirement in this chapter.
3. New utility transmission lines, transportation and communication facilities, docks and piers, and repairs and maintenance of existing lines, roads and facilities shall be visually subordinate as seen from key viewing areas to the maximum extent practicable.
4. New buildings shall be prohibited on steeply sloping lands visible from key viewing areas.
5. Proposed projects involving substantial grading on moderately to steeply sloping lands visible from key viewing areas shall include a grading plan addressing

visual impacts of grading activities. All graded areas shall be revegetated to the maximum extent practicable.

6. Development along the shoreline of the Columbia River and on immediately adjacent lands shall be limited to water-dependent development and water-related recreation development.
7. New production and/or development of mineral resources on sites visible in the foreground or middle ground from key viewing areas shall be permitted if fully screened from view from those key viewing areas. New production and/or development of mineral resources on sites visible in the background from key viewing areas shall be permitted if visually subordinate to its setting as seen from those key viewing areas.
8. Expansion of existing quarries on sites visible from key viewing areas shall be permitted if visually subordinate to its setting as seen from key viewing areas. Existing quarries are those determined not to be discontinued, pursuant to policy 7 in "Existing Uses" (Part II, Chapter 7: General Policies and Guidelines). Expansion refers to lateral expansion (expansion of mining activities into land surfaces previously unaffected by mining).
9. In addition to the guidelines contained in this section, applicable design guidelines specified for a particular landscape setting shall be used to ensure that new development on lands seen from key viewing areas is visually subordinate to its setting in a manner responsive to the unique character of that setting.

GMA Guidelines

1. Size, height, shape, color, reflectivity, landscaping, siting or other aspects of proposed development shall be evaluated to ensure that such development is visually subordinate to its setting as seen from key viewing areas.
2. The extent and type of conditions applied to a proposed development to achieve visual subordination should be proportionate to its potential visual impacts as seen from key viewing areas. Primary factors influencing the degree of potential visual impact include: the amount of area of the building site exposed to key viewing areas, the degree of existing vegetation providing screening, the distance from the building site to the key viewing areas from which it is visible, the number of key viewing areas from which it is visible, and the linear distance along the key viewing areas from which the building site is visible (for linear key viewing areas, such as roads). Written reports on determination of visual subordination and final conditions of approval shall include findings addressing each of these factors.
3. Determination of potential visual effects and compliance with visual subordination policies shall include consideration of the cumulative effects of proposed developments.

4. For all buildings, roads, or mining and associated activities proposed on lands visible from key viewing areas, the following supplemental site plan information shall be submitted in addition to the site plan requirements in "Review Uses" (Part II, Chapter 7: General Policies and Guidelines) and guideline 6 in "Provisions for All New Development" in this chapter for mining and associated activities:
 - A. For buildings, a description of the proposed building(s)' height, shape, color, exterior building materials, exterior lighting, and landscaping details (type of plants used; number, size, locations of plantings; and any irrigation provisions or other measures to ensure the survival of landscaping planted for screening purposes).
 - B. Elevation drawings showing the appearance of proposed building(s) when built and surrounding final ground grades for all buildings over 400 square feet in area.
5. For proposed mining and associated activities on lands visible from key viewing areas, in addition to submittal of plans and information pursuant to guideline 6 in the "Provisions for All New Development" section and guideline 4 in the "Key Viewing Areas" section of this chapter, project applicants shall submit perspective drawings of the proposed mining areas as seen from applicable key viewing areas.
6. New buildings or roads shall be sited on portions of the subject property that minimize visibility from key viewing areas, unless the siting would place such development in a buffer specified for protection of wetlands, riparian corridors, sensitive plants, or sensitive wildlife sites or would conflict with guidelines to protect cultural resources. In such situations, development shall comply with this guideline to the maximum extent practicable.
7. In siting new buildings and roads, use of existing topography and vegetation to screen such development from key viewing areas shall be given priority over other means of achieving visual subordination, such as planting new vegetation or using artificial berms to screen the development from key viewing areas.
8. Driveways and buildings shall be designed and sited to minimize grading activities and visibility of cut banks and fill slopes from key viewing areas.
9. The exterior of buildings on lands seen from key viewing areas shall be composed of nonreflective materials or materials with low reflectivity, unless the structure would be fully screened from all key viewing areas by existing topographic features.
10. Exterior lighting shall be directed downward and sited, hooded, and shielded such that it is not highly visible from key viewing areas. Shielding and hooding materials shall be composed of non-reflective, opaque materials.

11. Additions to existing buildings smaller in total square area than the existing building may be the same color as the existing building. Additions larger than the existing building shall be of colors specified in the design guidelines for the subject property's landscape setting.
12. Rehabilitation of or modifications to existing significant historic structures shall be exempted from visual subordination requirements for lands seen from key viewing areas. To be eligible for such exemption, the structure must be included in, or eligible for inclusion in, the National Register of Historic Places or be in the process of applying for a determination of significance pursuant to such regulations. Rehabilitation of or modifications to structures meeting this guideline shall be consistent with National Park Service regulations for such structures.
13. The silhouette of new buildings shall remain below the skyline of a bluff, cliff, or ridge as seen from key viewing areas. Variances to this guideline may be granted if application of the guideline would leave the owner without a reasonable economic use. The variance shall be the minimum necessary to allow the use and may be applied only after all reasonable efforts to modify the design, building height, and site to comply with the guideline have been made.
14. An alteration to a building built before November 17, 1986, that already protrudes above the skyline of a bluff, cliff, or ridge as seen from a key viewing area, may itself protrude above the skyline if:
 - A. The altered building, through use of color, landscaping and/or other mitigation measures, contrasts less with its setting than before the alteration, and
 - B. There is no practicable alternative means of altering the building without increasing the protrusion.
15. New main lines on lands visible from key viewing areas for the transmission of electricity, gas, oil, other fuels, or communications, except for connections to individual users or small clusters of individual users, shall be built in existing transmission corridors unless it can be demonstrated that use of existing corridors is not practicable. Such new lines shall be underground as a first preference unless it can be demonstrated to be impracticable.
16. New communication facilities (antennae, dishes, etc.) on lands visible from key viewing areas that require an open and unobstructed site shall be built upon existing facilities unless it can be demonstrated that use of existing facilities is not practicable.
17. New communications facilities may protrude above a skyline visible from a key viewing area only upon demonstration that:

- A. The facility is necessary for public service,
 - B. The break in the skyline is seen only in the background, and
 - C. The break in the skyline is the minimum necessary to provide the service.
18. Overpasses, safety and directional signs, and other road and highway facilities may protrude above a skyline visible from a key viewing area only upon a demonstration that:
- A. The facility is necessary for public service, and
 - B. The break in the skyline is the minimum necessary to provide the service.
19. Except for water-dependent development and for water-related recreation development, development shall be set back 100 feet from the ordinary high water mark of the Columbia River below Bonneville Dam, and 100 feet from the normal pool elevation of the Columbia River above Bonneville Dam, unless the setback would render a property unbuildable. In such cases, variances to this guideline may be authorized.
20. New buildings shall not be permitted on lands visible from key viewing areas with slopes in excess of 30 percent. Variances to this guideline may be authorized if the guideline's application would render a property unbuildable. In determining the slope, the average percent slope of the proposed building site shall be used.
21. All proposed structural development involving more than 100 cubic yards of grading on sites visible from key viewing areas and with slopes between 10 and 30 percent shall include submittal of a grading plan. This plan shall be reviewed by the local government for compliance with key viewing area policies. The grading plan shall include the following:
- A. A map of the site, prepared at a scale of 1 inch equals 200 feet (1:2,400) or a scale providing greater detail, with contour intervals of at least 5 feet, including:
 - (1) Existing and proposed final grades.
 - (2) Location of all areas to be graded, with cut banks and fill slopes delineated.
 - (3) Estimated dimensions of graded areas.
 - B. A narrative description (may be submitted on the grading plan site map and accompanying drawings) of the proposed grading activity, including:

- (1) Its purpose.
 - (2) An estimate of the total volume of material to be moved.
 - (3) The height of all cut banks and fill slopes.
 - (4) Provisions to be used for compactions, drainage, and stabilization of graded areas. (Preparation of this information by a licensed engineer or engineering geologist is recommended.)
 - (5) A description of all plant materials used to revegetate exposed slopes and banks, including the species, number, size, and location of plants, and a description of irrigation provisions or other measures necessary to ensure the survival of plantings.
 - (6) A description of any other interim or permanent erosion control measures to be used.
22. Expansion of existing quarries and new production and/or development of mineral resources proposed on sites more than 3 miles from the nearest key viewing areas from which it is visible may be allowed upon a demonstration that:
- A. The site plan requirements for such proposals pursuant to this chapter have been met.
 - B. The area to be mined and the area to be used for primary processing, equipment storage, stockpiling, etc. associated with the use would be visually subordinate as seen from any key viewing areas.
 - C. A reclamation plan to restore the site to a natural appearance that blends with and emulates surrounding landforms to the maximum extent practicable has been approved. The plan shall be approved by the applicable state agency with jurisdiction, or approved by the local government, with technical assistance from applicable state agencies, for uses not under state agency jurisdiction. At minimum, the reclamation plan shall comply with guideline 6 in the "Provisions for All New Development" section of this chapter.
 - D. A written report on a determination of visual subordination has been completed, with findings addressing the extent of visibility of proposed mining activities from key viewing areas, including:
 - (1) A list of key viewing areas from which exposed mining surfaces (and associated facilities/activities) would be visible.

- (2) An estimate of the surface area of exposed mining surfaces that would be visible from those key viewing areas.
 - (3) The distance from those key viewing areas and the linear distance along those key viewing areas from which proposed mining surfaces are visible.
 - (4) The slope and aspect of mining surfaces relative to those portions of key viewing areas from which they are visible.
 - (5) The degree to which potentially visible mining surfaces are screened from key viewing areas by existing vegetation, including winter screening considerations.
 - (6) The degree to which potentially visible mining surfaces would be screened by new plantings, berms, etc. and appropriate time frames to achieve such results, including winter screening considerations.
23. Unless addressed by guideline 22 of this section, new production and/or development of mineral resources may be allowed upon a demonstration that:
- A. The site plan requirements for such proposals pursuant to this chapter have been met.
 - B. The area to be mined and the area used for primary processing, equipment storage, stockpiling, etc., associated with the use would be fully screened from any key viewing area.
 - C. A reclamation plan to restore the area to a natural appearance that blends with and emulates surrounding landforms to the maximum extent practicable has been approved by the applicable state agency with jurisdiction, or approved by the local government, with technical assistance from applicable state agencies, for uses not under state agency jurisdiction. At minimum, the reclamation plan shall comply with guideline 6 of the "Provisions for All New Development" section of this chapter.
24. An interim time period to achieve compliance with visual subordination requirements for expansion of existing quarries and development of new quarries located more than 3 miles from the nearest visible key viewing area shall be established before approval. The interim time period shall be based on site-specific topographic and visual conditions, but shall not exceed 3 years beyond the date of approval.
25. An interim time period to achieve compliance with full screening requirements for new quarries located less than 3 miles from the nearest visible key viewing area shall be established before approval. The interim time period shall be

based on site-specific topographic and visual conditions, but shall not exceed 1 year beyond the date of approval. Quarrying activity occurring before achieving compliance with full screening requirements shall be limited to activities necessary to provide such screening (creation of berms, etc.).

26. Compliance with specific approval conditions to achieve visual subordination (such as landscaped screening) shall occur within a period not to exceed 2 years after the date of development approval. This guideline shall apply to all development regulated by this section except mining and associated activities.

*Waterfall on Dog
Creek in Washington*



LANDSCAPE SETTINGS

The Scenic Area is a region of exceptional beauty. To a large degree, this visual richness comes from the diversity of Gorge landscape settings, each with its unique character. Landscape settings are the combination of land uses, landforms, and vegetation patterns that distinguish an area in appearance and character from other portions of the Scenic Area.

The landscape settings goals, policies, and guidelines included in this section represent a long-term vision of scenic protection as expressed in the landscape. Design guidelines are provided to ensure that new developments are compatible with and maintain the character of their setting. They provide specific measures to achieve compliance with visual subordination standards for lands seen from key

viewing areas in a manner responsive to the distinct character of each setting. These guidelines are not intended to limit imagination, variety, or creative design solutions.

Thirteen distinct landscape settings were identified and mapped. The landscape settings map (back pocket), in combination with the design guidelines, will indicate which guidelines apply to a specific area.

GMA Goals

1. Maintain the diversity of Gorge landscapes to protect and enhance the Gorge's scenic beauty.
2. Retain the existing character of the Gorge's rural landscapes and two Rural Centers (Corbett and Skamania).
3. Protect existing riverfront landscape settings when providing additional recreational river access and ensure that riverfront recreation is provided in a manner compatible with those settings.

GMA Policies

1. New developments shall be compatible with their landscape setting and maintain the integrity of that setting. Expansion of existing developments shall be compatible with their landscape setting and maintain the integrity of that setting to the maximum extent practicable.
2. These goals, policies, and guidelines apply only to developments and uses subject to review, pursuant to the Management Plan. While agricultural and forest practices influence landscape settings, they are not subject to the goals, policies, and guidelines for landscape settings.
3. Because of the dynamic nature of landscape settings, these settings shall be reevaluated in the periodic plan review process. Substantial changes, particularly with respect to changes of large areas between wooded and agricultural settings, shall be reflected in periodic revisions to the Management Plan.
4. Maintenance of landscape settings shall be a key consideration in determining minimum parcel sizes for GMA land use designations. Recommended minimum parcel sizes for new land divisions to maintain landscape setting character are included where applicable in the landscape settings descriptions. The Gorge Commission shall use these recommendations when considering minimum parcel sizes for either plan amendments or plan updates.

5. The "Compatible Recreation Use Guidelines" for each landscape setting shall provide the basis for evaluating cumulative effects of recreation proposals on landscape settings, including types and intensities of recreation uses.

GMA Descriptions and Guidelines

Pastoral

Overview and Land Use

Pastoral settings are essentially agrarian in character, typified by areas of pastures and intensive agriculture. This setting includes areas where orchards, vineyards, row crops, and irrigated pasture predominate the landscape. This setting often includes woodlots and scattered rural residential development. Visual features distinguishing this setting include large expanses of cultivated fields and pastures, punctuated by clusters of farm accessory buildings and hedgerows or poplar rows defining distinct fields. Some small parcels with residences occur, but many parcels range between forty and several hundred acres in size.

Landforms

These settings usually occur on level ground or gently rolling terrain. Some of these landscapes are found on relatively flat terraces and benches at the top of steep slopes that form the walls of the Gorge. Other pastoral areas occur in the fertile valleys of the major tributaries flowing into the Columbia River.

Vegetation

Non-native vegetation patterns are predominant. They include alfalfa fields and irrigated pasture, vineyards and fruit orchards, row crops, hedgerows, and poplar rows. Scattered woodlots interspersed throughout this setting reflect the natural vegetation of the portion of the Gorge in which they are located (e.g. Oregon oak and ponderosa pine in the eastern Gorge; Douglas-fir, big leaf maple, and western red cedar in the west).

Compatible Recreation Use Guideline

Resource-based recreation uses of a very low-intensity or low-intensity nature (as defined in the "Recreation Intensity Classes" section of Part I, Chapter 4: Recreation Resources), occurring infrequently in the landscape, are compatible with this setting.

Recommended Parcel Size for New Land Divisions

40 acres.

Design Guidelines

1. New development shall be compatible with the general scale (height, dimensions, overall mass) of development in the vicinity. Expansion of existing development shall comply with this guideline to the maximum extent practicable.
2. Accessory structures, outbuildings, and access ways shall be clustered together as much as possible, particularly towards the edges of existing meadows, pastures, and farm fields.
3. In portions of this setting visible from key viewing areas, the following guidelines shall be employed to achieve visual subordination for new development and expansion of existing development:
 - A. Except as is necessary for site development or safety purposes, the existing tree cover screening the development from key viewing areas shall be retained.
 - B. Vegetative landscaping shall, where feasible, retain the open character of existing pastures and fields.
 - C. At least half of any trees planted for screening purposes shall be species native to the setting or commonly found in the area. Such species include fruit trees, Douglas-fir, Lombardy poplar (usually in rows), Oregon white oak, big leaf maple, and black locust (primarily in the eastern Gorge).
 - D. At least one-quarter of any trees planted for screening shall be coniferous for winter screening.
 - E. The exteriors of structures shall be dark and either natural or earth-tone colors unless specifically exempted pursuant to guidelines 11 or 12 in the "Key Viewing Areas" section of this chapter.

Coniferous Woodland

Overview and Land Use

These are primarily thickly forested areas characterized by forest uses and scattered residential development. Forest uses are often small to moderate in scale, particularly in the more settled portions of this setting. Parcels typically range between 20 and 160 acres in size. Large-scale silvicultural operations also occur in the less developed portions of this setting where land holdings tend to be relatively large (several hundred acres and larger) and residences fairly uncommon.

Landforms

These settings are found in hilly and mountainous portions of the Gorge, particularly on the Washington side of the western Gorge (in the GMA). The more gently rolling and accessible portions of this setting contain small-scale agricultural use and relatively more residences.

Vegetation

This setting is generally dominated by large conifer tree species associated with the ecosystems of the wet western slopes of the Cascades. Such species include Douglas-fir, western hemlock, western red cedar, and grand fir. Deciduous trees frequent the riparian corridors and also cover many slopes in the westernmost portions of the Gorge. Common deciduous species include big leaf maple, red alder, black cottonwood, and various species of willow trees. In the eastern portions of this setting and on dry, south-facing slopes, ponderosa pine and Oregon white oak are also common.

Compatible Recreation Use Guideline

Resource-based recreation uses of varying intensities may be compatible with this setting. Typically, outdoor recreation uses in Coniferous Woodlands are low intensity, and include trails, small picnic areas, and scenic viewpoints. Although infrequent, some more intensive recreation uses, such as campgrounds, occur. They tend to be scattered rather than concentrated, interspersed with large areas of undeveloped land and low-intensity uses.

Recommended Parcel Size for New Land Divisions

20 acres.

Design Guidelines

1. New development shall be compatible with the general scale (height, dimensions, and overall mass) of development in the vicinity. Expansion of existing development shall comply with this guideline to the maximum extent practicable.
2. Structure height shall remain below the forest canopy level.
3. In portions of this setting visible from key viewing areas, the following guidelines shall be employed to achieve visual subordination for new development and expansion of existing development:
 - A. Except as is necessary for construction of access roads, building pads, leach fields, etc., the existing tree cover screening the development from key viewing areas shall be retained.

- B. At least half of any trees planted for screening purposes shall be species native to the setting. Such species include: Douglas-fir, grand fir, western red cedar, western hemlock, big leaf maple, red alder, ponderosa pine and Oregon white oak, and various native willows (for riparian areas).
- C. At least half of any trees planted for screening purposes shall be coniferous to provide winter screening.
- D. The exteriors of structures shall be either natural or earth-tone colors, unless specifically exempted pursuant to guidelines 11 or 12 in the "Key Viewing Areas" section of this chapter.

Oak-Pine Woodland

Overview and Land Use

This visually complex setting represents the climatic transition area between the lush forests of the western Gorge and the semi-arid grasslands of the eastern Gorge. Dry oak-pine woods, savannah areas (predominantly grassy openings with scattered trees), and grassy prairies are interspersed with scattered rural development. Such development includes residences, roads, fences, etc. In some portions of this setting, orchards and cultivated areas lend a pastoral flavor to this generally natural-appearing landscape. Most parcels are over 20 acres in size, and are frequently between 40 and 160 acres.

Landforms

Most of this setting is found on gently rolling to hilly terrain. Pastures and small farm uses are interspersed in the gentler portions of this setting. Some very steep slopes and deeply incised side canyons are contained in the least developed portions of this setting.

Vegetation

This setting contains perhaps the most varied vegetative communities in the Gorge, adding to its visual richness. Mixed stands of Oregon white oak and ponderosa pine typify this setting. In the western portions, highest elevations, and north slopes, this community transitions into woodland vegetation patterns, with increasing numbers of Douglas-fir occurring. Drier portions of this setting and areas with poor, thin soils are often treeless prairies. "Biscuit scablands," or patterned ground areas with little vegetation and hummocky rock outcrops, also occur. This special landscape, created by scouring of great floods, is also found in some portions of the Grassland setting.

Compatible Recreation Use Guideline

Resource-based recreation uses of varying intensities may be compatible with this setting, although most are of a low-intensity nature (such as trails or small scenic outlooks). More intensive recreation uses may be compatible where allowed under the "Recreation Intensity Classes" in Part I, Chapter 4, although they are generally rare in this setting. As with Woodland settings, intensive recreation uses in Oak-Pine Woodlands may be compatible if widely scattered and not in large concentrations.

Recommended Parcel Size for New Land Divisions

40 acres.

Design Guidelines

1. New development shall be compatible with the general scale (height, dimensions, and overall mass) of development in the vicinity. Expansion of existing development shall comply with this guideline to the maximum extent practicable.
2. Structure height shall remain below the tree canopy level in wooded portions of this setting.
3. In portions of this setting visible from key viewing areas, the following guidelines shall be employed to achieve visual subordination for new development and expansion of existing development:
 - A. At least half of any tree species planted for screening purposes shall be species native to the setting. Such species include Oregon white oak, ponderosa pine, and Douglas-fir.
 - B. At least half of any trees planted for screening purposes shall be coniferous to provide winter screening.

For substantially wooded portions:

- C. Except as is necessary for construction of access roads, building pads, leach fields, etc., the existing tree cover screening the development from key viewing areas shall be retained.
- D. The exteriors of structures shall be either natural or earth-tone colors, unless specifically exempted pursuant to guidelines 11 or 12 in the "Key Viewing Areas" section of this chapter.

For treeless portions or portions with scattered tree cover:

- E. Structures shall be sited on portions of the property that provide maximum screening from key viewing areas, using existing topographic features.
- F. Patterns of plantings for screening vegetation shall be in character with the surroundings. Residences in grassy, open areas or savannahs shall be partly screened with trees in small groupings and openings between groupings.
- G. Accessory structures, outbuildings, and access ways shall be clustered together as much as possible, particularly towards the edges of existing meadows, pastures, and farm fields.
- H. The exteriors of structures shall be dark and either natural or earth-tone colors, unless specifically exempted pursuant to guidelines 11 or 12 in the "Key Viewing Areas" section of this chapter.

Grassland

Overview and Land Use

This setting comprises large expanses of generally treeless grass and shrub-covered hills and terraces. It covers most of the eastern fourth of the Scenic Area, stretching from just west of The Dalles to the eastern boundary of the Scenic Area. The dominant land use is cattle ranching, with widely scattered residences, accessory buildings, and related structures associated with ranching. Land holdings are relatively large, commonly ranging from several hundred to several thousand acres in size. The long, unbroken vistas and relatively sparse settlement patterns of this setting give it a dramatic, panoramic character distinct from the rest of the Gorge.

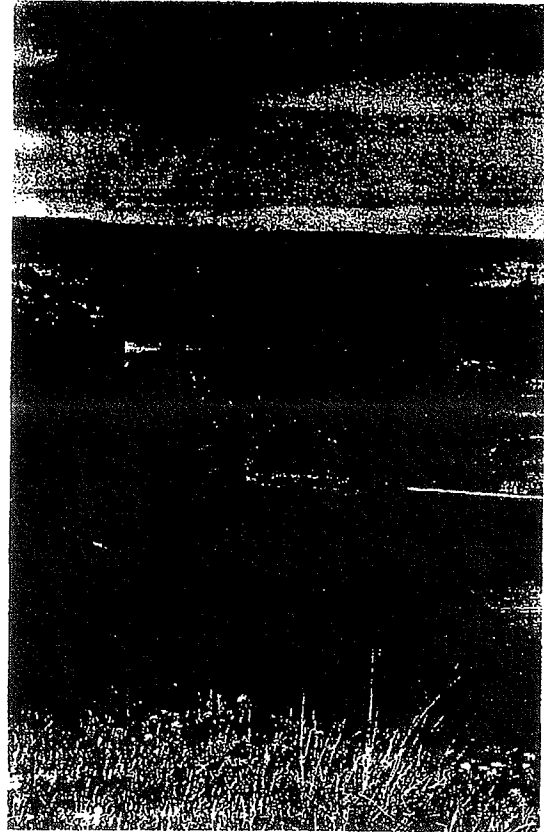
Landforms

The Grassland setting is found on gentle to steeply sloping hillsides and relatively level terraces in the eastern Gorge. The distinctive hummocky terrain of some areas of "biscuit scablands" near Dallesport is also included in this setting. In the extreme eastern portions of the Scenic Area, rugged rocky cliffs along the Columbia River also occur.

Vegetation

Grasses, shrubs, and forbs are predominant in this mostly treeless setting. Introduced grass species cover most of the rangelands, with bitterbrush and sagebrush shrubland occurring in some areas. Some areas of native bunchgrasses and forbs still occur, and some rare plant species are found in a few areas of scablands and vernal ponds. Oregon white oak stands grow in some of the intermittent stream drainages. A few tree species have been widely planted as windbreaks and are naturalized to the area, particularly black locust and poplar. A few vineyards and orchards have been planted in the lower terraces of this setting.

*Grassland and rock
pinnacle on the edge of
Rowena Plateau,
Oregon*



Compatible Recreation Use Guideline

Resource-based recreation uses of a very low-intensity or low-intensity nature that occur infrequently are compatible with this setting, and include hiking, hunting, and wildlife viewing.

Recommended Parcel Size for New Land Divisions

160 acres.

Design Guidelines

1. New development shall be compatible with the general scale (height, dimensions, and overall mass) of development in the vicinity. Expansion of existing development shall comply with this guideline to the maximum extent practicable.
2. Accessory structures, outbuildings, and access ways shall be clustered together as much as possible. Exceptions to this guideline are permitted where necessary for farming operations.
3. In portions of this setting visible from key viewing areas, the following guidelines shall be employed to achieve visual subordination for new development and expansion of existing development:
 - A. Structures shall be sited on portions of the property that provide maximum screening from key viewing areas, using existing topographic features.

- B. Lower structures that emphasize horizontal lines and blend with this sweeping landscape should be encouraged rather than very tall structures.
- C. Planting of trees for screening shall not be extensive, in character with the openness of this setting. Where used, screening vegetation shall either tie in with nearby riparian vegetation in seasonal drainages or emulate windrows. At least half of any trees planted for screening purposes shall be species native to the setting or commonly found in the area. Such species include Oregon white oak, Lombardy poplar, black locust, black cottonwood (wet locations), Russian olive and ponderosa pine.
- D. The exteriors of structures shall be dark and either natural or earth-tone colors, unless specifically exempted pursuant to guidelines 11 or 12 in the "Key Viewing Areas" section of this chapter.

Rural Residential

Overview and Land Use

Rural Residential settings occur throughout the Scenic Area, consisting of areas primarily committed to single-family residential development. These areas include numerous relatively small parcels, usually ranging between 1 and 5 acres. Because of these densities and the usually small size of these residential enclaves, Rural Residential settings often retain some rural character in contrast to larger, denser residential neighborhoods in the Urban Areas.

Landforms

Rural Residential settings occur in portions of the Gorge landscape that are relatively accessible and lacking in physical development constraints. Most of these areas are gently rolling or level terraces and valley floors. Rural Residential areas are rarely found in steep terrain.

Vegetation

Most Rural Residential settings include numerous plantings of ornamental and other non-native species in residential yards. In some of the less dense Rural Residential areas, remnants of the area's native vegetation have been preserved. In these areas, retention of the native vegetative communities has substantially contributed to the blending of the residential uses with their surroundings.

Compatible Recreation Use Guideline

Compatible recreation uses are usually limited to small community park facilities, but may occasionally include low-intensity resource-based recreation uses (such as small scenic overlooks).

Recommended Parcel Size for New Development

Two acres or 5 acres, depending upon the existing character of the area as reflected in average parcel size and development patterns.

Design Guidelines

1. New development shall be compatible with the general scale (height, dimensions, and overall mass) of development in the vicinity. Expansion of existing development shall comply with this guideline to the maximum extent practicable.
2. Existing tree cover shall be retained as much as possible, except as is necessary for site development, safety purposes, or as part of forest management practices.
3. In portions of this setting visible from key viewing areas, and not exempt from visual subordination guidelines (see "Developed Settings and Visual Subordination Policies" in this section), the following guidelines shall be employed to achieve visual subordination for new development and expansion of existing development:
 - A. Except as is necessary for site development or safety purposes, the existing tree cover screening the development from key viewing areas shall be retained.
 - B. At least half of any trees planted for screening purposes shall be species native to the setting or commonly found in the area.
 - C. At least half of any trees planted for screening purposes shall be coniferous to provide winter screening.
 - D. The exteriors of structures shall be dark and either natural or earth-tone colors, unless specifically exempted pursuant to guidelines 11 or 12 in the "Key Viewing Areas" section of this chapter.

Rural Residential/Pastoral, Rural Residential/Coniferous Woodland, and Rural Residential/Oak-Pine Woodland

Overview and Land Use

This setting reflects areas that are partly rural residential in nature, yet still substantially retain characteristics of a more rural setting (either Pastoral, Coniferous Woodland or Oak-Pine Woodland).

Such areas are typically composed of a combination of rural residential and small-scale agricultural and forest uses. Parcels in these areas generally range between 5 and 20 acres in size, although some smaller residential lots and a few larger vacant parcels occur.

Landforms

These combination settings generally occur in gentle terrain with relatively good access.

Vegetation

As with Rural Residential settings, natural vegetation patterns have been altered by ornamental and other non-native plantings on residential lots, although to a substantially lesser degree. The Rural Residential/Pastoral settings frequently contain pastures, small orchards, and other characteristic pastoral vegetation elements. Rural Residential/Coniferous Woodland and Rural Residential/Oak-Pine Woodland settings still retain much of the natural vegetative communities. In these settings, residential development blends with the rural landscape to a greater degree than in Rural Residential settings.

Compatible Recreation Use Guideline

Very low-intensity and low-intensity resource-based recreation uses, scattered infrequently in the landscape, may be compatible with this setting.

Recommended Parcel Size for New Land Divisions

Ten acres or 20 acres, depending upon the existing character of the area, as reflected in average parcel size and development patterns. However, a 10-acre minimum parcel size is recommended for all Rural Residential/Coniferous Woodland settings.

Design Guidelines

1. New development in this setting shall meet the design guidelines described for both the Rural Residential setting and the more rural setting with which it is combined (either Pastoral, Coniferous Woodland or Oak-Pine Woodland), unless it can be demonstrated that compliance with the guidelines for the more rural setting is impracticable. Expansion of existing development shall comply with this guideline to the maximum extent practicable.
2. In the event of a possible conflict between the two sets of guidelines, the guidelines for the more rural setting (Coniferous Woodland, Oak-Pine Woodland or Pastoral) shall apply, unless it can be demonstrated that application of such guidelines would not be practicable.

Residential

Overview and Land Use

A very limited number of areas in the General Management Area already contain dense residential development on parcels of less than 1 acre on the average. These areas, because of their density, size, and proximity to Urban Area development (in all but one case), are essentially suburban in nature and have not retained any rural characteristics. The subdivision north of Chenoweth Creek, known as "Murray's Addition," is the largest of the few Residential settings in the GMA.

Landforms

The Residential settings in the GMA are located on flat or gentle terrain in areas that are readily accessible.

Vegetation

With a few exceptions, natural vegetation patterns in these dense residential areas have been replaced by ornamental and non-native plantings.

Compatible Recreation Use Guideline

Compatible recreation uses are essentially limited to community park facilities.

Design Guidelines

1. New development shall be compatible with the general scale (height, dimensions, and overall mass) of development in the vicinity. Expansion of existing development shall comply with this guideline to the maximum extent practicable.
2. In portions of this setting visible from key viewing areas and not exempt from visual subordination guidelines (see "Developed Settings and Visual Subordination Policies" in this section), the following guidelines shall be employed to achieve visual subordination for new development and expansion of existing development:
 - A. Except as is necessary for site development or safety purposes, the existing tree cover screening the development from key viewing areas shall be retained.
 - B. The exteriors of structures shall be non-reflective unless fully screened from key viewing areas with existing vegetation and/or topography.
 - C. At least half of any trees planted for screening purposes shall be species native to the setting or commonly found in the area.
 - D. At least half of any trees planted for screening purposes shall be coniferous to provide winter screening.

- E. The exteriors of structures shall be dark and either natural or earth-tone colors, unless specifically exempted pursuant to guidelines 11 or 12 in the "Key Viewing Areas" section of this chapter.

Village

Overview and Land Use

The Village setting applies to the two designated Rural Centers in the GMA (Corbett and Skamania--see Part II, Chapter 5), as well as the Broughton Mill area (approved for a resort by the Gorge Commission in 1989). This setting reflects the nature of the Rural Centers as service centers and gathering places for nearby rural residences. The Village setting contains many small residential parcels and a central core, serving both commercial and social functions. Village settings are distinguished from Rural Residential settings by their mix of residential, institutional (churches, schools, etc.), and commercial uses, creating a small town atmosphere.

Landforms

Village settings have evolved in level or gently rolling areas lacking any substantial physical development constraints or access problems.

Vegetation

Although the Village settings are densely settled relative to the surrounding rural landscape, some areas have retained the natural vegetation of the region in which they are located. Much of the vegetation in this setting, particularly in the Corbett area, consists of non-native species planted by homeowners.

Compatible Recreation Use Guideline

Compatible recreation uses may include community parks serving the recreation needs of local residents, and varying intensities of other recreation uses.

Special Policies for Village Setting

1. The Gorge Commission shall consult with community groups and the appropriate county to refine and revise these design guidelines as appropriate to reflect community desires and interests.
2. The Gorge Commission shall consult with the Oregon Department of Transportation, the Historic Columbia River Highway Advisory Committee, and Multnomah County to define desirable and appropriate provisions for curbs, parking treatments, and access on the Historic Highway.

Design Guidelines

1. New development shall be compatible with the general scale (height, dimensions, and overall mass) of development in the vicinity. Expansion of existing development shall comply with this guideline to the maximum extent practicable.
2. New commercial buildings shall be limited in size to a total floor area of 5,000 square feet or less, and shall be limited in height to 2 1/2 stories or less.
3. For new commercial, institutional (churches, schools, government buildings), or multifamily residential uses on parcels fronting a scenic travel corridor (Washington State Route 14 or the Historic Columbia River Highway) and expansion of existing development for such uses, parking shall be limited to rear or side yards of buildings to the maximum extent practicable.
4. New vehicular access points to the scenic travel corridors shall be limited to the maximum extent practicable, and access consolidation shall be required where feasible.
5. New development proposals and expansion of existing development shall be encouraged to follow planned unit development approaches, featuring consolidated access, commonly shared landscaped open areas, etc.
6. New commercial, institutional or multifamily residential uses fronting a scenic travel corridor shall comply with the following landscape requirements:
 - A. Parking or loading areas for 10 or more spaces shall include a landscaped strip at least 5 feet wide between the new use and the scenic travel corridor roadway.
 - B. The landscape strip required in guideline 6(a), above, shall include shrubs, vegetative ground cover, and, at minimum, one tree. Trees shall be spaced as appropriate to the species and not to exceed 25 feet apart on the average.
7. The use of building materials that reinforce the Village setting's character, such as wood, logs, or stone, and that reflect community desires, should be encouraged.
8. Architectural styles that are characteristic of the area (such as 1 1/2-story dormer roof styles in Corbett) and that reflect community desires should be encouraged. Entry signs should be consistent with such architectural styles.
9. Design features that create a "pedestrian-friendly" atmosphere, such as large shop windows on the ground floor of commercial buildings, porches along ground floors with street frontage, etc., should be encouraged.

10. Pedestrian walkways and bicycle paths should be encouraged and integrated into new developments wherever feasible.
11. Where feasible, existing tree cover of species native to the region or commonly found in the area shall be retained when designing new development or expanding existing development.

River Bottomlands

Overview and Land Use

This setting includes lush floodplains and riparian forests found along the shores of the Columbia River, particularly below Bonneville Dam. Much of this setting has been lost to dam, freeway and railroad construction. In many places in the GMA, only thin strips of this setting remain, directly adjacent to the river. These remnants are still visually distinct settings that markedly contrast with adjacent rocky slopes or upland conifer forests.

Some of these areas include small pastures and scattered rural residential development, as well as major transportation facilities. This setting also includes major existing park and recreation facilities along the river (e.g. Celilo Park) and the most potentially suitable areas for concentrated public recreational river access, as identified in the planning process.

Landforms

River Bottomlands are, by their nature, confined to flat or gently sloping lands representing remnants of the original Columbia River floodplain.

Vegetation

Where unaltered, this setting consists primarily of a largely deciduous forest, with black cottonwood, red alder, bigleaf maple, and willows dominating. Unforested marshes also occur in this setting, although the largest of these ecologically critical vegetative communities are in the Special Management Area. Major parks in River Bottomlands contain some vegetation patterns uncharacteristic of pristine riparian communities, such as mowed lawn areas and some ornamental plantings. However, to a large degree, the riverfront parks that best blend with the natural surroundings emphasize native species plantings and retention of existing riparian vegetation communities. Thus, the deciduous-dominated riparian species found in River Bottomlands are emphasized as the major vegetation element in the design guidelines applicable to new recreation uses in this setting.

Compatible Recreation Use Guideline

Compatible recreation uses in this setting depend on the degree of natural resource sensitivity of a particular site. In the most critically sensitive River Bottomlands, very low-intensity uses that do not impair wetlands or special habitat requirements may be compatible.

In other River Bottomland areas, nodes of moderate-intensity and/or high-intensity recreation uses may be compatible, provided that: (1) their designs emphasize retention and/or enhancement of native riparian communities, (2) structures and parking areas are visually subordinate, and (3) they are separated from other areas of concentrated recreation usage by stretches of natural-appearing shoreline and adjacent uplands.

Design Guidelines

1. New development shall be compatible with the general scale (height, dimensions, and overall mass) of development in the vicinity. Expansion of existing development shall comply with this guideline to the maximum extent practicable.
2. In portions of this setting visible from key viewing areas, the following guidelines shall be employed to achieve visual subordination for new development and expansion of existing development:
 - A. Except as is necessary for site development or safety purposes, existing tree cover screening the development from key viewing areas shall be retained.
 - B. At least half of any trees planted for screening purposes shall be species native to the River Bottomland setting. Public recreation developments are encouraged to maximize the percentage of planted screening vegetation native to this setting. Such species include black cottonwood, big leaf maple, red alder, Oregon white ash, Douglas-fir, western red cedar and western hemlock (west Gorge), and various native willow species.
 - C. At least one-quarter of any trees planted for screening purposes shall be coniferous for winter screening.
 - D. The exteriors of structures shall be dark and either natural or earth-tone colors, unless specifically exempted pursuant to guidelines 11 or 12 in the "Key Viewing Areas" section of this chapter.

Gorge Walls, Canyons, and Wildlands

Overview and Land Use

This setting represents the bluffs, cliffs and steep slopes that form the walls of the Gorge and the deeply incised canyons of the Columbia River's major tributaries. Because of extreme steepness, and in some cases inaccessibility and instability, these areas are largely undeveloped. They represent some of the most natural settings in GMA lands, despite the proximity of some of these areas to major thoroughfares. Prevailing land use in these areas is undeveloped vacant land, although low-intensity recreation use and some silviculture occur in a few limited areas.

Landform

The landform component of this setting is a much greater determinant of its character than is true for any other setting. Steep wooded slopes, canyon walls, and sheer rock faces characterize this setting. In the side canyons, small ribbons of riparian floodplain areas also occur.

Vegetation

The steepest portions of this setting are rocky cliffs devoid of much vegetation or loose talus slopes with limited vegetation (although such slopes often include large, old fir, pine, and maple trees). Other portions of this setting include stands of large fir and pine trees, some of which appear to be the original forest cover. At the bottom of the Hood, White Salmon, and Little White Salmon River canyons, narrow bands of lush, riparian vegetation are found.

Compatible Recreation Use Guideline

Because of the fragility, steepness, and undeveloped nature of these lands, compatible recreation uses are usually limited to very low-intensity or low-intensity, resource-based activities that focus on enjoyment and appreciation of sensitive resources. Such uses (such as trails) are generally associated with minimal facility development, if any.

Design Guidelines

1. New development and expansion of existing development shall be screened so it is not seen from key viewing areas, to the maximum extent practicable.
2. All trees planted to screen permitted development and uses from key viewing areas shall be native to the area.
3. Existing tree cover shall be retained to the maximum extent practicable, except for the minimum removal necessary to accommodate facilities otherwise permitted in the underlying land use designation or for safety purposes.
4. All structures shall be limited in height to a maximum of 1 1/2 stories.

5. The exteriors of structures shall be non-reflective.
6. Signage shall be limited to natural materials such as wood or stone, with natural or earth-tone colors, unless public safety concerns or federal or state highway standards require otherwise.

Developed Settings and Visual Subordinance Policies

GMA policies to protect key viewing area viewsheds require that all new development on lands seen from key viewing areas be visually subordinate to its landscape setting, except for "specified developed settings that are not visually sensitive."

Three landscape settings are considered developed settings within this context: Rural Residential, Residential, and Village. Of all GMA lands in these three settings, six particular areas that are not visually sensitive have been identified. New development in these settings shall be compatible with the setting, but not necessarily visually subordinate. These areas are:

1. Corbett Rural Center (Village)
2. Skamania Rural Center (Village)
3. West of Hood River Urban Area, east of Country Club Road (Rural Residential)
4. Murray's Addition subdivision, The Dalles (Residential)
5. Two small areas south of The Dalles in Sections 9 and 10, Township 1N, Range 13E (Residential)
6. Portion of Underwood Heights along Cooper Avenue, south of Cook-Underwood Road (Rural Residential)

SCENIC TRAVEL CORRIDORS

Several state and federal highways, renowned as highly scenic travel and recreation corridors, traverse the Scenic Area. These travelways parallel the Columbia River and several of its major tributaries. Among these well-known roads are the Historic Columbia River Highway, Washington State Route 14, Interstate 84 (recently designated as one of the most scenic highways in America by Rand McNally), and Oregon Highway 35. The latter two roads form two of the three legs of the widely publicized "Mt. Hood Loop."

The scenic travel corridors program acknowledges the importance of these travelways to the Scenic Area. It provides measures to protect and enhance the scenic qualities of the landscapes within the foregrounds of these roads. Many of the objectives

included in this section require implementing actions from the state agencies charged with managing these scenic byways, in coordination with local governments.

*View from atop
Burdoin Mountain
into the middle of the
Gorge*



GMA Goal

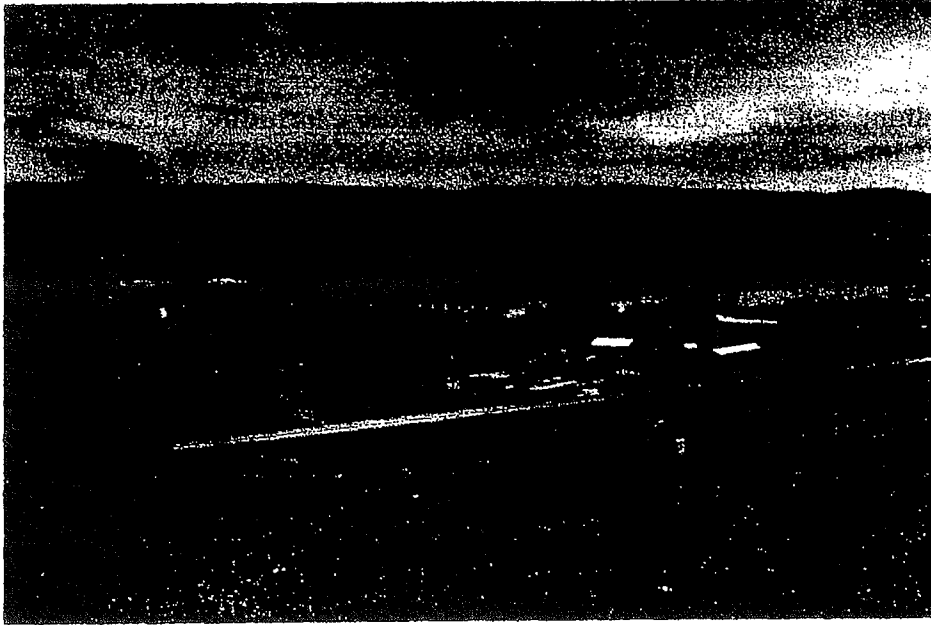
Designate those portions of the following roads in the Scenic Area as scenic travel corridors and protect and enhance scenic resources within the corridors: Washington State Routes 14, 141, and 142, Interstate 84, the Historic Columbia River Highway (all segments), and Oregon Highway 35.

GMA Objectives

1. Establish coordinated, cooperative implementation programs with the state highway departments, railroads, the Bonneville Power Administration, and utility companies that include protection measures to mitigate visual effects of new corridor development and enhancement measures to reduce visual effects of existing development.
2. Establish a program to provide incentives for landowners or land managers to screen or remove discordant features in the foreground of scenic travel corridors.
3. Encourage communities along scenic travel corridors to enhance the entries to their communities.
4. Encourage the railroads and utility companies to place signal wires and powerlines underground where such features are visually dominant and detract from the visual quality of scenic travel corridors.

5. Encourage the railroads and utility companies to use colors that are visually subordinate on existing equipment along scenic travel corridors.
6. Encourage the Washington and Oregon Departments of Transportation to take the following measures to improve the visual quality of scenic travel corridors:
 - A. Place reflectors on guardrails rather than on free-standing posts where feasible and not detrimental to public safety.
 - B. Remove unnecessary highway signs and consolidate signs, wherever possible.
 - C. Replace sections of white guardrail where white contrasts noticeably with gray or galvanized sections, except along the Historic Columbia River Highway, where two-rail white guardrails are encouraged to emulate historic styles.
 - D. Construct berms to emulate natural contours to the maximum extent practicable and eliminate any construction berms that no longer perform any function.
 - E. Close unused access roads that no longer provide any service or perform any function and that intersect scenic travel corridors.
 - F. Use native plants to the maximum extent practicable when planting any new vegetation in scenic travel corridor rights-of-way.
7. Establish a program to reclaim abandoned quarries in the foreground of scenic travel corridors.
8. Encourage the Bonneville Power Administration to use colors that are visually subordinate on its existing facilities seen from scenic travel corridors.
9. Encourage the Bonneville Power Administration to improve the visual quality of powerline rights-of-way by restoring vegetation to its natural appearance wherever possible.
10. Establish new viewpoints of the Columbia River and lands within the Gorge at places offering outstanding views along scenic travel corridors. (Same as objective 4 under "Scenic Appreciation and Scenic Travel Corridors" in Part I, Chapter 4.)
11. Create or restore openings in vegetation along Washington State Route 14, Interstate 84, and the Historic Columbia River Highway to provide or improve views of the Columbia River and the walls of the Gorge in a manner that does not adversely affect the scenic, cultural, natural, or recreation resources of the Scenic Area. (Same as objective 5 under "Scenic Appreciation and Scenic Travel Corridors" in Part I, Chapter 4.)

12. Encourage the railroads and state departments of transportation to use integrated vegetation management practices in managing vegetation in scenic travel corridor foregrounds.



The Dalles Dam with a view of the Columbia Hills grazing country in the background

GMA Policies

1. Programs and specific provisions developed for scenic travel corridors shall emphasize protection and enhancement of the corridors' foreground.
2. To achieve scenic travel corridor objective 1, above, the Gorge Commission shall consider establishing an interagency Scenic Travel Corridor Implementation Task Force, to be composed of representatives of all entities referenced in objective 1, as well as local and Indian tribal government representatives.
3. New structural development, other than access roads, pathways, or necessary signage, shall be limited in the immediate foreground of scenic travel corridors. Expansion of existing development shall comply with this policy to the maximum extent practicable.

4. New production and/or development of mineral resources may be permitted in the foregrounds of scenic travel corridors upon a demonstration that such uses would be fully screened from view of the corridor roadway itself. Expansion of existing quarries in the foregrounds of scenic travel corridors may be permitted if determined to be visually subordinate.
5. A reclamation plan shall be required for expansion of existing quarries and all new mining activity within scenic travel corridors, including quarries for which no reclamation program is required by the laws of Washington or Oregon.
6. New signal wires and powerlines along scenic travel corridors shall be placed underground to the maximum extent practicable in areas where above-ground facilities would be visually dominant and detract from corridor visual quality.
7. New mailboxes and newspaper boxes along scenic travel corridors shall be clustered to the maximum extent practicable.
8. New residential and commercial driveway access to scenic travel corridors shall be consolidated to the maximum extent practicable.
9. New road cuts shall be contoured to approximate a natural-appearing grade and vegetated with species native or naturalized to the area in order to blend with the landscape setting.

GMA Guidelines

1. For the purposes of implementing this section, the foreground of a scenic travel corridor shall include those lands within 1/4 mile of the edge of pavement of the scenic travel corridor roadway.
2. All new buildings and alterations to existing buildings shall be set back at least 100 feet from the edge of pavement of the scenic travel corridor roadway. This policy shall not apply in Rural Center designations (Village landscape setting). A variance to this setback requirement may be granted pursuant to guideline 2 in "Variances from Setbacks and Buffers" (Part II, Chapter 7: General Policies and Guidelines). All new parking lots and expansions of existing parking lots shall be set back at least 100 feet from the edge of pavement of the scenic travel corridor roadway, to the maximum extent practicable.
3. Additions to existing buildings or expansion of existing parking lots located within 100 feet of the edge of pavement of a scenic travel corridor roadway shall comply with guideline 2 of this section to the maximum extent practicable. This guideline shall not apply in Rural Center designations (Village landscape setting).
4. All proposed vegetation management projects in public rights-of-way to provide or improve views shall include the following:

- A. An evaluation of potential visual impacts of the proposed project as seen from any key viewing area.
 - B. An inventory of any rare plants, sensitive wildlife habitat, wetlands, or riparian areas on the project site. If such resources are determined to be present, the project shall comply with applicable Management Plan guidelines to protect the resources.
5. When evaluating possible locations for undergrounding of signal wires or powerlines, railroads and utility companies shall prioritize those areas specifically recommended as extreme or high priorities for undergrounding in the *Columbia River Gorge National Scenic Area Corridor Visual Inventory* (April 1990).
 6. New production and/or development of mineral resources proposed within 1/4 mile of the edge of pavement of a scenic travel corridor may be allowed upon a demonstration that full visual screening of the site from the scenic travel corridor can be achieved by use of existing topographic features or existing vegetation designed to be retained through the planned duration of the proposed project. An exception to this may be granted if planting of new vegetation in the vicinity of the access road to the mining area would achieve full screening. If existing vegetation is partly or fully employed to achieve visual screening, over 75 percent of the tree canopy area shall be coniferous species providing adequate winter screening. Mining and associated primary processing of mineral resources is prohibited within 100 feet of a scenic travel corridor, as measured from the edge of pavement, except for access roads. Compliance with full screening requirements shall be achieved within timeframes specified in guideline 25 of the "Key Viewing Areas" section of this chapter.
 7. Expansion of existing quarries may be allowed pursuant to guideline 22 in the "Key Viewing Areas" section of this chapter. Compliance with visual subordination requirements shall be achieved within timeframes specified in guideline 24 of the "Key Viewing Areas" section of this chapter.

SIGNS

GMA Goal

Protect and enhance scenic resources by minimizing visual impacts of signage, while authorizing signage necessary for commerce, recreation, safety, and public information.

GMA Objective

Encourage the use of the Columbia River Gorge National Scenic Area Graphic Signing System for public signs in and adjacent to public rights-of-way.

GMA Policies

1. New signs within state and federal highway rights-of-way shall comply with the standards of the Columbia River Gorge National Scenic Area Graphic Signing System. Exceptions may be granted if necessary for public safety, traffic control, or highway construction signs when the Graphic Signing System conflicts with the requirements of the *Manual for Uniform Traffic Control Devices*.
2. New signs shall be designed and sited in a manner that achieves their intended function and is compatible with their settings, to the maximum extent practicable.
3. Guidelines for alteration and amortization of nonconforming signs shall be employed to bring such signage into conformance with the provisions of this section.

GMA Guidelines

1. All signs must meet the following guidelines unless these guidelines conflict with the *Manual for Uniform Traffic Control Devices* for public safety, traffic control or highway construction signs. In such cases, the standards in the *Manual for Uniform Traffic Control Devices* shall supersede these guidelines.
 - A. The support structure shall be unobtrusive and have low visual impact.
 - B. Lettering colors with sufficient contrast to provide clear message communication shall be allowed. Signs shall be colored to blend with their setting to the maximum extent practicable.
 - C. Backs of all signs shall be unobtrusive, nonreflective, and blend in with the setting.
 - D. Spotlighting of signs may be allowed where needed for night visibility. Backlighting is not permitted for signs.
2. Business identification or facility entry signs located on the premises may be allowed, subject to review for consistency with guideline 1 of this section.
3. The following may be permitted without review subject to guideline 1 of this section:
 - A. Ordinary repair and maintenance of signs.
 - B. Election signs that are not displayed for more than 60 days. Removal must be accomplished within 30 days of election day.

-
- C. "For sale" signs not greater than 12 square feet. Removal must be accomplished within 30 days of close of sale.
 - D. Temporary construction site identification, public service company, safety, or information signs not greater than 32 square feet. Exceptions may be granted for public highway signs necessary for public safety and consistent with the *Manual for Uniform Traffic Control Devices*. Removal must be accomplished within 30 days of project completion.
 - E. Signs posted on private property warning the public against trespassing, danger from animals, the private nature of a road, driveway or premise, or signs prohibiting or otherwise controlling fishing or hunting, provided such signs are not greater than 6 square feet.
 - F. Temporary signs advertising civil, social, or political gatherings and activities, provided such signs do not exceed 12 square feet. Removal must be accomplished within 30 days of the close of the event.
 - G. Signs posted by governmental jurisdictions giving notice to the public. Such signs shall be no larger than that required to convey the intended message.
 - H. Signs associated with the use of a building or buildings, if placed flat on the outside walls of buildings (not on roofs or marquees).
- 4. Other signs not addressed or expressly prohibited by this section may be permitted without review.
 - 5. Any sign that does not conform with a provision of these guidelines and has existed before their adoption is subject to the following provisions:
 - A. Alteration of existing nonconforming signs shall comply with these guidelines.
 - B. Any nonconforming sign used by a business must be brought into conformance concurrent with any expansion or change in use that requires a development permit.
 - 6. Except for signs along public highways necessary for public safety, traffic control, or road construction and consistent with the *Manual for Uniform Traffic Control Devices*, the following signs are prohibited:
 - A. Luminous signs or those with intermittent or flashing lights. These include neon signs, fluorescent signs, light displays, and other signs that are internally illuminated, exclusive of seasonal holiday light displays.
 - B. New billboards.
-

- C. Signs with moving elements.
- D. Portable or wheeled signs, or signs on parked vehicles where the sign is the primary use of the vehicle.



*Horsethief Butte
and Horsethief
Lake in
Washington*

SMA PROVISIONS

SMA Goal

Protect and enhance scenic resources.

SMA Policies

1. The following landscape settings shall be protected:
 - A. Pastoral
(Same land use, landform, and vegetation descriptions as GMA)
 - B. Coniferous Woodland
(Same land use, landform, and vegetation descriptions as GMA)
 - C. Oak-Pine Woodland

(Same land use, landform, and vegetation descriptions as GMA)

D. Residential

(Same land use, landform, and vegetation descriptions as GMA)

E. River Bottomlands

(Same land use, landform, and vegetation descriptions as GMA)

F. Gorge Walls, Canyonlands, and Wildlands

(Same land use, landform, and vegetation descriptions as GMA)

2. The existing appearance and character of the identified landscape setting shall be maintained.
3. New developments and land uses shall maintain the visual character of the landscape setting in which the development is located.
4. The Forest Service Visual Quality Objective (VQO) system shall be used to evaluate all new developments and land uses. Each landscape setting will be assigned visual quality objectives.
5. For National Forest lands, the VQOs identified in the Mt. Hood and Gifford Pinchot National Forest Plans shall be used.
6. Where appropriate, scenic easements or fee purchase by the federal government shall be used to protect and perpetuate certain landscape settings.
7. Size, scale, shape, color, texture, siting, height, building materials, lighting, or other visual aspects shall be regulated to protect the scenic resources.
8. New developments and land uses occurring in the foreground of key viewing areas shall protect scenic values.
9. Rehabilitation or modification of historic structures on or eligible for the National Register of Historic Places may be exempt from the above policies if such modification is in compliance with the National Register of Historic Places guidelines.
10. The Historic Columbia River Highway, Washington State Route 14, Interstate 84, the Larch Mountain Road, the Wyeth Bench Road, and Klickitat County Road 1230 shall be managed as scenic routes.

SMA Guidelines

1. New developments and land uses shall be evaluated to ensure that scenic resources are not adversely affected, including cumulative effects, based on visibility from key viewing areas.
2. All new developments and land uses immediately adjacent to scenic routes shall be in conformance with state or county scenic route guidelines.
3. New land uses or developments shall comply with the following design guidelines:
 - A. Pastoral: Pastoral areas shall retain the overall appearance of an agricultural landscape.
 - (1) New developments and forest practices shall meet the VQO of partial retention.
 - (2) The use of plant species common to the landscape setting shall be encouraged. The use of plant species in rows, as commonly found in the landscape setting, is encouraged.
 - (3) The exteriors of structures shall be earth-tone colors that will result in low contrast with the surrounding landscape.
 - (4) The exteriors of structures may be white (except for the roof) only in the Mt. Pleasant and Dodson-Warrendale areas where other white structures are evident in the setting.
 - B. Coniferous Woodland and Oak-Pine Woodland: Woodland areas shall retain the overall appearance of a woodland landscape. New developments and land uses shall retain the overall visual character of the natural appearance of the Coniferous Woodland and Oak-Pine Woodland landscape.
 - (1) New developments and land uses in lands designated Federal Forest or Open Space (see land use designations in Part II) shall meet the VQO of retention; all other land use designations shall meet the VQO of partial retention as seen from key viewing areas.
 - (2) Forest practices on National Forest lands included in the Mt. Hood and Gifford Pinchot National Forest Plans shall meet the VQO identified for those lands in those plans.
 - (3) Buildings shall be encouraged to have a vertical overall appearance in the Coniferous Woodland landscape setting and a horizontal overall appearance in the Oak-Pine Woodland landscape setting.

- (4) Use of plant species native to the landscape setting shall be encouraged. Where non-native plants are used, they shall have native-appearing characteristics.
- (5) The exteriors of structures in the Coniferous Woodland landscape setting shall be dark earth-tone colors that will result in low contrast with the surrounding landscape as seen from key viewing areas.
- (6) The exteriors of structures in the Oak-Pine Woodland landscape setting shall be earth-tone colors that will result in low contrast with the surrounding landscape as seen from key viewing areas.

C. Residential: The Residential setting is characterized by concentrations of dwellings.

- (1) New developments and land uses shall meet the VQO of partial retention.
- (2) At Rowena Dell, new buildings shall have a rustic appearance and use natural materials and earth-tone colors.
- (3) At Latourell Falls, new buildings shall have an appearance consistent with the predominant historical architectural style.
- (4) Use of plant species native to the landscape setting shall be encouraged. Where non-native plants are used, they shall have native-appearing characteristics.

D. River Bottomlands: River Bottomlands shall retain the overall visual character of a floodplain and associated islands.

- (1) New developments and land uses shall meet the VQO of partial retention, except in areas designated Open Space, where they shall meet the VQO of retention.
- (2) Buildings shall have an overall horizontal appearance in areas with little tree cover.
- (3) Use of plant species native to the landscape setting shall be encouraged. Where non-native plants are used, they shall have native-appearing characteristics.
- (4) The exteriors of structures shall be earth-tone or water-tone colors that will result in low contrast with the surrounding landscape.

- E. Gorge Walls, Canyonlands, and Wildlands: New developments and land uses shall retain the overall visual character of the natural-appearing landscape.
- (1) New developments and land uses shall meet the VQO of retention as seen from key viewing areas.
 - (2) Structures, including signs, shall have a rustic appearance, use nonreflective materials, have low contrast with the surrounding landscape, and be of a Cascadian architectural style.
 - (3) Temporary roads shall be promptly closed and revegetated.
 - (4) New utilities shall be below ground surface, where feasible.
 - (5) Use of plant species non-native to the Columbia River Gorge shall not be allowed.
 - (6) The exteriors of structures shall be dark earth tones that will result in the structure having low contrast with the surrounding landscape.
4. For forest practices, the following guidelines shall apply:
- A. Forest practices shall meet the design guidelines and VQO for the landscape setting designated for the management area.
 - B. Not more than 16 percent of each total ownership within a viewshed shall be in created openings at any one time. The viewshed boundaries shall be delineated by the Forest Service.
 - C. Size, shape, and dispersal of created openings shall maintain the natural patterns in the landscape.
 - D. The maximum size of any created opening shall be 15 acres. In the foreground of key viewing areas, the maximum size of created openings shall be 5 acres.
 - E. Clearcutting shall not be used as a harvest practice on land designated Federal Forest.
 - F. Created openings shall not create a break or opening in the vegetation in the skyline as viewed from a key viewing area.
 - G. Created openings shall be dispersed to maintain at least 400 feet of closed canopy between openings. Closed canopy shall be at least 20 feet tall.
5. The following design standards shall be applied to all new land uses and developments, regardless of location or landscape setting:
-

- A. Proposed developments shall not protrude above the line of a bluff, cliff, or skyline as seen from key viewing areas.
- B. Size, scale, shape, color, texture, siting, height, building materials, lighting, or other features of a proposed structure shall be visually subordinate in the landscape and have low contrast in the landscape.
- C. Colors shall be used in a manner so that developments are visually subordinate to the natural and cultural patterns in the landscape setting. Colors for structures and signs should be slightly darker than the surrounding background.
- D. Structure height shall remain below the average tree canopy height of the natural vegetation adjacent to the structure, except if it has been demonstrated that meeting this guideline is not feasible considering the function of the structure.
- E. Proposed developments or land use shall be aligned, designed, and sited to fit the natural topography and to take advantage of vegetation and landform screening, and to minimize visible grading or other modifications of landforms, vegetation cover, and natural characteristics.
- F. Any exterior lighting shall be sited, limited in intensity, shielded, or hooded in a manner that prevents lights from being highly visible from key viewing areas and from noticeably contrasting with the surrounding landscape setting, except for road lighting necessary for safety purposes.
- G. Seasonal lighting displays shall be permitted on a temporary basis, not to exceed 3 months.
- H. Reflectivity of structures and site improvements shall be minimized.
- I. Right-of-way vegetation shall be managed to minimize visual impacts of clearing and other vegetation removal as seen from key viewing areas. Roadside vegetation management (vista clearing, planting, etc.) should enhance views from the highway.
- J. Screening from key viewing areas shall be encouraged for existing and required for new road maintenance, warehouse, and stockpile areas.

REFERENCES

The following sources of information were used in mapping landscape settings.

National Scenic Area land use inventory, 1988. Cascade Planning Associates.

Aerial photography (color and black and white), 1988. U.S. Forest Service, National Scenic Area Office.

County assessor parcel maps for Clark, Skamania, Klickitat, Multnomah, Hood River, and Wasco counties, various dates.

Visual monitoring station photographs, 1988-89. U.S. Forest Service, National Scenic Area Office.

Vegetation classes inventory, 1988. Chris Kiilsgard.

Visual attributes inventory, 1988. U.S. Forest Service, National Scenic Area Office.

Landscape sensitivity inventory, 1988. U.S. Forest Service, National Scenic Area Office.

Visual absorption capability inventory, 1988. U.S. Forest Service, National Scenic Area Office.

Landscape character units, as identified in the *National Scenic Area Corridor Visual Inventory*, 1990. U.S. Forest Service, Columbia River Gorge Commission, Oregon Department of Transportation, and Washington Department of Transportation.

Digital elevation model, slope classes map, 1990. U.S. Forest Service, National Scenic Area Office.

U.S. Geological Survey topographic quadrangle maps, various dates.

Preliminary land use designations, General Management Area, 1989. Columbia River Gorge Commission.

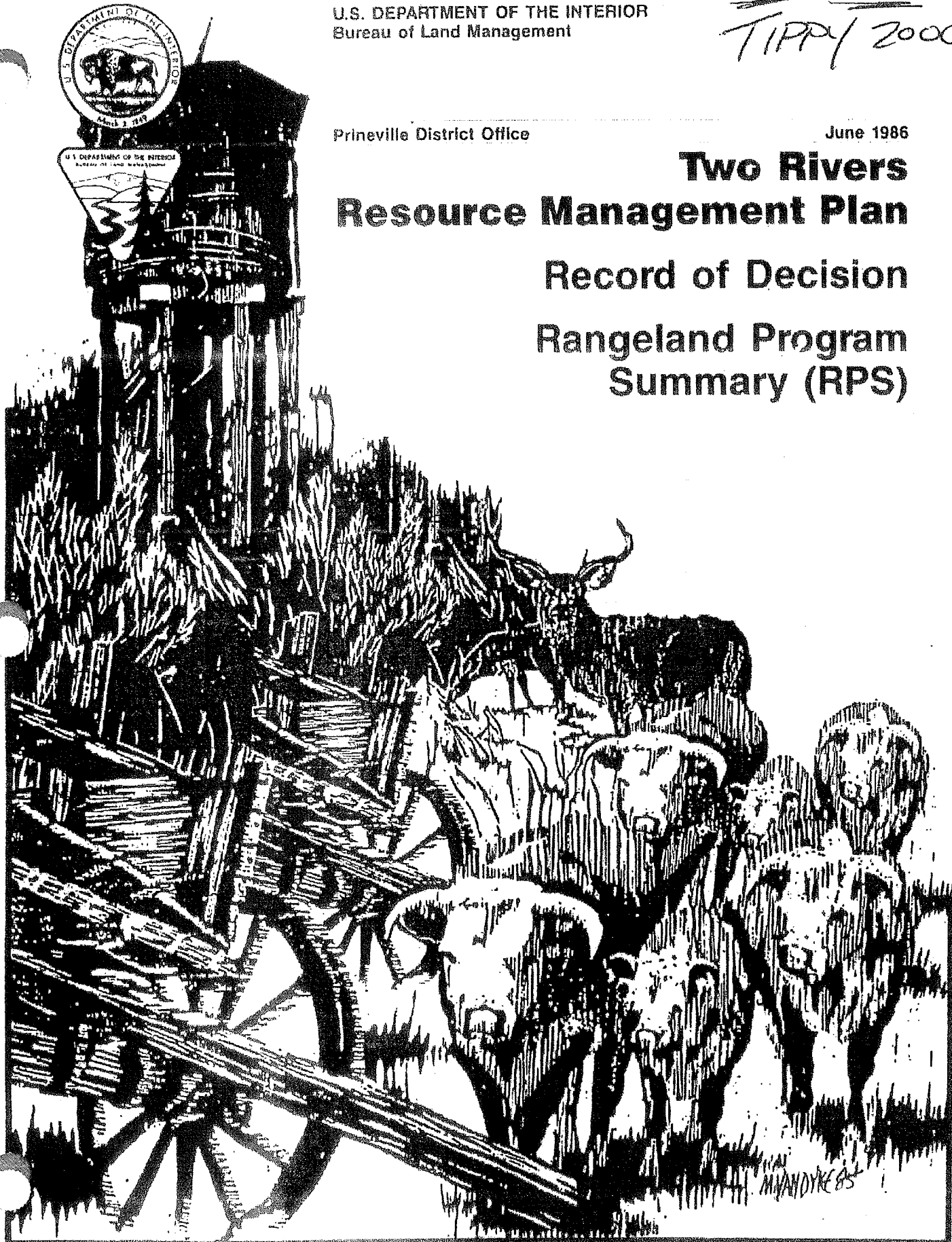
U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management

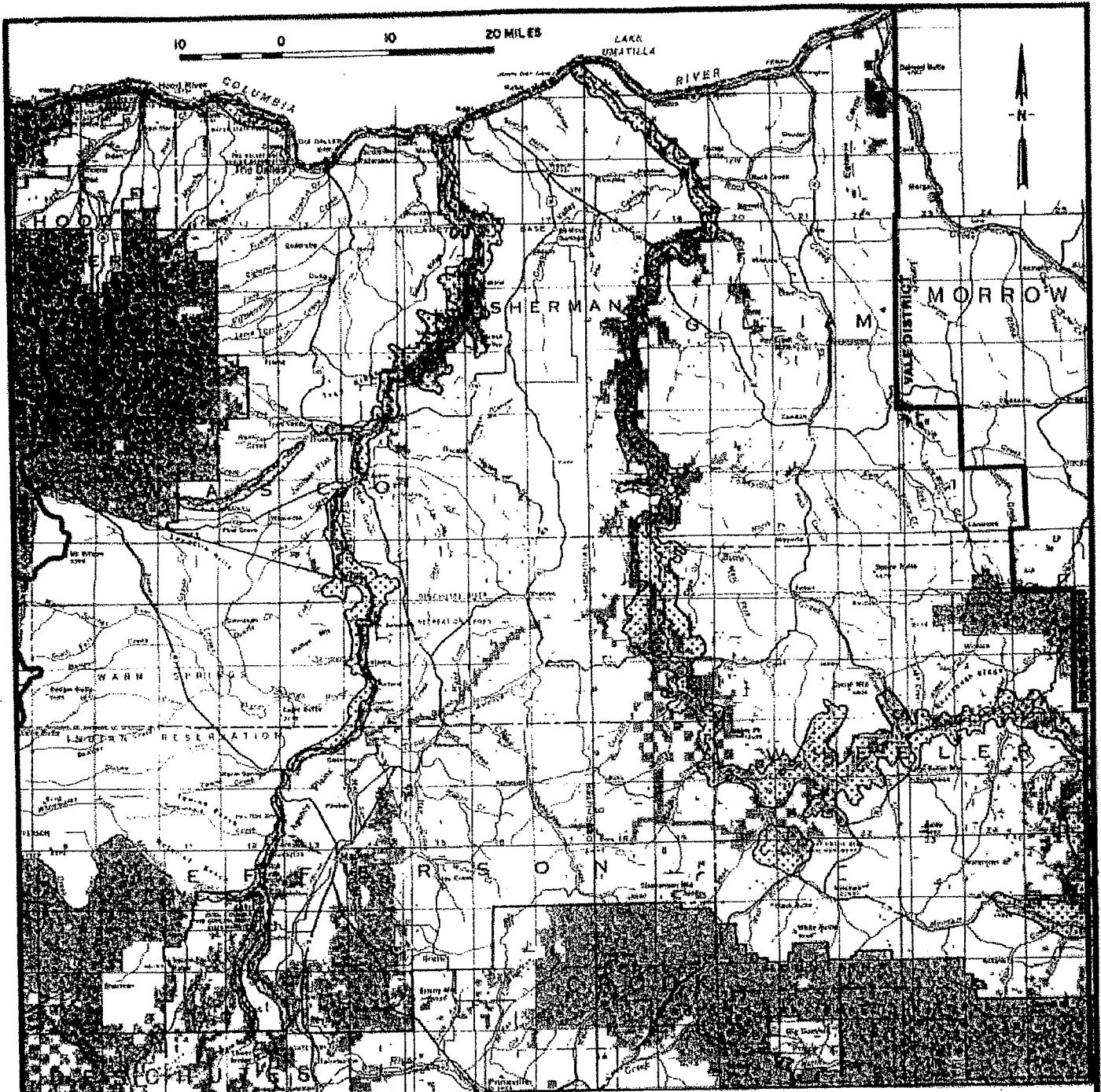
CV 8/4/86
TIPP/2000

Prineville District Office

June 1986

**Two Rivers
Resource Management Plan
Record of Decision
Rangeland Program
Summary (RPS)**





U. S. DEPARTMENT OF THE INTERIOR
 Bureau of Land Management
 PRINEVILLE DISTRICT
 1988

 Areas of High Visual Quality

MAP 6
Areas of High
Visual Quality

Rockhounding

Collectible mineral resources with moderate or high value as shown on Map 8, will be available for rockhounding and recognized in land use decisions.

Special Management Areas

The thirteen special management areas identified on Map 9 will be managed as follows:

The Island in The Cove Palisades State Park

The 250 acres of public land will be designated and managed as an Area of Critical Environmental Concern; Research Natural Area. This includes 80 acres of USFS land which will require a cooperative management agreement.

The designation and management of this area will be designed to protect and preserve what is considered to be the best remaining example of the western juniper/big sagebrush/bluebunch wheatgrass plant association in the region. It is also

a raptor, deer, and waterfowl use area and contains outstanding scenic vistas of Lake Billy Chinook and the Cascades.

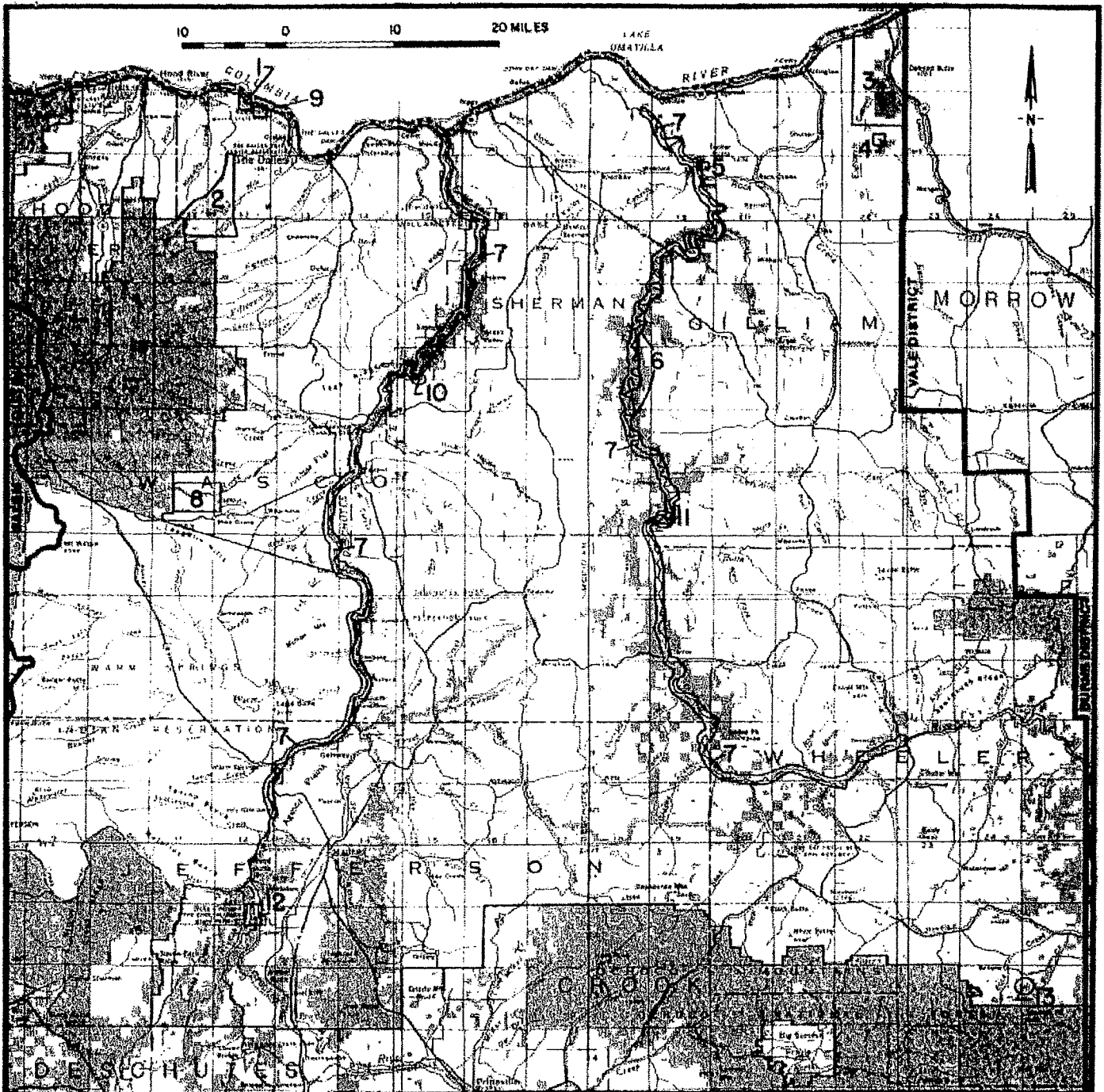
Specific management actions to be taken include closing the area to off road vehicle use, continuing to not lease the area for fluid mineral exploration and development, to not sell mineral material in the area (rock, sand or gravel), to continue to exclude livestock grazing, preclude the use of mechanized equipment in fire suppression and prohibit the collection of rocks, plants, plant parts and animals.

Deschutes and John Day River Canyons (Including the Red Wall)

Areas of high visual and natural quality in the canyon areas (approximately 139,000 acres) will continue to be protected while allowing other compatible uses in the same area. A cooperative role with the State Parks and Recreation Division of the Oregon Department of Transportation in managing the public lands consistent with the intent of the Oregon Scenic Waterways Act will be continued.



The Island In The Cove Palisades State Park



1. Governor Tom McCall Preserve at Rowena
2. The Dalles Watershed Area
3. Horn Butte (Curlew) Wildlife Area
4. Oregon Trail Historic Site at Fourmile Canyon
5. Oregon Trail Historic Site at McDonald Crossing
6. John Day River State Wildlife Refuge
7. Deschutes and John Day State Scenic Waterways
8. White River Wildlife Management Area
9. Botanical/Scenic Areas Within Columbia Gorge
10. Macks Canyon Archaeological and Recreation Area
11. Red Wall Scenic Area
12. The Island at The Cove Palisades State Park
13. Spanish Gulch Mining District

U. S. DEPARTMENT OF THE INTERIOR
 Bureau of Land Management ,
 PRINEVILLE DISTRICT
 1986

MAP 9
Special Management Areas

John Day River State Wildlife Refuge, Horn Butte Curlew Area and White River Wildlife Areas

it is compatible

Incompatible uses will be excluded. The areas will be managed to meet forage and habitat needs for big game and non game species as recommended by the Oregon Department of Fish and Wildlife. The Horn Butte Curlew Area which totals 6,000 acres will be designated as an Area of Critical Environmental Concern. The designation and management of this area will be designed to protect and preserve the important nesting habitat for the long billed curlew. Specific management actions to be taken include limiting vehicle travel on public lands to existing roads and trails and by managing livestock grazing in the area to enhance habitat for the long billed curlew.

The Dalles Watershed

The management agreement with the City of The Dalles will be continued. Surface disturbing activities will be excluded from this 410 acre area if they would have an adverse effect on the watershed.

The Governor Tom McCall Preserve at Rowena and the Botanical/Scenic Areas within the Columbia Gorge.

The 12.5 acres of public land within The Governor Tom McCall Preserve will be designated as an Area of Critical Environmental Concern; Outstanding Natural Area to preserve the outstanding botanic values of this area. The important botanic/zoologic and scenic qualities of 76 additional acres (in two parcels) outside this preserve, but within the Columbia Gorge, will also be preserved with a designation as an Area of Critical Environmental Concern; Outstanding Natural Area. Specific management actions to be taken include closing the areas to off road vehicle use, continuing to not lease the areas for fluid mineral exploration and development, to not sell mineral material (rock, sand or gravel), to continue to exclude livestock grazing from the areas, preclude the use of mechanized equipment in fire suppression and prohibit the collection of rocks, plants, plant parts or animals.

Historic Spanish Gulch Mining District

The 335 acre Spanish Gulch Mining District has been determined to be eligible for the National Register of Historic Places. It will be designated as an Area of Critical Environmental Concern to protect and maintain significant historical values. The designation will recognize valid existing mineral rights.

This mining district is an important historic gold mining area dating back to the mid 1800s. Remnants of early mining activities include an old stamp mill, mineshafts and several old cabins. Specific management actions to be taken include limiting vehicle travel to existing roads and trails and requiring plans of operation from mining claimants before beginning any mining operations in the area.

The Oregon Trail Historic Sites at Fourmile Canyon and McDonald and the Macks Canyon Archaeological Site.

The unusual qualities of these sites will be maintained and protected. Intensive management plans, as well as public information and interpretive plans will be developed for these areas.

Implementation

Five of the special management areas are hereby designated as areas of critical environmental concern with three areas being managed as either a research natural area, or an outstanding natural area. This action is completed with the publication of this record of decision and filing of the designation order in the Federal Register. Additional survey work will be initiated on Sutton Mountain and on the Sherars Bridge Road to determine if the areas meet the criteria for one of the above designations. Any areas which are nominated and found to meet the criteria for classification as an Area of Critical Environmental Concern in the future will receive interim protective management until formal designation occurs.

Utility and Transportation Corridors

All utility/transportation corridors identified by the Western Regional Corridor Study of May 1980, prepared by the Ad Hoc Western Utility Group and shown on Map 10 are currently occupied and will be designated without further review. Corridor widths vary, but are a minimum of 2,000 feet. No additional crossing sites on the BLM managed portions of the Deschutes and John Day rivers will be permitted. No facilities will be allowed parallel to the railroad right of way in the Deschutes Canyon. Applicants will be encouraged to locate new facilities (including communication sites) adjacent to existing facilities to the extent possible.

All rights of way applications will be reviewed using the criteria of following existing corridors wherever practical and avoiding proliferation of separate rights of way. Recommendations made to applicants and actions approved will be consistent with the objectives of the RMP. All designated areas of critical environmental concern and wilderness study areas will be considered right of way exclusion areas. Public lands will continue to be available for local rights of way, including multiple use and single use utility/transportation corridors following existing routes, communication sites, and roads. Issuance of leases and/or patents under the Recreation and Public Purposes Act and other permits or leases for development of public lands will also continue. Applications will be reviewed on an individual basis for conformance with the Two Rivers RMP to minimize conflicts with other resources or users.

Visual Resources

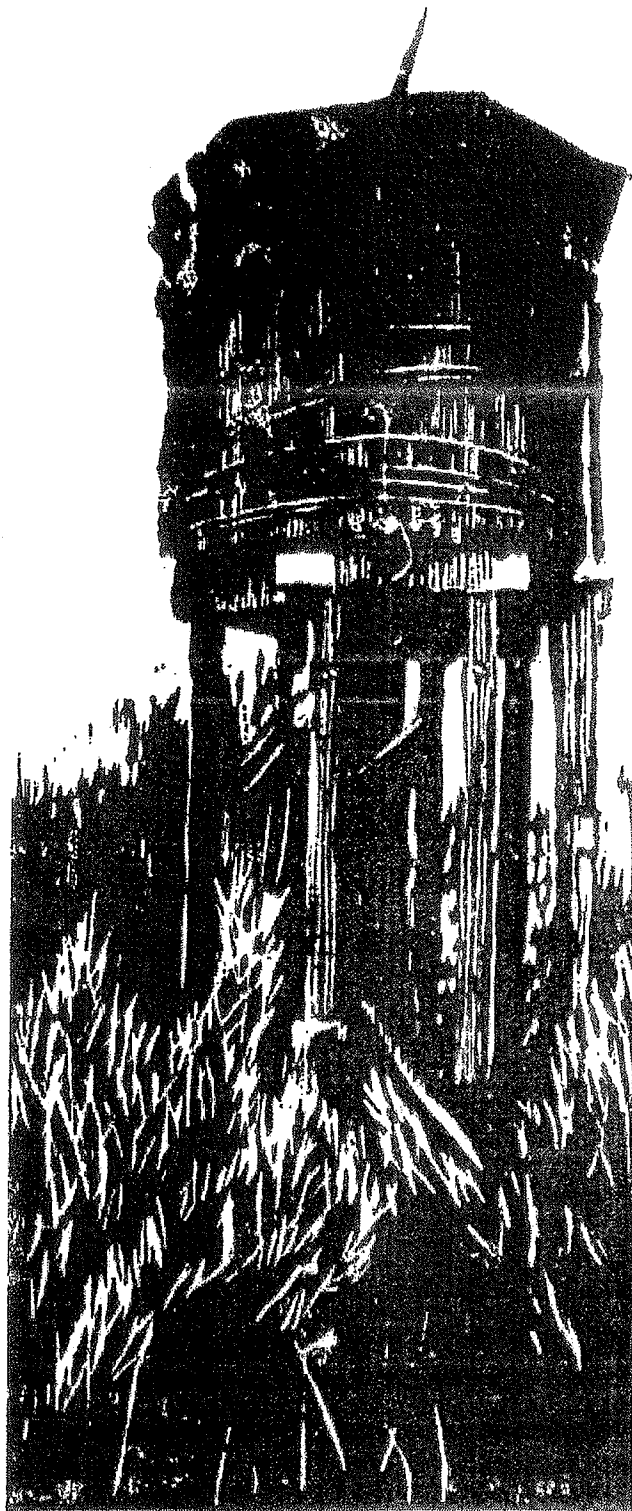
Before the BLM initiates or permits any major surface disturbing activities on public land, an analysis will be completed to determine adverse effects on visual qualities. Activities that will result in significant, long term adverse effects on the visual resources of the John Day or Deschutes River canyons in areas normally seen from these rivers will not be permitted.

Activities within other areas of high visual quality that may be seen might be permitted if they do not attract attention or leave long term visual changes on the land. Activities in other areas may change the landscape but will be designed to minimize any adverse effect on visual quality.

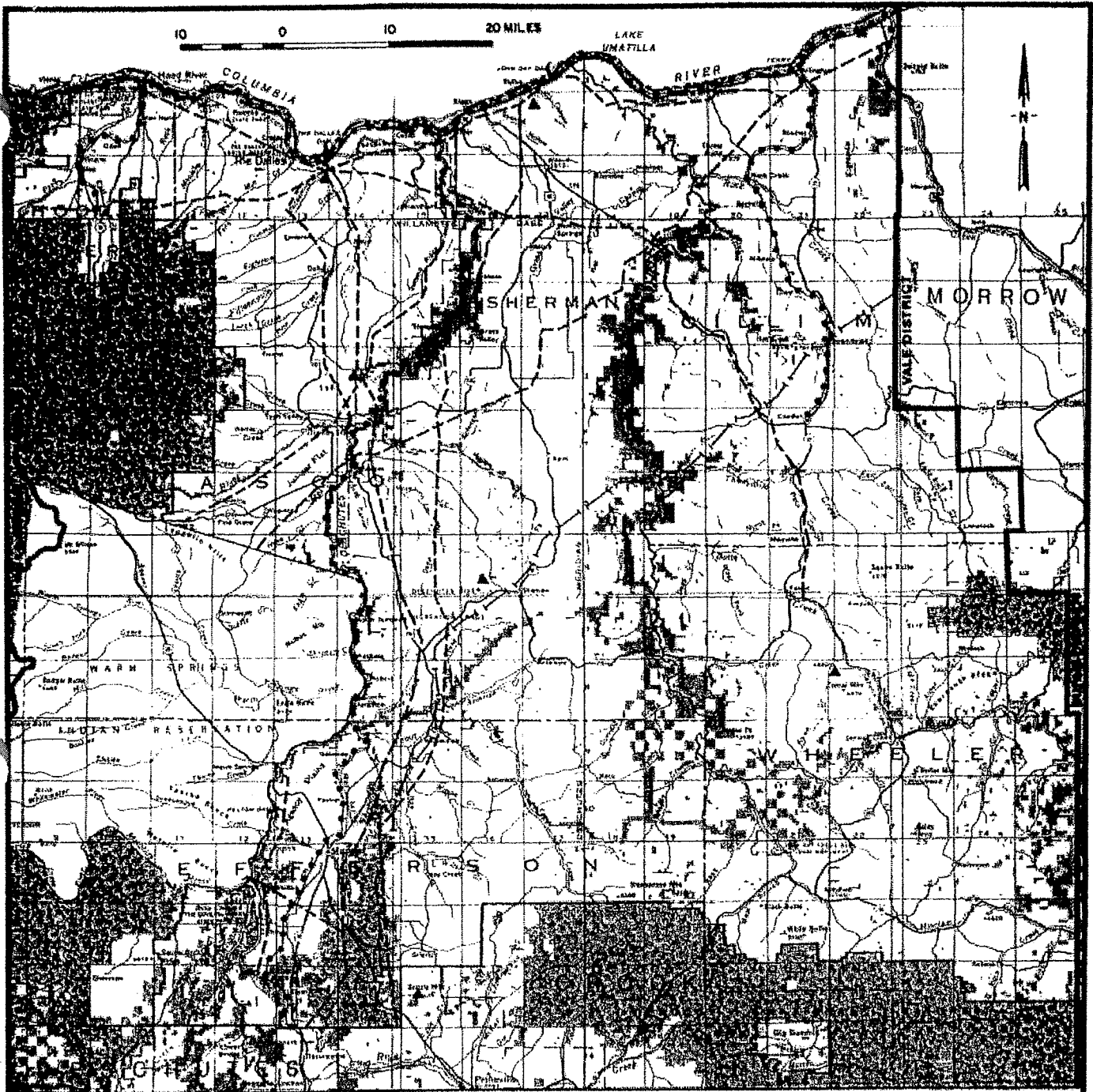
Wilderness

Areas under wilderness review will continue to be managed following the guidance of the Bureau's Interim Management Policy for Lands Under Wilderness Review. This policy will be in effect until

areas are released from interim management. Areas designated wilderness will be managed under the guidelines of BLM's Wilderness Management Policy.



Old railroad water tower at Harris Canyon

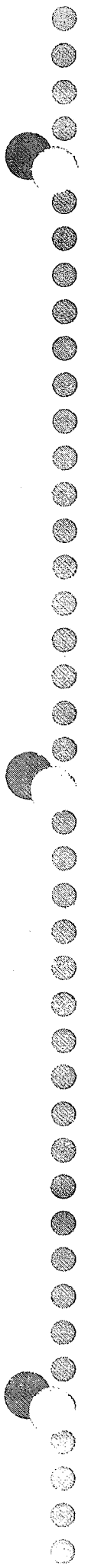


U. S. DEPARTMENT OF THE INTERIOR
 Bureau of Land Management
 PRINEVILLE DISTRICT
 1988

- Electric Transmission Line
- |—|— Natural Gas Transmission Pipeline
- Railroad
- Hydroelectric Impoundment
- ▲ Communication Site

MAP 10
Utility/Transportation
Corridors
Communication Sites

This page left
blank intentionally.





**U.S. Department of the Interior
Bureau of Land Management**

Prineville District Office
3050 NE 3rd Street
Prineville, Oregon 97754

June 2000



John Day River Proposed Management Plan, Two Rivers and John Day Resource Management Plan Amendments and Final Environmental Impact Statement

**Volume 1
Executive Summary
and Chapters 1-5**

10. How should law enforcement and emergency services be provided as visitation increases on the John Day River?

Current public use of the John Day River has grown beyond the ability of local counties to provide law enforcement and emergency services.

The BLM law enforcement officers have authority to enforce natural resource regulations on public lands. Search and rescue, emergency medical, and law enforcement assistance are the responsibility of local county sheriff departments. Local county budgets and personnel cannot support the added responsibility of meeting needs associated with the John Day River.

Medical emergencies that occur in a remote setting sometimes require highly trained response personnel. Methods used to rescue, stabilize, and transport victims to a medical facility are complicated and expensive.

Local landowners report the need for law enforcement assistance to resolve trespass and vandalism problems. Additional reported problems include visitors' needs for motor vehicle assistance. It is common in some areas of the river for local landowners to receive pleas for vehicle assistance from visitors.

Illegal activities that occur along the river corridor include trespass, vandalism, game and fish violations, unauthorized fires, guiding without a commercial permit, and drug use. Addressing these problems is difficult with the level of law enforcement coverage currently available.

11. How should the outstanding scenic qualities of the river corridor be protected and enhanced?

Potentially influences to the river's scenic quality include road construction, timber harvest, mining, changes in land use, private and commercial development, noxious weeds, improper grazing, erosion, and utility rights-of-way.

Scenery was identified by Congress as an outstandingly remarkable value in all WSR segments. The State Scenic Waters Program classified several John Day River segments as "Scenic River Areas." This designation overlaps most of the National Wild and Scenic river miles. Scenery is an important value in non-designated river segments as well, and segments of highways that parallel the John Day River have been identified as State Scenic Byways. In managing scenic qualities, including those of the John Day River, the BLM uses a Visual Resource Management (VRM) system to inventory and manage these values. See the Glossary and Appendix O for VRM descriptions.

Currently, changes in land use and the development of structures for private or commercial use pose the greatest potential for change to the river's scenic quality, especially in the less developed segments of the mainstem and the North Fork. The BLM uses the VRM process to preserve scenic qualities on public lands, but has no control over development of private lands along any portion of the river. Scenic qualities can be preserved to some degree on private lands located in SSWs segments under the provisions of the SSWs System. County agencies have the option of addressing future riverside development through local land use plans.

12. How should increasing recreation use be managed to protect and enhance river values?

Visitors to the John Day River come to participate in many types of activities and seek a variety of recreation experiences. There has been a significant increase in public use of the John Day River system in recent years. The amount and type of recreation use may be degrading river values in some areas. Some visitors report that it is becoming increasingly difficult to find the type of experience they are seeking or have enjoyed in the past due to increased use and types of use. Other visitors, especially those visiting the area for the first time, tend to be satisfied with the present recreation experience and opportunities.

The very large and diverse John Day River system allows managers to provide a wide variety of recreation opportunities and experiences, while emphasizing protection of river values.

Non-native and/or wild and domestic sheep and goat species that have the potential to move into occupied bighorn sheep habitat are a concern because of potential for disease transmission and habitat competition and degradation.

The spotted bat, also a Bureau Sensitive species in Oregon, is found in one segment along the John Day River.

Scenery

The John Day River system contains an abundance of high quality scenery that contributed to the state and federal river designations and is extremely important to visitors and residents of the area. Scenery is identified as an outstandingly remarkable value for federally designated WSR segments by both Congress and the BLM. Oregon Parks and Recreation Department (OPRD) has also identified scenery as a "Special Attribute" for State Scenic Waterways along the mainstem, North Fork, Middle Fork, and South Fork John Day Rivers. Canyons along these river segments include vertical cliffs more than 500 feet high composed of dramatic basalt rock outcrops. Sandy beaches and gravel bars appear at low water flows. Diverse vegetation, from fir and pine trees in the uplands to high desert communities of sagebrush and juniper in the lowlands, dot the landscape along the South, North, and Middle Forks of the John Day River. Ranches, intermingled with public lands, add an interesting contrast. No major hydroelectric dams or developments impair the visual resource values in the basin.

The BLM uses the Visual Resource Management (VRM) system to classify scenery and provide a framework for managing visual impacts of activities occurring on BLM-administered lands. VRM inventories were completed and resulted in VRM classifications, which were documented in the Two Rivers RMP (USDI-BLM 1986) and John Day RMP (USDI-BLM 1985) for all river segments, except Segment 8. Comparable scenery management guidelines were established for Segment 8, the upper North Fork, by the Umatilla National Forest in the North Fork John Day WSR Plan (USDA-FS 1993). All WSR segments, most non-designated segments, and portions of some tributaries are classified as VRM Class II, in which management activities resulting in changes to the existing character of the landscape may be allowed, provided they do not attract the attention of the casual observer. A recent change in BLM policy classifies all lands within Wilderness and Wilderness Study Areas (WSAs) as VRM Class I, which requires that natural processes dominate the landscape, allowing limited management activity, provided it does not attract attention. The Two Rivers and John Day RMPs have yet to be amended to reflect the change in VRM classification for WSAs (Appendix O).

Vegetation

A useful way of discussing vegetation is by examining plant communities similarly affected by landscape and climate (Oosting 1956). These classifiable plant communities are referred to as ecological sites. Ecological sites are grouped according to specific physical characteristics that differ from other kinds of land in the ability to produce a distinctive kind and amount of vegetation (such as potential vegetation). Potential vegetation is a function of soil, parent material, relief, climate, flow regime (for riparian communities), biota (animals), and time (time for the biotic community to approximate a dynamic equilibrium with soil and climate conditions) (USDA NRCS 1997). Ecological sites along the John Day River can be broadly categorized into four basic divisions according to the topographic position which they occupy: riparian, riverine terrace, upland, and forest-woodland (see Appendix M).

Riparian

The riparian zone is the area that normally receives some degree of inundation (or saturated soil conditions) during the growing season (for more information refer to U.S. Army Corps of Engineers 1987 and USDI-BLM 1993). In most of the John Day River, the majority of the riparian zone is flooded during part of the growing season and dry during mid to late summer. There are several riparian ecological sites that have distinct potential plant communities. Some of these sites have potential for dense riparian plant communities. In areas where the soils are not developed enough to moderate the annual wet-dry cycle, vegetation is either lacking completely or restricted above the normal high water line to plants such as service berry, hackberry, mock orange and various annual and perennial grasses and forbs. The areas where soils are developed and well-drained have more shrubs that are traditionally considered riparian, such as willow and alder. Where water flow is slow or where saturated soil conditions last longer into the growing season, sedges and rushes occupy more of the plant composition. General descriptions of the ecological sites are presented in Appendix M.

River Segment Descriptions

The following descriptions are organized the same as the preceding general description. Omission of topics previously discussed indicates that no additional information is available.

Segment 1: Mainstem - Tumwater Falls to Cottonwood Bridge

Location and Characteristics

This segment is the lowest in elevation of the John Day River. It lies between Tumwater Falls (RM 10) and Cottonwood bridge (RM 40), where State Highway 206 crosses the John Day River.

The lower subbasin, which includes this segment, drains an area of about 2,030 square miles. It is physiographically different from the upstream segments in that it generally lacks the mountainous terrain and high elevations that accumulate significant snow pack.

Land Ownership and Classification

The BLM administers about 25% of the 30 miles of river frontage in this segment, and the remaining 75% is private land. River-front ownership is mixed, so along many stretches, one side of the river is private, and the other side is BLM-administered land. The area at McDonald Ferry, on the east side of the river, is primarily private land, but there is BLM-administered land in the immediate vicinity. The BLM regularly receives inquiries from visitors wanting to fish or hunt in this river segment and who are confused about the ownership of the river's bed and banks. The BLM also receives occasional complaints from landowners about trespass by recreation users.

The river corridor between Thirtymile Creek and the Columbia River is a State of Oregon Wildlife Refuge that prohibits waterfowl hunting. The entire segment was designated as a federal Wild and Scenic River by Congress in 1988 and as a State Scenic Waterway in 1970 by the State of Oregon. This segment contains no designated Wilderness and no Wilderness Study Areas. The Oregon Trail crosses the river near RM 21.

This segment of the John Day River serves as the boundary between Sherman and Gilliam counties.

Sherman County has planned and zoned private lands adjoining the west bank of the river as "Exclusive Farm Use." The purpose of Exclusive Farm Use is to protect agricultural uses from encroachment by incompatible uses and to provide tax incentives to assure that agricultural land is retained in agricultural use. The minimum lot size for this zone is 40 acres. Subdivisions and major partitions are prohibited.

Gilliam County has also planned and zoned private lands along the east bank of the river as Exclusive Farm Use. A lot or parcel of 160 acres or more is considered a farm unit. A lot or parcel of less than 160 acres, but not less than 100 acres, may be acceptable as a farm unit if approved through the conditional use process. The Gilliam County Comprehensive Plan recognizes the existence of the State Scenic Waterway designation along the John Day River, and county policy states they will cooperate with OPRD when development is proposed on private lands along the river.

Information and Education

An informational bulletin board and boater registration station is located at Cottonwood Bridge Recreation Site. Posted information includes fire regulations, Marine Board regulations, and minimum impact camping requirements. There are signs discouraging shooting and garbage dumping, which are two of the main management problems at this site. BLM personnel and volunteers are present at this site on peak river use days to instruct boaters in the use of the new river-toilet dump station located here.

The BLM, in cooperation with the Sherman County Historical Society, constructed an Oregon Trail interpretive site on the west side of the river at McDonald Ferry (RM 21) to complement an existing monument erected previously by that local organization. The interpretive site and monument highlight the trials and tribulation of the Oregon Trail emigrants who crossed the John Day River at this location. Access to the monument is available from the west side of the river by county road from Wasco. The site can also be accessed along the county road by foot from the river, or by vehicle via a low water ford from the east side. Conflicts occur regarding access at this latter point; however, due to unclear direction via the county road across a 1/4 mile strip of private land between the site and the river.

Law Enforcement and Emergency Services

Several court cases are pending as a result of alleged private land trespass by recreationists. Ownership of the river bed and banks has not been determined by the State of Oregon, resulting in confusion over the legal rights of public land users and private landowners.

Cultural Resources

Segment 1 has been selectively inventoried for cultural resources by Polk (1976). This small sampling revealed the occurrence of only a few prehistoric sites. Based on this small sample and subsequent excavations along the river, it appears that human occupation in the lower part of the canyon extends back at least 8,000 years (Schalk 1987). It has been suggested that the interior portion of the canyon, but not necessarily this segment, was most heavily used after about 5,000 years ago.

Ethnographically, this segment of the river canyon is known to have been used by the Tenino group of Sahaptin-speakers, primarily for fishing. Several villages are known to have existed in the lower reaches of the river. The BLM has limited knowledge about other or more current uses of the canyon by Native American Indian groups. The CTWSRO have indicated past historical use of, and continued interest in, Tumwater Falls for fishing.

The primary historic use of this river segment occurred at the John Day crossing, what is now called McDonald Ferry. This was the only crossing point of the river for thousands of Oregon Trail emigrants between the 1840s and 1860s. In 1858, a ferry was built at the crossing. Later transportation routes used this same crossing.

Water Quantity and Quality

The lower subbasin, including this segment, can be characterized as an area that receives water, as opposed to one that produces it. Most tributary streams in the subbasin are nearly ephemeral, many ceasing to flow in summer (approximately July through September). There are three main tributaries to the lower mainstem: Rock Creek, Hay Creek, and Grass Valley Canyon. Rock Creek is the largest with a mean monthly flow ranging from 120 cfs in March to less than 1 cfs in September. Lone Rock Creek, a tributary to Rock Creek, stopped flowing at some time in at least 10 out of the 13 years between 1966 (first year of record) and 1978 (last year of published record). Generally, non-flow conditions last from August through September in these tributaries. In especially dry years, flows can stop as early as July and not resume until October.

The stream gauge at McDonald Ferry records discharge for over 95% of the John Day basin. It has been in operation since 1905 and provides an excellent record of stream flow variability. Discharge varies seasonally, from year to year, and from decade to decade (OWRD 1986). Peak discharge occurs between late March and early June, with 22% of runoff occurring in April and 21% in May. Low flows occur between July and November. The average monthly high flow is during April (5,710 cfs). Minimum monthly low flow occurs during September (87 cfs); no flow occurred for part of September 2, 1966, August 15 to September 16, 1973, and August 13, 14 and 19 to 25, 1977.

Frequency of peak flows has changed. The number of flow events exceeding 6,900 cubic feet per second (cfs) (defined by the USGS as a peak flow for the gauge at McDonald Ferry) was greater from 1980 to 1985 than any other five-year period since 1948. The flows during the 1964 and 1997 floods of 40,200 and 35,200 cfs respectively, exceeded any other flows on record by 35%. Changes in discharge may be caused by climatic variation or watershed alteration (OWRD 1986). The average annual discharge for the period of record is 1,524,000 acre feet. On some occasions, such as in 1966, 1973 and 1977, the river ceased to flow.

Final John Day River Plan and EIS

In 1996, the 29.5 miles of Segment 1 were included in the Oregon Department of Environmental Quality (ODEQ) 303(d) list of water quality limited streams as exceeding the state criteria of 64° F for summer water temperatures (ODEQ 1998). This river segment has a relatively high width-to-depth ratio, as would be expected with a river of this length, sediment load, and extreme flow variations. Low summer flows are spread into wide cross-sections, increasing the volume of water exposed to solar radiation. The percent of effective shade provided by vegetation decreases as channel width increases and is expected to be minimal for this segment. Temperature gains per mile vary widely between basins and depend on variables such as aspect, geology, vegetation, river width, and latitude. The ODEQ will conduct temperature modeling to develop TMDLs for the Lower John Day in the year 2005.

Instantaneous water temperature measurements at Cottonwood Bridge have been measured on a monthly basis by ODEQ for their Oregon Water Quality Index Reports. The 13 instantaneous measurements for June averaged 64° F. According to 22 afternoon measurements, the average daily afternoon water temperature is about 73° F in July and August.

As presented in the general discussion above, water quality in the lower river and in this segment is the result of upstream and local conditions. During the summer when flows are low, water temperatures exceed the criteria for rearing anadromous fish (ODEQ 1998). During low flow periods, water samples collected from McDonald Ferry indicate high levels of total phosphates, total suspended solids, biochemical oxygen demand, and fecal coliform. High levels of these pollutants also occur during periods of high runoff as a result of erosion and field runoff (Cude 2000).

The ODEQ non-point source assessment maps (August 1988) identify severe stream bank erosion and sedimentation in some of the major tributaries to the mainstem John Day. The OWRD (1986) has reported that water quality for cold water and warm water fish "...is on a downward trend threatening continued use of the water by that use." Since the time OWRD published these conclusions, however, ODEQ (1999) has noted, in reference to the entire lower John Day River, that water quality has "significantly improved" and utilizes a graph (Figure 2-C) to illustrate the upward trend of water quality since 1985 (water quality parameters that make up the water quality index are temperature, dissolved oxygen, biochemical oxygen demand, pH, ammonia+nitrate nitrogen, total phosphates, total solids, and fecal coliform). The ODEQ data collected between 1985 and 1998 at Cottonwood Bridge, the upstream end of Segment 1, revealed no improvement or decline in water quality.

Fish

This segment is within the lower John Day River subbasin and produces approximately 2% of the summer steelhead of the John Day basin (OWRD 1986). Steelhead spawning and rearing occurs in Grass Valley, Rock, and Hay creeks. The river itself functions as a migration corridor for adult and juvenile anadromous salmonids (summer steelhead and spring chinook) during fall and spring. During the summer months, the mainstem does not provide habitat for anadromous salmonids. Adult spring chinook migrate in the spring through the segment to spawning areas in tributaries. Steelhead and spring chinook eggs hatch, and fry rear, in the tributaries during the following year. Smolts migrate downstream from rearing areas in the tributaries during the spring and early summer. In addition, a small run of fall chinook may have historically utilized this segment.

This segment provides year round habitat for smallmouth bass, which provides the most notable fishery in this segment.

Wildlife

Wildlife species diversity in this river segment is limited by the lack of woody riparian vegetation that provides the vertical structure favored by many wildlife species. The condition of riparian habitat influences the presence of many wildlife species that rely on riparian diversity and structure for nesting and rearing of young. Riparian habitat conditions also influence production of food sources (such as flying insects), which contribute to the variety and numbers of species, such as bats or flycatchers. Dense stands of coyote willow have developed in many areas, especially where riparian-oriented grazing management has been implemented.

Some wildlife species expected to occur in riparian habitat, such as many species of neotropical migratory birds, use this segment, but on a very limited basis because of the relatively small area that can be inhabited. Beaver and river otter continue to utilize the river and may be increasing, but their use is restricted to suitable habitat. A few species, such as the introduced chukar, thrive here by primarily utilizing upland habitats away from the river. Although limited in this segment, irrigated agricultural fields provide mule deer with high protein forage, especially in the late summer and early fall when many native forb species lose their nutrients. Species presently found along this segment of river include great blue herons, beaver, mule deer, bobcats, Western rattlesnakes, nighthawks, cliff swallows, Canada geese, Brewer's blackbird, Pacific treefrog, spotted sandpipers, chukar, and golden eagles. This segment also has one of the very few known populations of spotted bat in the State of Oregon. The spotted bat is a special status species.

All of Segment 1 is within the John Day Wildlife Refuge. The refuge was established by the State of Oregon in 1933, but waterfowl hunting has been prohibited since 1921. This refuge includes a 0.25-mile corridor on each side of the river, measured from the high water mark. The primary purpose of this refuge is to protect wintering and nesting waterfowl. The area is open to deer and upland bird hunting during authorized seasons, between August 30 and October 31. No waterfowl hunting is allowed.

Scenery

A portion of this river segment flows through a deep canyon with steep walls next to the river. More often, however, the river flows through a wide valley with agricultural fields near the river. Signs of human activities in this area are those generally expected in a rural setting. Fences, fields, and farm equipment are visible from the river. Several residences and motor vehicles owned by the residents are also visible. The most significant visual intrusion in this segment are large power lines crossing the river upstream from Hay Creek. Segment 1 is classified in the Two Rivers RMP (USDI-BLM 1986) as VRM Class II, in which management activities resulting in changes to the existing character of the landscape may be allowed, provided they do not attract the attention of the casual observer (Appendix O).

Vegetation

The vegetation types in Segment 1 are among the driest within the basin. The average yearly precipitation is 9 to 12 inches. The river elevation rises from 270 feet to 520 feet above sea level, and the canyon walls rise to 1,600 feet above sea level. Most upland soils are stony and well drained, and hill slopes tend to be steep (35% to 70%).

Segment 1 lies entirely within the Columbia Basin ecoregion (Oregon Biodiversity Project 1998). Upland plant communities have been described as "dry grass" and "dry shrub" in ICBEMP (Quigley and Arbelbide 1997). The plant communities are generally dominated by bluebunch wheatgrass on south-facing slopes and Idaho fescue on north-facing slopes. Where sagebrush grows, it is usually low sagebrush or Wyoming big sagebrush. Some of the historic bunchgrass communities are now occupied by cheatgrass, Russian thistle, fiddleneck, snakeweed, and shrubs such as gray rabbitbrush. The most common noxious weed species in this segment are knapweeds and salt cedar.

Rorippa columbiana (Columbia cress), *Mimulus jungermannioides* (hepatic monkeyflower), *Carex hystericina* (porcupine sedge) and *Juncus torreyi* (Torrey's rush) are all suspected to occur in this river segment, but have not been found.

Riparian soils tend to be highly stratified river alluvium that deposits material from upriver or side canyons (USDA-SCS 1964, 1977). The alluvial sources from further up the river tend to be silty and clayey, whereas material from side canyons is more silty and sandy soils mixed with gravel, cobble and boulders. Riverwash mainly consists of sand, well-rounded gravel, stones, and boulders, although varying amounts of silt and clay material may be present due to redeposition from cutbanks.

Riparian plant communities vary in Segment 1, due in large part to the variable ecological sites. The establishment and health of willows, sedges, and rushes depends greatly on the ecological site potential of any given location in a river segment (Vol. I, Chapter 2, Resource Values, Vegetation and Vol. II, Appendix M). Some areas that have received riparian-oriented management have developed dense stands of coyote willow, although

There is no public take-out for floatboats downstream of McDonald Ferry. Therefore, the most common way to access the river between McDonald Ferry (RM 21) and Tumwater Falls (RM 10) is to use a motorized boat to return upstream to McDonald Ferry or to seek permission for access from a private landowner. Although no boater registration data is available for McDonald Ferry, increasing numbers of people use motorized boats to access this area for steelhead fishing and upland bird hunting. Several private helicopters are also used for recreation access to this river segment.

The Cottonwood Bridge Recreation Site (J.S. Burres State Park) is the most developed recreation site in this segment. It is owned by Oregon Parks and Recreation Department (OPRD) and managed cooperatively by OPRD and BLM under a long-term lease agreement. The site is maintained by the BLM and volunteers. This site is used for boat launching and landing, fishing, picnicking, swimming, and as a popular highway rest area. Facilities at this site include a primitive boat launch, a boater registration station, parking, a picnic table, vault toilets, and a toilet dump station for boaters who have just completed a river trip. Overnight camping is not allowed at this site.

There is a small recreation site accessible by county road at Rock Creek that contains several picnic tables and limited parking. Overnight camping is allowed at the site currently maintained by volunteers.

A comprehensive inventory of dispersed river campsites has not been completed for this segment. Map surveys and general knowledge of the area, however, indicate that approximately 30 places along the river could be used for camping, approximately 10 of which are on public land. Primitive river campsites are generally in good condition due to infrequent use.

Commercial permittees reported 28 boating use days in Segment 1 during 1998, all of which occurred in November for steelhead fishing.

Access

This river segment is accessible to the public by boat or two public roads, one at Cottonwood Bridge (RM 40) and the other at McDonald Ferry (RM 21) (also called McDonald, McDonald Ford, and McDonald Crossing).

The primary public access to this segment is at the recreation site (which contains a boat launch) next to Cottonwood Bridge, where State Highway 206 crosses the John Day River. After float boaters leave Cottonwood Bridge, there is no public road access until McDonald Ferry where the river's east and west banks are accessible by county road. Conflicts between visitors and private landowners sometimes occur on both sides of the river here, often due to confusion over ownership of the bed and banks of the John Day River, which has yet to be determined. There is no public road access to the river downstream from McDonald Crossing, and boat access to the Columbia River is blocked by Tumwater Falls (RM 10). The downstream end of Tumwater Falls is accessible by boat from Lake Umatilla, which backs up to Tumwater Falls from the John Day Dam on the Columbia River.

Segment 2: Cottonwood Bridge to Clarno

Location and Characteristics

This river segment winds 70 miles downstream from Clarno Bridge at State Highway 218 (RM 109) to Cottonwood Bridge on State Highway 206 (RM 40). This segment is well known for spectacular scenery and contains very high canyon walls. The river meanders more in this segment than in adjacent segments. This segment is also very remote and contains no public road access, except for two roads at each end of the segment.

Land Ownership and Classification

The BLM manages approximately 50 of the 70 miles of river frontage. Private lands are in several small tracts scattered throughout the length of this segment.

Land designations include three BLM Wilderness Study Areas and a State of Oregon wildlife refuge from Thirtymile Creek downstream to the Columbia River.

The mainstem of the John Day River serves as the boundary between Sherman and Gilliam counties and also as the boundary between Wasco and Wheeler counties.

Land use guidelines and county zoning for this segment are the same as in Segment 1.

This river segment is presently classified as a State Scenic Waterway "Scenic River Area," from Cottonwood Bridge to Ferry Canyon. State classifications in this segment include "Scenic River Area" from Clarno to Thirtymile Creek, "Natural River Area" from Thirtymile Creek to Ferry Canyon, and "Scenic River" from Ferry Canyon to Cottonwood Bridge. State guidelines under the existing Oregon Administrative Rules (OAR 736-040-0065) describe how lands should be managed under these classifications.

Information and Education

An information bulletin board and boater registration station is located at Clarno Recreation Site and at the BLM launch site at Butte Creek. Posted information includes fire regulations, Marine Board regulations, and minimum impact camping requirements. At Clarno, signs also discourage shooting and garbage dumping, which are the two main management problems at this site. An interpretive display encourages boaters to help pull noxious weeds. BLM personnel and volunteers are present at the Clarno Recreation Site on peak river launch days to contact boaters and instruct them in minimum impact camping requirements.

Paleontology

The lower two-thirds of this segment is considered to have low potential for both vertebrate and invertebrate fossils. The upper third, however, is in the vicinity of the Clarno Unit of the John Day Fossil Beds National Monument. Fossil-bearing exposures occur within and adjacent to this portion of the segment. No formal inventories have yet been conducted within the corridor but several locations are known to contain or are considered highly likely to contain significant vertebrate and botanical specimens. One fossil locality in the vicinity of Clarno is being used for outreach and education efforts with Oregon Museum of Science and Industry (OMSI) students under a long-term volunteer agreement with the BLM.

Cultural Resources

Polk (1976) conducted a cultural inventory of this segment. Within this particular stretch of the river, Polk recorded 59 prehistoric sites. An additional five prehistoric sites have been located since that time, and other sites are expected to exist but have yet to be discovered. The nature of several of the prehistoric sites is undetermined, because they are buried by river sediments. Many of the sites are in good condition, but those nearest to access points, and a few which are not, have been badly damaged by vandals. Recent formal excavations at a prehistoric site adjacent to the corridor have resulted in the hypothesis that prehistoric occupation and use increased dramatically between 4,000 and 2,000 years ago, then steadily declined (Atwell and Katsura 1995).

Ethnographically, the area was used by the Tenino group of the Sahaplin-speaking language family. Few of the early ethnographic studies specifically mention the use of the canyon. Suphan (1974) indicates that the canyon was used for fishing, hunting, and plant gathering. The few village and resource use locations noted by Suphan cannot be correlated with known archaeological sites. This segment of the canyon is used by members of the CTWSRO or other Native American groups for economic or religious purposes. However, the nature and extent of this use is unknown to the BLM.

Historic use of this segment is oriented primarily towards post-1900 farming and ranching, and a few sites are related to transportation, prohibition, and entertainment.

Water Quantity and Quality

Segment 2 drains about 906 square miles of arid lands. Precipitation here is around 10 inches per year, and mean annual runoff is between 0.5 and 0.75 inches per year. This means that this segment contributes between 35 and 50 cfs per year, based on calculations of data from OWRD (1986). Discharge patterns, peak flows, and duration of flow events are similar to those of Segments 1 and 3. Butte Creek, Thirtymile Creek, and Pine Hollow Creek are the main tributaries to this segment. Butte Creek flow averages from one to five cfs, July through October.

In 1996, the ODEQ included the 70 miles of Segment 2 in the 303(d) list of water quality limited streams under the parameter of temperature. The criteria of 64° F is based on the beneficial use of the waters for fish rearing. Instantaneous water temperature measurements at Cottonwood Bridge have been measured monthly by ODEQ for their Oregon Water Quality Index Reports. These measurements are taken at the downstream end of Segment 2. Thirteen instantaneous water measurements (1985-1998) averaged 64° F. Based on 22 afternoon measurements, the average daily afternoon water temperature is about 73° F in July and August (Cude 2000).

Water quality impairment from within this segment is a consequence of stream bank erosion and sedimentation. In the past, Condon and Fossil municipal sewage treatment facilities were discharging poor quality effluent into Thirtymile and Butte Creeks (OWRD 1986.) The ODEQ is pursuing correction of problems at both facilities. However, the history of sewage discharge can influence current conditions because pollutants collect in stream sediments. This condition can exacerbate problems associated with eutrophication during low flows that result in the release of contaminants during periods of high flows. "Water quality constituents such as total phosphates, biochemical oxygen demand, and fecal coliform are typically elevated during late summer when flow is lowest and water temperatures are the highest" (Cude 2000). Average Oregon Water Quality Index scores are poor in the summer and fair during the fall, winter and spring (Cude 2000).

Fisheries

Like Segment 1, this segment is a migration corridor for adult and juvenile anadromous fish from September to the following May and June. Meaningful water temperature data is not available for this segment, but is assumed to be similar to Segment 3. Thirtymile and Butte Creeks provide steelhead and rainbow trout with spawning habitat. Butte Creek is important for improving water quality in the mainstem due to its colder water temperatures (Claire 1991). Pine Hollow Creek intermittently provides spawning and rearing habitat for steelhead, depending on water flows. Two other tributaries (Jackknife and Little Ferry Canyons) may still produce steelhead intermittently, but direct observations have not been made. Productivity of smallmouth bass in this segment is considered to be excellent and is a nationally known fishery (Claire 1991). Channel catfish are also present in this segment.

Wildlife

The portion of this segment from Thirtymile Creek to Cottonwood Bridge is within the State of Oregon John Day Wildlife Refuge. Canada geese, the main species of concern in the wildlife refuge, occupy this segment year-round. Wildlife diversity and numbers within Segment 2 is slightly higher than Segment 1. This can be partially attributed to riparian grazing systems, an increase in the occurrence of shrub communities, and increased features such as cliffs and more pronounced canyon formations. The same wildlife species found in Segment 1 occur in this segment, with additional representative species being prairie falcons, violet-green swallows, canyon wrens, red-tail hawks, osprey, and flickers. In addition, California bighorn sheep have been successfully reintroduced into this segment on both sides of the river, and populations are expanding. This segment (like Segment 1) has one of the very few known populations of spotted bat in the State of Oregon. The spotted bat is a special status species.

The Farmers Home Administration (FmHA) transferred title of a 512-acre property north of Clarno to the BLM in 1992. Technical experts from the U.S. Fish and Wildlife Service (USFWS) found unusually high fish, wildlife, and other environmental values associated with the land. Because of these values, the USFWS, in consultation with the ODFW, recommended FmHA protect and enhance these values for the public by transferring title to the BLM, which manages adjacent public land. Since that title transfer, much wildlife habitat improvement has occurred on this property. Weed control efforts, wildlife food and cover plots, wildlife guzzlers, as well as cottonwood

plantings are all part of the efforts that have been accomplished since BLM acquisition of this property. Wildlife food and cover plots and wildlife guzzlers have been accomplished through support and funding from the ODFW, Oregon Hunter's Association, Quail Unlimited, Oregon Wildlife Heritage Foundation, National Fish and Wildlife Foundation, and Pheasants Forever.

Scenery

The primitive and largely natural scenery of this segment provides river visitors with a sense of wildness and remoteness. It is an area of high plateaus bisected by the river and its tributaries. The river winds through majestic basalt cliffs that reach heights of over 1,000 feet above the river, and steeply sloped hills covered with grass, sagebrush, and juniper.

These high cliffs are impressively scenic, especially in the early morning or late afternoon when lighting is at its best. In contrast to the rugged, golden hills, riparian vegetation laces the river edge and rocky side canyons with a lush green hue. Scattered juniper trees produce a sprinkling of color and fragrance. Erosion and oxidation of some basalt columns and pillars have created interesting formations and colors that have become scenic landmarks for river visitors.

Visitor surveys conducted by the OPRD in 1983/84 found that solitude, scenery and wildlife were very important aspects of their visit to the John Day River. This portion of the mainstem exemplifies those qualities. Outstanding scenic qualities have been identified as a special feature of all three Wilderness Study Areas located within this river segment. Additionally, Congress and the BLM determined the scenery of the John Day River to be an outstandingly remarkable value of the mainstem John Day WSR.

Signs of human activity in this segment are either temporary or not significant enough to seriously affect the scenic values and are mostly products of ranching and farming. These include fences, spring developments, livestock, irrigation pumps, and a few private airstrips and primitive dirt roads. Highway 206 crosses the river at Cottonwood Bridge, and a powerline can be seen for approximately 4 miles from Devils Canyon to Cottonwood edge. Some evidence of an underground pipeline and a fiber optics line is present at Thirtymile Canyon.

Segment 2, including substantial uplands between Clarno and Butte Creek and portions of some tributaries, are classified in the Two Rivers RMP (USDI-BLM 1986) as VRM Class II, in which management activities resulting in changes to the existing character of the landscape may be allowed, provided they do not attract the attention of the casual observer. (Appendix O)

Seven designated military overflight routes cross or closely parallel the John Day River between Cherry Creek and the Columbia River, and two other military routes cross the river at Kimberly. The types of aircraft vary, as do the allowed elevations of flight. In addition, privately owned aircraft occasionally fly over the John Day River, sometimes at very low elevations.

Vegetation

Segment 2 annually receives an average of 11 to 15 inches of precipitation. The river elevation rises from 520 feet to 1,380 feet above sea level, and the canyon walls rise to 2,600 feet above sea level. Canyon slopes in this segment are extreme, often exceeding 70%.

Segment 2 lies within both the Columbia Basin and the Lava Plains ecoregions, with the break being near Butte Creek (Oregon Biodiversity Project 1998). The upland plant communities have been described by ICBEMP as "dry grass" and "dry shrub," with the "cool shrub" type beginning at Butte Creek and progressing upstream (Quigley and Arbelbide 1997). Stiff sage communities become common on ridges. Sagebrush stands become denser on the hill slopes, and junipers form occasional, sparse stands in draws and on low terraces. An example of an increase in bunchgrass, on a riverine terrace site, is shown in Appendix M, Photos 23 and 24.

Riparian vegetation and soils are the same as those in Segment 1 (USDA-SCS 1964, 1970, and 1977). Two extensive willow surveys were completed on public land in this segment and Segment 3 in 1980 and 1995 (USDI-BLM 1996a). In Segment 2, *Salix exigua* (Coyote willow) increased from zero linear miles in 1980, to 9.50 miles in 1995, and the number of acres covered increased from zero to 22.69. Refer to Appendix L for a description of the willow increases on individual allotments in this segment. Examples of existing riparian sites are shown in Appendix M, Photos 1 through 12.

CHAPTER IV - OREGON STATE SCENIC WATERWAY

June 2, 2000

TO THE READER:

The John Day River system is fortunate to have designation under two important river preservation programs; the National Wild and Scenic Rivers Act and the Oregon Scenic Waterways Act. Together, these two Acts, one a federal program and one a state program, provide the best protection available today for the natural, scenic, and recreational values of our river environments.

The Oregon Parks and Recreation Department administers the Oregon Scenic Waterways Program. The department has participated with the Bureau of Land Management, the Tribes, state agencies, local government and the public in the development of the John Day River Management Plan and Environmental Impact Statement and the Rules of Land Management for the John Day River Scenic Waterway system. We deeply appreciate the opportunity offered by the BLM to include this chapter on the State Scenic Waterway Program and the state Rules of Land Management in the federal John Day River Management Plan. It is our sincere desire that displaying the state program side by side with the federal program in this manner, will give the public a clearer picture and more complete understanding of how these two programs will work together to preserve and protect the outstanding values of the John Day River system.

The rules contained in this chapter were adopted by the Oregon Parks and Recreation Commission on May 31, 2000. When they become effective later this year, these rules will be used by the Parks and Recreation Department in evaluating proposals for development, improvement or alteration of private and non-federal, public lands within the John Day River Scenic Waterway system.

For more information on the State Scenic Waterways Program or the Rules of Land Management for the John Day Scenic Waterway, please contact the Oregon Parks and Recreation Department Rivers Program at 1115 Commercial St. NE, Salem, Oregon, 97301-1002, or call (503) 378-4168.

Sincerely,
Laurie A. Warner
Acting Director
Oregon Parks and Recreation Department

Background

The Oregon Scenic Waterways System was created by ballot initiative in 1970. The original Act designated 496 free-flowing miles of six different rivers. Designation of the John Day River main stem accounted for about 147 of these miles. Scenic waterways are defined as including the designated river and related adjacent lands within one-fourth of one mile of the bank on either side of the river.

In 1988, Oregon voters passed a second scenic waterways initiative, the Oregon Rivers Initiative (Ballot Measure #7). This measure added 573 river miles to the Oregon Scenic Waterways System, including 167 additional miles to the John Day River Scenic Waterway. The John Day River addition was divided among four new segments. These segments are: an 11 mile addition to the John Day River Scenic Waterway on the main stem extending upstream from Service Creek to Parrish Creek; a 56 mile addition on the North Fork, from approximately three miles upstream from Monument to the North Fork John Day Wilderness Area; a 71 mile addition on the Middle Fork, from its confluence with the North Fork to its confluence with Crawford Creek; and a 29 mile addition on the South Fork, from the north boundary of the Phillip W. Schneider Wildlife Area (formerly Murderer's Creek Wildlife Area) to the Post-Paulina Road crossing. There are now segments of 19 rivers (1,148 river miles) and one lake (Waldo Lake) in the Oregon Scenic Waterways System.

Rivers can also be added to the system by the state legislature or through administrative act of the Governor. Such actions have added segments of five rivers and the entirety of Waldo Lake to the scenic waterway system.

Administration

Scenic waterways are administered by the Oregon Parks and Recreation Commission in accordance with Oregon Revised Statutes (ORS) 390.805 to 390.925. Oregon Administrative Rules (OAR) have been adopted to govern the program. General rules set forth generic standards that apply to all scenic waterways. Specific rules are also developed for each river during the management planning process. These rules are designed to manage development within the scenic waterway corridor to maintain the natural beauty of the river.

The Scenic Waterways Act and rules require evaluation of proposed land development, improvement or alteration relative to the scenic and aesthetic beauty of the waterway as viewed from the river. This review and evaluation apply to all related adjacent lands within one-fourth of one mile of the banks of the scenic waterway. Landowners wanting to build houses or roads, cut timber, mine, or pursue other similar projects, must make written notification to the Oregon Parks and Recreation Department (OPRD). OPRD reviews the proposal in coordination with other jurisdictions and determines if the proposal will substantially impair the natural beauty of the scenic waterway. When a project is inconsistent with scenic waterway goals, OPRD works with the landowner to resolve conflicts. The Commission has one year from the date of initial notification in which to reach accommodation with the landowner. This may include revising the project or compensating the landowner by purchasing the land or resource or negotiating a scenic easement. If satisfactory resolution is not reached within one year, the landowner may proceed with the initial development proposal.

Local and state agencies must comply with the scenic waterway law and rules. Federal land managing agencies are encouraged to coordinate with OPRD to insure their own land management actions are compatible with scenic waterway management prescriptions.

Management Plans

Scenic waterway management plans (administrative rules) are developed to protect or enhance the aesthetic and scenic values of scenic waterways while allowing compatible agriculture, forestry and other land uses. The plans are composed of management principles, standards and prescriptions applicable to scenic waterway shorelines and related adjacent lands. The rules establish varying intensities of protection or development based on the special attributes of each river segment. This is done through the use of river classifications.

In addition to developing formal management rules, the scenic waterway planning process may also identify other management tools. These may take the form of prescribed agency actions, interagency agreements, agency commitments, and cooperative arrangements with a variety of other parties, all designed to more effectively preserve and protect the natural values and special attributes of scenic waterways.

Scenic Waterway Classification

A scenic waterway may be divided into multiple segments with each segment having its own classification. Scenic waterway segments are assigned one of six possible classifications according to the character of the landscape and the amount and type of development present within the corridor at the time of designation.

The following describes each of the six classifications and the management goals each represents.

1. *Natural River Areas* are generally inaccessible, except by trail or river, with primitive or minimally developed shorelines. Preservation and enhancement of the primitive character of these areas are the goals of this classification.
2. *Accessible Natural River Areas* are readily accessible by road or railroad but otherwise possess the qualities of Natural or Scenic River Areas. Preserving or enhancing the primitive scenic character while allowing compatible recreation use are the goals of this classification.
3. *Scenic River Areas* are accessible by roads in places but contain related adjacent lands and shorelines still largely primitive and undeveloped except for agriculture and grazing. Scenic River Areas are administered to preserve their undeveloped character, maintain or enhance their high scenic quality, recreation, fish and wildlife values while allowing continued agriculture use.
4. *Natural Scenic View Areas* possess the qualities of Natural or Scenic River Areas except that one shore and the related adjacent lands have development or access that only qualify for a lesser classification. Protecting or enhancing the primitive scenic character while allowing compatible recreation use are the goals of this classification.
5. *Recreational River Areas* are readily accessible by road or railroad, may have some development along their shoreline and on related adjacent lands and may have undergone impoundment or diversion in the past. Allowing compatible existing uses and a wide range of river-oriented recreation use while protecting the natural beauty, fish and wildlife values are the management goals of this classification.
6. *River Community Areas* are river segments where the density of existing structures (residential tract or platted subdivision), or other development precludes a more restrictive classification. River Community Areas are managed to allow development that is compatible with county zoning and blends into the natural character of the surrounding landscape. This also means protecting riparian vegetation and encouraging activities that enhance the landscape.

The rules established for each river classification generally do not affect development existing at the time of scenic waterway designation. None of the classifications are designed as absolute prohibitions of new development. Though some types of improvements require notification, review, and approval, others do not.

Mining, road building, new structures, mobile home placement, land clearing and timber harvest typically must go through the notification process. River classifications and the administrative rules for each scenic waterway determine what proposals may be approved and how they must be conditioned to protect the natural and scenic beauty of the waterway.

Notification and approval is generally not needed for new fences, farm building maintenance, irrigation lines, crop rotation, danger tree removal, residential maintenance and remodeling, homesite landscaping, minor road maintenance and firewood cutting. However, landowners are generally advised to contact OPRD before making any changes to their land within a scenic waterway corridor, especially if it is visible from the river.

Classification for the John Day River Scenic Waterway (Main Stem)

The John Day River main stem from Tumwater Falls to the confluence with Service Creek was designated as a state scenic waterway in 1970. In 1988, an additional 11 miles of river extending upstream from the confluence of Service Creek to the confluence of Parrish Creek was designated as scenic waterway.

Oregon Administrative Rules divide the John Day River Scenic Waterway (main stem) into four reaches. The upstream most reach is classified as a Recreational River Area, followed by a Scenic River Area, a Natural River Area and then another Scenic River Area at the downstream end of the scenic waterway. Amendments to the John Day River Scenic Waterway rules adopted by the Oregon Parks and Recreation Commission in May 2000, lengthened the reach of the Natural River Area segment along the lower John Day River, added more definitive land management rules to the segments of the John Day River between Tumwater Falls and Service Creek, and established management rules for the new scenic waterway segment from Service Creek to Parrish Creek.

The 11.3 mile segment of the John Day River from river mile 168.7, at the confluence with Parrish Creek near Day, to river mile 157.4, at the confluence with Service Creek, runs parallel to Oregon State Highway 19. Along most of this segment, the highway can be seen from the river. OPRD has classified this scenic waterway segment as a **Recreational River Area**. The management goal for this segment is to ensure that the view of any new development along the river is unobtrusive as seen from the river.

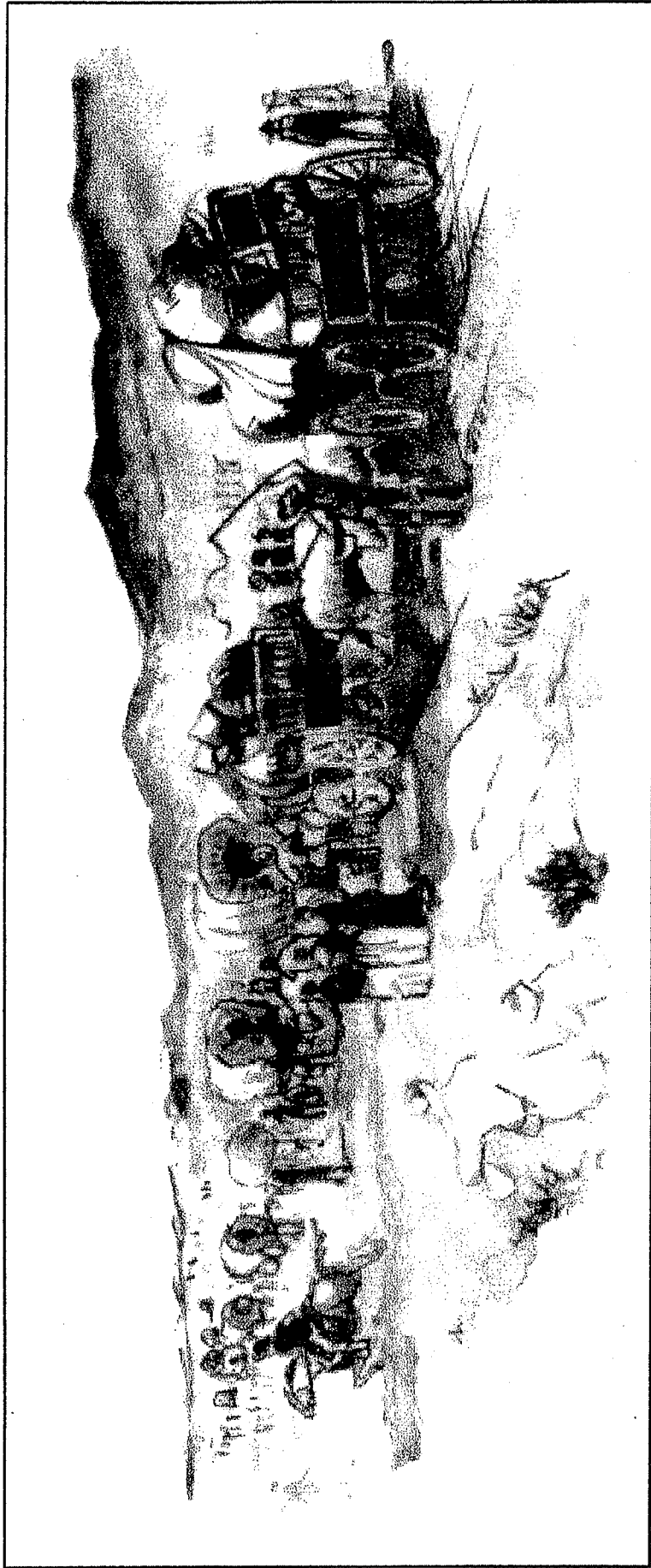
The 62.4 mile segment of the John Day River from Service Creek, at river mile 157.4, to the Wasco County-Sherman County line, at river mile 95, is fronted mainly by private agricultural lands. Public access along this segment is less prominent than the upstream reach. The management goal for this segment is to allow the continuation of existing farm, rural residential and recreation uses while protecting the scenic character of the river. OPRD has classified this segment of river as a **Scenic River Area**.

The 51.7 mile segment of the John Day River from the Wasco County-Sherman County line, at river mile 95, downstream to river mile 43.3, about three and one-half miles upstream from Cottonwood Bridge, is largely inaccessible by road. This segment of river is remotely located between steep-walled canyons where very little sign of structures or human settlement exists. River frontage in this segment is mainly Bureau of Land Management administered public land. The management goal for this segment is to preserve and protect the primitive, undeveloped character of the river corridor. OPRD has classified this segment as a **Natural River Area**.

The lower 33.3 mile segment of the John Day River Scenic Waterway begins at river mile 43.3, upstream from Cottonwood Bridge, and terminates at river mile 10 at Tumwater Falls. This segment is fronted mostly by private agriculture and range lands. The management goal for this segment is to allow the continuation of existing farm, rural residential and recreation uses while protecting the scenic character of the river corridor. The classification for this segment is **Scenic River Area**.

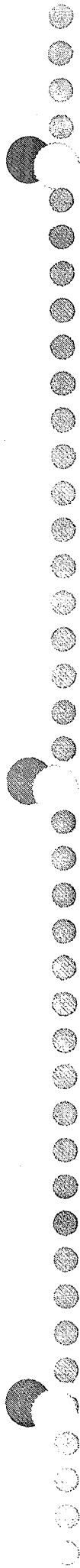
Comprehensive Management and Use Plan
Final Environmental Impact Statement
California National Historic Trail
Pony Express National Historic Trail

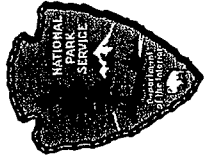
Management and Use Plan Update
Final Environmental Impact Statement
Oregon National Historic Trail
Mormon Pioneer National Historic Trail



OREGON • CALIFORNIA • MORMON PIONEER • PONY EXPRESS
NATIONAL HISTORIC TRAILS

United States Department of the Interior • National Park Service





Leave No Trace Ethic

- Plan Ahead and Prepare*
- Camp and Travel on Durable Surfaces*
- Pack It In, Pack It Out*
- Properly Dispose of Human Waste*
- Leave What You Find*
- Minimize the Use and Impact of Fires*

Historic Routes and Significant Resources

Historic Routes



OREGON NATIONAL HISTORIC TRAIL

The enabling legislation (Public Law 95-625 amendment to the National Trails System Act, PL 90-543) authorized a primary route between Independence, Missouri, and Oregon City, Oregon. Table 1 summarizes the approximate miles by state. The general route is shown on map 1. An official route map for the Oregon National Historic Trail, as required by the National Trails System Act, has been prepared, and the route has been digitized using ARC/INFO, a geographic information system (GIS). The description of the route will be published in the Federal Register. If new research identifies more accurate route locations, an official notice of correction will be published.

When the Oregon National Historic Trail legislation was passed, Congress decided to concentrate on the most important right-of-way for purposes of official designation and marking. Where an alternative right-of-way of equal importance existed, both were selected. The years 1841-48 were designated for determining the primary route to avoid confusion with the route of the forty-niners to California. This route also includes the Barlow Road between The Dalles and Oregon City, Oregon, which was developed in 1846. Congress authorized a single route, except for a 126-mile branch (South Alternate Route) between Three Island Crossing, Idaho, and eastern Oregon, and a 114-mile branch (Columbia River Route) used between 1841 and 1846 extending from The Dalles to Oregon City, Oregon (see maps 1 and 7-9).

The route of the Oregon National Historic Trail begins at Independence, Missouri. The emigrants followed the older Santa Fe Trail to the southwest for about 40 miles, then headed northwest for the Platte River. Emigrants crossed the rolling hills of the eastern Great Plains, bisected by numerous rivers and streams, such as the Wakarusa, Kansas, Red Vermillion, Black Vermillion, and Big Blue Rivers. They followed the Little Blue River valley (into Nebraska), and when the river turned south, they continued northwest to the broad Platte River valley.

The emigrants followed the Platte River to its confluence in western Nebraska, crossed the South Platte near California Hill, and descended in the North Platte valley through Ash Hollow. After Ft. Laramie, the first major stopping place on the trail, emigrants moved northwest over the dry ranges connecting the meanders of the North Platte River, crossed and left the North Platte at present-day Casper, and

Table 1: Oregon National Historic Trail — Route Miles by State

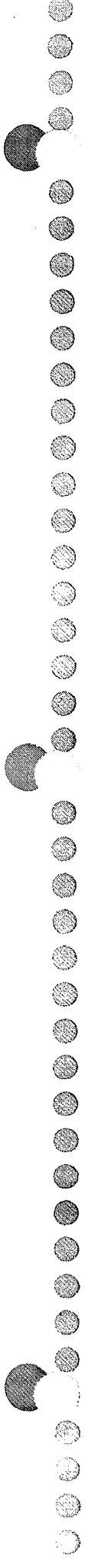
State	Miles
Missouri	16
Kansas	165
Nebraska	424
Wyoming	491
Idaho	510
Oregon	524
Total	2,130

headed southwest across the high range country of Wyoming toward Independence Rock.

After South Pass, which many emigrants considered to be the halfway point of their trip, they crossed the Dry Sandy and the Big Sandy and eventually reached the welcome water, grass, and shade of the Green River. They then proceeded to Fort Bridger, the second of the major resupply points along the trail, which was then a small and isolated fur trading post.

After Fort Bridger the emigrants went over the rugged Bear River Divide, followed the Bear River into Idaho, and then left it to head across the desert toward Fort Hall, on the banks of the Snake River. Fort Hall was a fur trading post operated by the Hudson's Bay Company. It was also a supply point and aid station for the weary emigrants.

After Fort Hall the emigrants followed the Snake River through southern Idaho. They forded the Snake River at Three Island Crossing whenever possible. Once across, they skirted the mountains north of the Snake toward Fort Boise, another Hudson's Bay Company trading post, and another spot where rest and resupply were possible before crossing the Snake. Approximately half of the emigrants were unable to cross the river at Three Island Crossing, and were forced to use the 126-mile South Alternate Route. Days of hot and dusty travel along the south bank of the Snake awaited emigrants before they could rejoin the main route just west of Fort Boise.



Significant Resources

The National Trails System Act provides for the identification of high-potential sites and segments, based on criteria established in the act. These criteria include historic significance, the presence of visible historic remnants, scenic quality, and relative freedom from intrusion. High-potential segments are those segments of a trail that afford high quality recreational experiences along a portion of the route having greater than average scenic values or affording an opportunity to vicariously share the experience of the original users of a historic route. Each site or segment must have the potential to interpret the trails' historical significance and to provide opportunities for high-quality recreation.

This plan acknowledges that the lists of high-potential sites and segments for each trail must be flexible and will require periodic updates. Under both alternatives a mechanism is provided to modify and revise high-potential sites and segments as new information becomes available, or if the integrity of trail resources becomes compromised.

All of the information on sites and segments gathered during the planning process and submissions received from resource managers and trail organizations through September 18, 1997, has been entered into the database. This database is available at the Long Distance Trails Office. In the future it will be linked to the GIS mapping effort completed as part of this planning process.

Revisions have been made to the lists of high-potential sites and segments for each trail to reflect comments received during the various review processes and to reflect research conducted by the Long Distance Trails Office since the release of the Draft Comprehensive Management and Use Plan / Draft Environmental Impact Statement.



OREGON NATIONAL HISTORIC TRAIL: HIGH-POTENTIAL SITES AND SEGMENTS UPDATE

Modifications to the original listing of sites and segments identified in the Comprehensive Management and Use Plan for the Oregon National Historic Trail have resulted in the addition of 5 segments and 20 sites, the modification of 1 segment, and the deletion of 7 sites. Since the publication of the draft plan the Long Distance Trails Office has refined the list of high-potential resources associated with this trail. Four sites have been added, 10 have been deleted, and 15 names of sites or segments have been modified (see maps 7-9, and appendices G and H).

Table 5 indicates the number of high-potential sites and segments by state. Table 6 displays the mileage of segments by state.

This list can be modified in the future to add sites and segments that additional research might indicate to be worthy of inclusion. Sites and segments can also be deleted from this list.

Table 5: Oregon National Historic Trail — High-Potential Sites and Segments by State

State	Sites	Segments
Missouri	7	0
Kansas	14	1
Nebraska	17	0
Wyoming	32	5
Idaho	32	3
Oregon	27	6
Washington	2	0
Total	131	15

Table 6: Oregon National Historic Trail — Mileage of High-Potential Segments

State	Number of Segments	Number of Miles
Kansas	1	6
Wyoming	5	243
Idaho	3	114
Oregon	6	82
Total	15	445



CALIFORNIA AND PONY EXPRESS NATIONAL HISTORIC TRAILS: HIGH-POTENTIAL SITES AND SEGMENTS

From the extensive list of submissions, 244 sites and 52 segments listed in tables 7 and 8 have been identified as high-potential (for a more comprehensive description of these resources, see appendices E and F and maps 2-6). The segments total 2,077 miles. Some of these sites and segments have already been classified as high-potential in the plans for the Oregon and Mormon Pioneer Trails.

Since the publication of the draft plan, the Long Distance Trails Office has refined the list of high-potential resources associated with this trail. These changes are the result of the opinion by the U.S. Department of the Interior's Office of the Solicitor, public comments, and additional research conducted by the Long Distance Trails Office. Seven segments were deleted, seven were added, and the names of seven segments were modified. A total of 37 sites have been deleted, 14 have been added, and the names of 26 sites have been modified (see maps 2-6 and appendices E and F).

This list of high-potential resources can be modified in the future to add sites and segments that additional research might indicate to be worthy of inclusion. Sites and segments can also be deleted from this list.

Appendix H.
Oregon National
Historic Trail:
High-Potential
Sites



NO	SITE NAME	COUNTY	STATE	QUAD 1:100,000	DESCRIPTION	NATIONAL REGISTER STATUS	THREATS TO RESOURCES/ VISITOR SERVICES	
							OWNERSHIP	OWNERSHIP
114	Well Spring	Morrow	OR	Hermiston	Well Spring, an important emigrant campsite and water source, made travel possible for weary emigrants and their worn-out teams across this dry stretch of the Columbia Plateau. Most emigrants left the Umatilla River, crossed Butler Creek, and pressed on to camp at Well Spring. The spring was always a meager source of water, but it was a crucial oasis, since this portion of the trail was usually traveled in late August or early September when the intermittent streams were normally dry. Riley Root made the journey from Butler Creek on August 24, 1848, and camped at Well Spring. "18 miles, over a poor tract of the Columbia River valley, to camp, at the foot of a hill, by a spring, called Well Spring, rising in the center of a large mound of decayed vegetation, and sinking suddenly again, within a few feet, of where it issues. . . . No grass nor water exists along this day's route, where emigrants might refresh themselves and by a strong guard, to keep thirsty cattle from falling into it, out of which they cannot extricate themselves." The spring has been seriously impacted over the years and is now virtually dry. Remains of a stage station, a graveyard which dates from the emigration era, and trail ruts can be found nearby.	Listed	Public (DOD)	Support of the U.S. Navy is needed to complete the development of Well Spring. Several wayside exhibits have been erected near the spring.
115	Fourmile Canyon	Gilliam	OR	Goldendale	After the Oregon Trail passed the desert-like range near Well Spring, it entered more rolling range country, fringed by numerous small canyons. Over a mile of deep ruts can be found at a BLM interpretive site where the trail crossed Fourmile Canyon. Emigrants pressed on as rapidly as possible across this country because of dwindling supplies and their concern that winter would soon be upon them. Lydia A. Rupp struggled across Fourmile Canyon on September 23, 1852. "Continued our tedious journey. . . encamped on the hills, wood plenty, a little dry grass but no water. Ice nearly an inch thick this morning. Mount Hood a peak of the Cascades loomed in the [sky] covered with snow. Henry and myself are just able to move and that is all."	Not listed	Public (BLM) Private	Vandalism is a problem. Ruts on private land should be marked and preserved.
116	John Day River Crossing	Gilliam, Sherman	OR	Goldendale	After three days of sand, rock, blustery winds, and shortages of wood and water while crossing the Columbia Plateau, emigrants were relieved to arrive at the John Day River. This was the first of several major rivers flowing north toward the Columbia that would have to be crossed, but the McDonald ford provided an easy crossing. The river is normally only 8-12 inches deep during late summer, and the ford has a smooth, pebbly bottom. Esther Belle McMillan Hanna arrived at McDonald Ford on September 1, 1852. We had a very steep hill to descend in coming to it [John Day River]. We all rejoiced to see water once more as our poor beasts had had none since yesterday noon. We have encamped on the river bottom, which is large and very level. Will remain here until tomorrow to rest out cattle and ourselves and conclude on the route we will take." After ascending the west side of the canyon—"one of the most difficult hills we have met on the whole journey across the plains"—emigrants could take the right fork of the trail to go to the Dalles, or, after 1848, they could take the left fork and follow a cutoff to the Barlow Road.	Not listed	Public (BLM) Private	None known.

NO		SITE NAME		COUNTY		STATE		QUAD		DESCRIPTION		NATIONAL REGISTER STATUS		OWNERSHIP		THREATS TO RESOURCES/ VISITOR SERVICES	
117	Biggs Junction	Sherman	OR	Goldendale						After crossing McDonald Ford, the Oregon Trail slowly wound its way through the hills towards the Columbia River. About 25 miles west of the ford, emigrants abruptly topped a ridge and saw spread out before them the magnificent Columbia River Valley, with Mt. Hood rising from the western horizon. This was one of the most impressive and joyful sights along the trail, for the Oregon country was finally beginning to resemble its publicized beauty, and reaching the Columbia River meant the long overland journey was almost at an end. Michael Fleenen Luark wrote on August 23, 1853, "4 miles further we reached the Columbia river for the first time after going down a long but not a steep hill. . . . The river is quite low at this time leaving large banks of beautiful white sand showing that the river is extremely high at some seasons of the year." A one mile section of trail runs across a bench above old highway 30 west of the present-day town of Biggs Junction. This is one of the last remaining stretches of the Oregon Trail along the Columbia River not destroyed by highway and railroad construction in the past century.	Not listed	Private	Permanent signs are needed to explain the rules for accessing the trail segment on private land. There is a small monument on old U.S. Highway 30 just west of the present-day town of Biggs Junction.				
118	Deschutes River Crossing	Sherman	OR	Goldendale					Emigrants frequently camped at the mouth of the Deschutes River before attempting the difficult crossing of this "considerable tributary of the Columbia." Some parties crossed at the mouth of the river, using rocky islands as stepping-stones. Wagons were usually floated across, while the animals swam. Joel Palmer wrote a detailed description of the crossing on September 26, 1845: "The river is about one hundred yards wide, and the current very rapid; the stream is enclosed by lofty cliffs of basaltic rock. Four hundred yards from the Columbia is a rapid or cascade. Within the distance of thirty yards its descent is from fifteen to twenty feet. The current of this stream was so rapid and violent, and of such depth, as to require us to ferry it. Some of the companies behind us, however, drove over at its mouth by crossing on a bar."	Not listed	Public (State of Oregon)	Trail remnants on private land west of the Deschutes River need to be preserved and marked. The original river crossing is now submerged by Lake Celilo.					
119	The Dalles Complex	Wasco	OR	Hood River					Until 1846, the Dalles marked the end of overland travel on the Oregon Trail. At the mouth of Chenoweth Creek, emigrants embarked on steamboats, rafts, or canoes for the 83-mile journey down the Columbia River to Fort Vancouver. With the opening of the Barlow Road, emigrants at The Dalles faced a decision—whether to float their families and wagons down the Columbia or to cross the southern flank of Mount Hood by wagon. Neither option was easy. Rafts and livestock were difficult to maneuver along the river's swift currents and the Barlow Road's steep and rocky grades made travel dangerous for exhausted livestock. When Celinda Heines reached the Dalles on September 19, 1853, her family decided to take the river route. They planned to "go ourselves down the river and send the cattle & horses down the pack trail which goes along near the river. . . . The men engaged a barge to take us to the Cascades & we put our things on board & went on ourselves but it began to leak & we were obliged to get off also to remove our baggage." The next day, Celinda reported, "We took what provision and clothing was necessary & repaired on board the stream boat. Alan which was already crowded with passengers. It is a poor apology for a boat very small having no cabin, & we were obliged to seat ourselves as best we could on the floor or whatever we could find to sit upon."	Listed	Public (City)/ Private	None known. The Columbia Gorge Discovery Center is a major interpretive facility that contains exhibits focusing on the Oregon Trail.					

This page left
blank intentionally

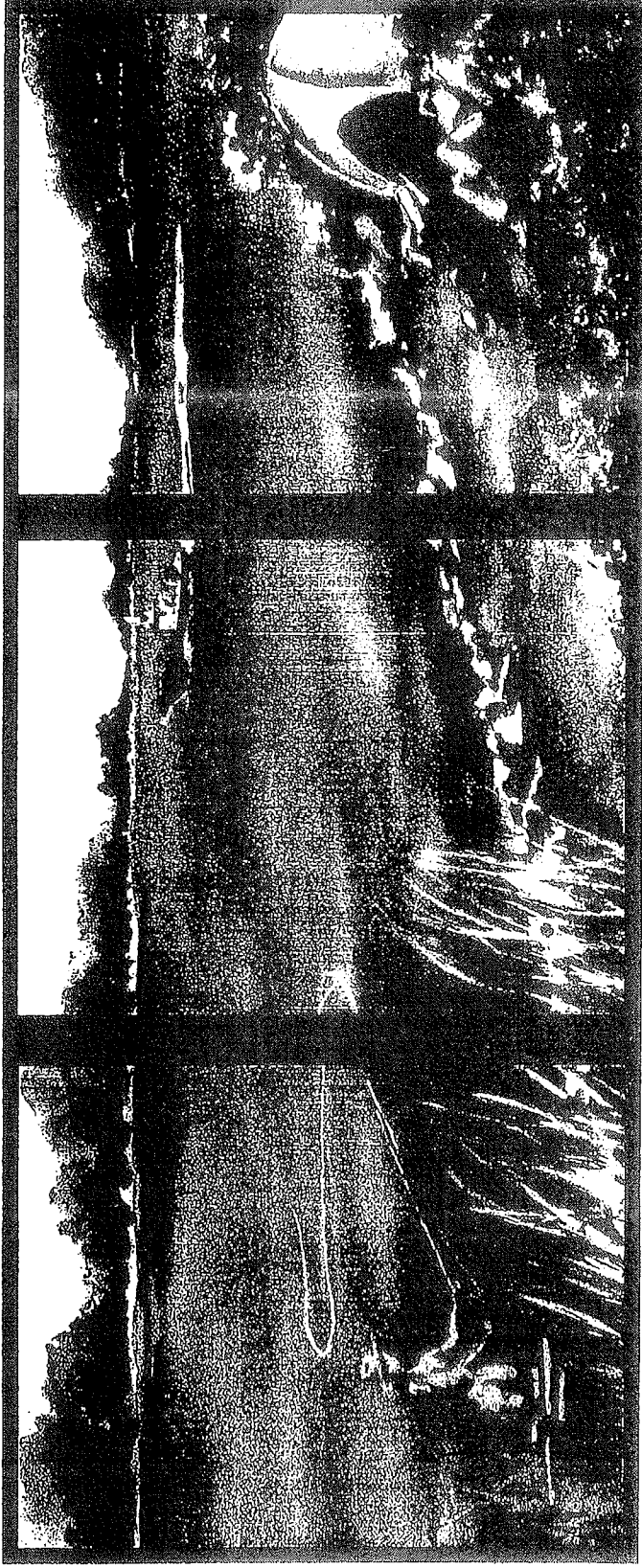
Final

January 1993

Lower Deschutes River Management Plan and Environmental Impact Statement - Volume 1

A Joint River Management Plan Developed By:

- Bureau of Land Management
- Bureau of Indian Affairs
- Confederated Tribes of The Warm Springs Reservation
- Oregon State Parks & Recreation Department
- Oregon Department of Fish & Wildlife
- Oregon State Marine Board
- Oregon State Police
- Deschutes River Management Committee
- Wasco, Sherman and Jefferson Counties
- City of Maupin



Scenic Values

The Lower Deschutes River Canyon contains a diversity of landforms, vegetation and color. The river, having carved a canyon nearly 2,000 feet deep in many locations out of rugged Columbia River basalt flows, provides a dramatic and diverse landscape. The clear water of the river framed by the green riparian vegetative fringe creates a stark contrast to the often barren and broken reddish and brown cliffs and hillsides of the canyon. The river provides a boater with a moving platform for viewing the ever-changing scene. While transportation corridors exist (roads and railroads) and occupational and rural development have occurred in several areas, they are overshadowed by the magnitude and beauty of the river and canyon character.

Botanical Values

Plant communities in the Deschutes River Canyon fall into four broad categories. In the high desert uplands there are big sagebrush, juniper-big sagebrush and bunchgrass types. Along the river there is a thin band of riparian vegetation dominated by alders. Within the canyon there are also six special status plant species (known or suspected to occur). These are: *Astragalus howellii* v. *howellii*, *Astragalus tyghensis*, *Cyperus rivularis*, *Lomatium farinosum* v. *hambleniae*, *Minulus jungermannioides* and *Talinum spinescens*. *Astragalus tyghensis* is the only species which is presently a Federal candidate species for listing as threatened and endangered.



United States
Department of
Agriculture

Forest Service

Pacific
Northwest
Region

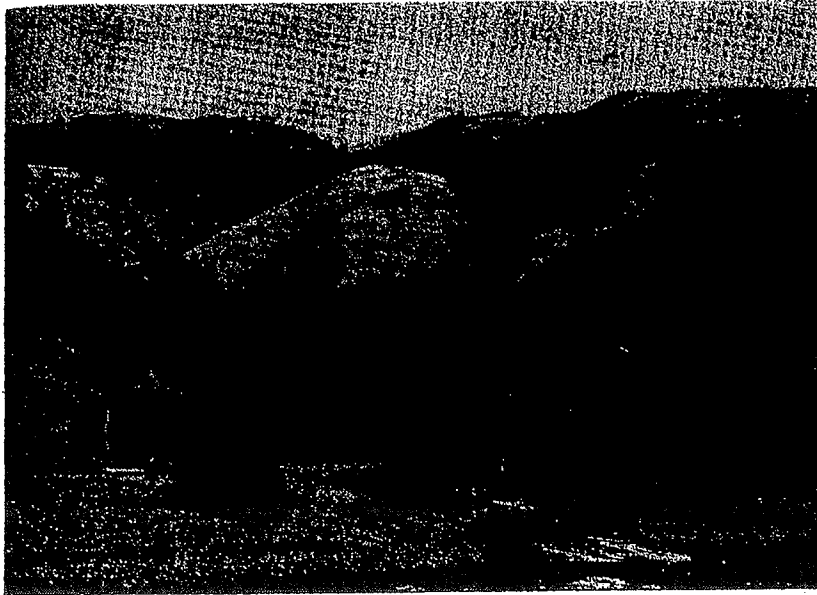
November, 1991



Lower Klickitat River

Wild and Scenic River Management Plan
Final Environmental Impact Statement

CLICKITAT AND WHITE SALMON
River Study Update



Mixed stands of oak and ponderosa pine are common on the hillsides (view north from WDW access site near RM 5).

documented (Reynier, 1989), but increased numbers of attempts of this risky activity can be anticipated.

Another concern is Highway 142 along the lower three miles of the river. The lack of guard rails and warning signs, twisting road alignment and increased roadside parking have been cited as potential problems at the public meeting in on April 20, 1989, and by Task Force members (Gorman and Frey, 1989). The Washington Department of Transportation does not consider Highway 142 to be dangerous as long as people are not speeding, and the few places that could use guard rails are too narrow for their installation (Hogan, 1990). The county has recommended development of roadside pullouts and view areas along Highway 142 near the gorge at RM 2.5 to resolve some road safety issues (Gorman, 1989). Formal pullouts also would provide an opportunity for interpretive signs.

Impacts of Recreation. At public meetings in Lyle, landowners reported increases in recreation-related trespass, litter, vandalism and theft. The majority of reported situations and problems has been on the river below the gorge, where some of the most concentrated use occurs. Other concerns expressed involve land owner liability and recreation trespass.

3.8 Visual Resources

The scenic resources of the lower Klickitat are influenced by geographical, geological, climatological and cultural associations with the Columbia River Gorge. This reach is more densely settled and utilized than the upper Klickitat primarily due to proximity to major transportation routes along the Columbia. The result is a riverscape composed of cultural as well as natural features and patterns and containing permanent developments such as Highway 142, which

parallels much of the river. The historic farm and ranch buildings and primitive canyon switchback roads contribute to the cultural landscape.

Viewshed Analysis. For visual resources, the affected environment is defined as those areas viewable from the river and other important viewing areas such as Highway 14, Highway 142, and developed recreation and access areas (see Map 3-5). Almost the entire river segment is within view of people traveling on Highway 142 and other canyon roads, including the Fisher Hill road. Due to the open vegetation, views from the river extend to the surrounding hilltops or plateaus in most locations. These distant views contribute to the visual variety, landscape scale, and scenic quality. Distant views to Mt. Hood are possible from Highway 142 near RM 2.5. At least 55 residences also have views of the lower Klickitat.

Highway 142 provides the main public access for sightseeing, increasing the scenic value of the river which otherwise would be seen by few. This two-lane highway winds in conformance with the meanders of the river and provides both close views of the river and unfolding panoramas of the canyon. Views are unobstructed by guardrails or other roadside developments. Klickitat County promotes the highway as part of a scenic loop drive.

People who view the river corridor from the river include those who come to fish, boat, or camp. Recreational use on the designated segment of the river is estimated to be 5,000-10,000 RVD's per year. Most of these utilize either the area around the mouth or the area upstream from the gorge. The gorge itself is used mainly by Native American fishermen and those who stop to gaze down at this visually spectacular area. Views from individual residences were not evaluated; however, the river and canyon views experienced by travelers and recreation visitors overlap many of the views experienced by residences within the corridor. The views from residences are important, as documented by the real estate value of view properties.

The scenes viewed most often include the mouth of the Klickitat as seen from Highway 14, the lower gorge area as seen from the Fisher Hill bridge, the river as seen from adjacent sections of Highway 142, the river and canyon walls from public recreation sites, and the canyon as viewed while boating the river.

The visual experience in each of these areas differs depending on the orientation of the viewer. For example, car travelers typically have high expectations for scenic beauty but the time spent in any one location, be it along the road or at pullouts, is relatively short. By contrast, while scenic quality is also

important to boaters and anglers, their focus tends to be on the river, the shoreline, and the area immediately adjacent the shoreline; riparian buffers are therefore important to maintaining their aesthetic experiences

Riverscape Character and Quality. The 1,400-foot deep lower Klickitat canyon's most famous scenic feature is the bedrock gorge. Although less than 100 feet deep, the cliffs narrow to as little as eight feet apart and the water explodes through the gorge in continuous whitewater rapids. The visual appeal is accented by the tenuously-appearing dip-net fishing platforms and, during seasonal fish runs, by Native Americans fishermen practicing their art. The gorge and its dip-net fishery were featured as part of a recent article on Washington State published in National Geographic.

Another noteworthy feature is the visual diversity created by the undulating grassland and forest patterns that swirl across the rounded hills and deep draws. The dry grasslands, oaks and other deciduous trees and shrubs, spring wildflowers, and winter snows create distinctive seasonal color changes within the canyon. In the hot, dry summers, the river serves as an attractive, cool oasis.

The river outside of the gorge area maintains its own special visual appeal. Downstream from the gorge the river is a deep pool framed by low, exposed basalt walls. Upstream from the gorge the river is a meandering sequence of pools, riffles, and gravel bars. Banks are often framed by towering ponderosa pines. Views in the area upstream of the gorge also periodically include man-made objects such as the road, natural rock rip-rap, and, less frequently, structures.

Existing Management Practices Affecting Visual Resources. The draft plan for the Columbia River Gorge National Scenic Area designates the west bank of the Klickitat within CRGNSA boundaries as Open Space and the east bank as a transition zone between the river and town of Lyle, where some rural residential and recreation development may be appropriate.

The corridor has historically been protected by topography, relatively large public and private land holdings, and private landowners' stewardship. Besides the CRGNSA, the only law or management activity specifically addressed protecting or enhancing aesthetic resources within the viewshed of the lower Klickitat River is a county scenic overlay zone that restricts signs along roadways. The SMP provides some scenic quality protection within the immediate 200-foot shoreline, although the emphasis is on protecting natural resources and water quality rather than directly addressing scenic resources. Washington State has no management programs for scenic resources other than through the SEPA checklist, which is required only for specific activities such as converting commercial forest land to resort development. The State Forest Practices Act requires no visual resource considerations, although there is growing public pressure to amend the law

to address aesthetics, particularly in highly sensitive landscapes.

While aesthetic resources are not directly managed like water quality and fish, several laws and programs help to conserve visual quality. For example, Washington's Interagency Committee for Outdoor Recreation (IAC) manages the Federal Land and Water Conservation Fund, which can be used to acquire scenic properties. The DNR's Natural Heritage Program manages exemplary natural communities and T&E species sites, which serves to protect scenic values. The Washington Department of Ecology manages water quality and quantity, which also protects water appearance. Klickitat County zoning and state tax laws help to slow the conversion of agricultural and forest lands to other uses.

3.9 Native American Traditional Uses and Rights

Traditional Uses. Native Americans have inhabited the area along the Columbia river and its tributaries since before recorded history. These people, members of the plateau culture, evolved a rich culture that relied on the river and its corridor for fishing, hunting, food gathering and village sites. While many of these original inhabitants eventually were displaced by the treaties of 1855 and establishment of reservations to make way for the pressures of European settlement. There also was a gradual decline of the fisheries, Native Americans continue to live in the area and use the river for traditional purposes. The river also is used for these purposes by Native Americans living outside the river corridor, particularly by those living on the Yakima Indian Reservation.

Traditional Native American activities that continue to occur within the Klickitat River drainage include collecting of roots and berries, collecting of materials for basket weaving, hunting, and fishing. Along the lower river the primary traditional use, and one found to be an outstanding resource value, is Native American dip-net fishing (*see Box 3-4*).

The gorge is in a natural state except for a fish passage facility at the upstream end where a falls once impeded upstream fish migration. Fishing platforms and scaffolds line the gorge. Portions of the shoreline are owned by the Washington Department of Fisheries, the Washington Department of Natural Resources, the North Dalles Irrigation District, and a private landowner. The Department of Fisheries owns the entire west bank and a portion of the east bank, using its land to access the fishway and for conservation purposes. Native American fishermen are allowed access to the gorge through both treaty rights and informal landowner agreements.

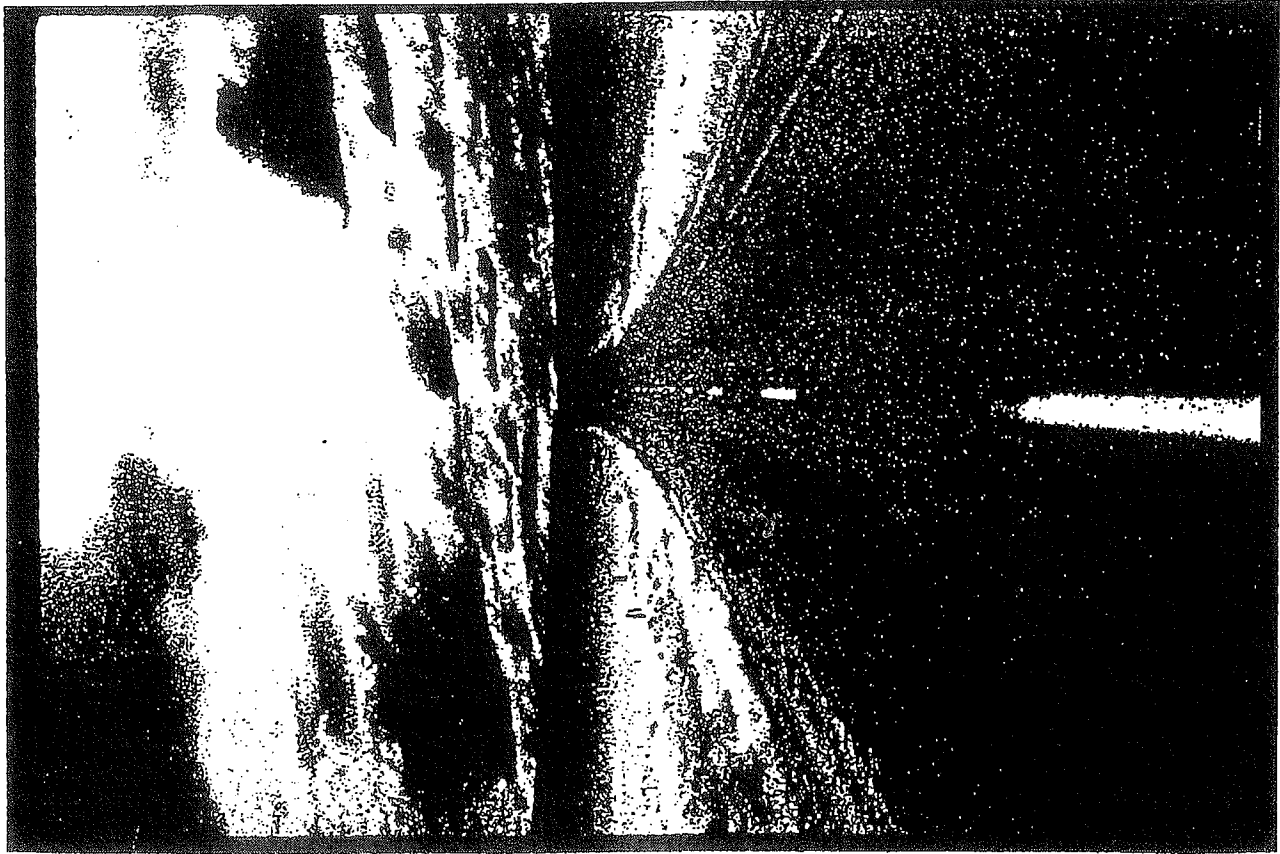
The upland area on the west side of the river at the head of the gorge consists of individual allotments held in trust by The

This page left
blank intentionally.

Journey Through Time

Management Plan

April, 1996



Page 10
~~10/11/96~~

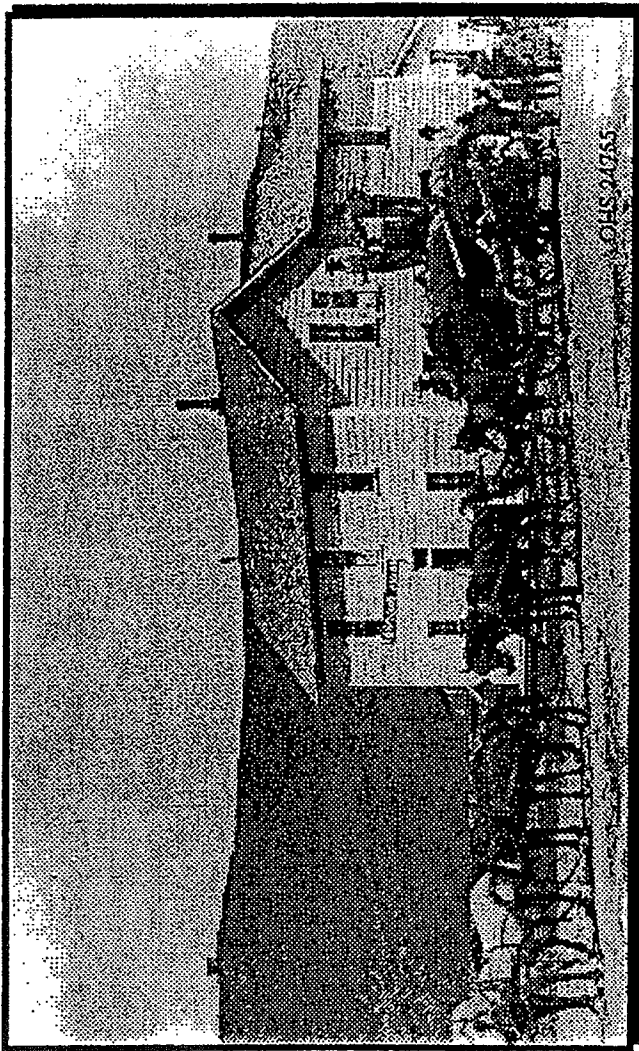


Journey Through Time

Tour Route Management Plan

The Journey Through Time was the winner of the Oregon Tourism Commission's Innovative Tourism Award, presented March of 1996.

Credit is due to the many volunteers from Journey communities whose receptivity and enthusiasm brought this superb visitor experience into existence with blazing speed and unsurpassed excellence.



© 1996 OHSU/OTAS

Journey Through Time

Tour Route Management Plan

Vision, Goals, Objectives

Vision

The Journey Through Time Tour Route has developed a reputation as a rich, meaningful, and exciting heritage experience. Interpretive markers and displays located at key sites along the route's entire length tell in vivid detail the stories of those who pioneered this land, of how they made their living, and of the fortunes that were made or lost. This history provides a rich background for an understanding of the region's main industries--timber and agriculture-- which are also interpreted for the visitor. Visitors spend days in the area learning about the earth's past with naturalists, and hunting for their own fossils near the town of Fossil.

The Journey Through Time Tour Route draws repeat customers out of Portland, Boise, and other population centers in the Pacific Northwest. In

addition, the Journey Through Time route serves as an alternate

route to I-84 from Baker City to Biggs. Many prefer it as a scenic and engaging alternative to the interstate freeway.

Each of the towns along the Journey Through Time Tour Route actively showcase their heritage and rural lifestyle. Antique stores, gift shops, restaurants, bed and breakfasts, and motels are thriving. Local business people offer unique experiences like the chance to tour a historic town by horse-drawn carriage, take a ride on an historic train, pan for gold, or spend a few days living on a ranch. Visitors leave with a better understanding of rural issues and local people feel that the route is helping them preserve and improve their quality of life.

Goals

1. Create Jobs. To create economic opportunities for the

towns along the Journey Through Time Tour Route.

2. Maintain Rural Lifestyles. The rural lifestyle is the reason why many residents live in the area. The area would like to support its traditional industries of agriculture and timber, maintain the small, friendly feeling of its towns, and continue to have available open, uncrowded, space to live.
3. Protect Important Values. To preserve the heritage of the area, which will be lost or degraded if it is not protected. The region's heritage is an integral part the area's identity and character and is important to both the area's present and future.
4. Build Identity for the North Central Region. To help create an impression, with non-residents, of the qualities and features that make the North Central Region unique.

Objectives

Create Jobs

1. **Attractions.** Develop attractions within communities so that visitors spend time and money within the communities.
2. **Interpretive Information.** Provide interpretive information in each community that tells the story of what makes the community special. This will encourage visitors to spend time in each community along the route.
3. **Business Opportunities.** Provide area businesses with an opportunity to advertise to tour route users.
4. **Downtown Revitalization.** Conduct downtown revitalization efforts in area communities to help merchants better capitalize on visitation and to help downtowns become attractive for visitor activity.

Maintain Rural Lifestyle

1. **Interpret Industry.** Provide interpretation of agriculture and forest products to create a greater understanding of these industries among out-of-area visitors.
2. **Support Authenticity.** Showcase the rural lifestyle in its authentic form, to give people an experience of why it is valuable and should be preserved.
3. **Attract Quality Visitors.** Promote to quality visitors who will spend time and money in the area. Quality, not quantity.

Protect Important Values

1. **Protect Historical Attractions.** Conduct historic preservation efforts to protect the region's valuable heritage attractions.
2. **Educate Visitors.** Educate visitors about sensitive resources, such as fossil beds

and petroglyphs, so that they do not violate these important elements of the route.

Build Identity for the North Central Region

1. **Market heritage.** Conduct marketing efforts that emphasize the heritage theme.
2. **Develop heritage.** Develop attractions that reinforce the heritage theme.
3. **Emphasize the authentic.** Key promotion and development efforts to authentic aspects of the area's history, rather than fabricating new attractions.

Enhancement and Management Strategies

Economic development interests in the region have undertaken a number of key strategies to gain economic benefit from the tour route designation and to preserve unique offerings along this route.

Journey Through Time

Tour Route Management Plan

Overall Enhancement Efforts

1. Almost every community along the Journey Through Time Tour Route has initiated efforts to preserve or showcase local historical points of interest. Downtown restoration, preservation and beautification projects are underway or recently completed in Baker City, Sumpter, Austin Junction, Prairie City, Canyon City, Mt. Vernon, Dayville, Spray, Fossil, Shaniko, Grass Valley, Moro and Maryhill. New festivals are planned, storefronts are being improved and efforts such as murals and walking tour brochures are underway. As part of a planning process initiated by the North Central Region, many communities have received, and will continue to receive, assistance from the Oregon Downtown Development Association.
2. Each of the counties in North Central Oregon has embraced tourism as a key industry through the Regional Strategies Board. Gilliam, Grant, Morrow, Wheeler, Sherman and Wasco Counties have approved a Tourism Strategic Plan for the six county North Central Oregon Region which cites the Journey Through Time Tour Route as a key component of the Strategy. In addition, some of the counties of the North Central region are active members of the Eastern Oregon Visitors Association and Oregon Trail Marketing Coalition.
3. Hospitality workshops for local businesses have been conducted in Morrow and Grant Counties and are under consideration in other places along the route.
4. Visitor kiosks were completed in 1995 at Prairie City and Fossil. These kiosks describe the Journey Through Time Tour Route through historical photos, maps, and points of interest. Free brochures are under development and will soon be available to the public to further detail this tour route and provide information on dining, lodging, museums, etc. Similar kiosk information -- detailing the Journey Through Time Tour Route -- are under development for the communities of Moro and Baker City.
5. Several Bed and Breakfasts have sprung up on or near the route.
6. Farm/Ranch recreation opportunities were developed in 1995 through a partnership between the Grant County Tourism Committee and the Oregon Department of Agriculture. Workshops have been completed and follow-up activities are currently underway throughout the region to promote farm and ranch stays, working dude ranches, retail farm stands, fee hunt-

Tour Route Management Plan

- ing, and other agri-tourism opportunities.
7. Loop tours are being developed to provide side trips from the Journey Through Time Tour Route. These loops include the Middle Fork of the John Day River, Sumpter to Greenhorn Gold Loop, Logan Valley and the Aldrich Range.
8. A new merchant's association has been formed in Prairie City. In Canyon City merchants and volunteers contributed matching funds and labor for placement of a sign depicting the town's history.
9. Public awareness of the natural resources industries has been initiated and will be integrated into the route development.
10. Cultural resources are being developed with attention to their carrying capacity. Further, the undeveloped potential of other facilities is under consideration. For example, the City of John Day is cur-

- rently soliciting requests for proposals to study the feasibility of expanding the Kam Wah Chung Museum.
11. Land use patterns will be maintained by the counties.
12. The Journey Through Time Tour Route connects directly to a Washington State designated Scenic Tour Route. This connection serves to attract visitors who wish to travel further. The Maryhill Museum of Art will distribute Journey Through Time brochures at its facility.

Journey Through Time

Tour Route Management Plan

Points of Interest and Specific Enhancement and Protection Projects

Maryhill Museum of Art

This historic mansion showcases sculptures by Rodin, a Native American gallery, rare chess sets, Queen Marie of Romania Royal Regalia, Russian Icons, European & American paintings, a gift shop, cafe and picnic grounds. A ghost town and replica of Stonehenge are nearby.

Biggs

Biggs' tourist accommodations straddle Hwy. 30, which runs between I-84 and the original route of the Oregon Trail. About one mile west of town is an historical marker and viewpoint. It was at this point that most of the emigrants had their first view of the Columbia River. Mt. Hood's 11,235 ft. peak is also clearly visible. Original Oregon Trail ruts are an easy hike, located about one mile from a historical marker.

The property owners in Biggs have come together to form a service district for the purpose of constructing a wastewater collection, treatment and discharge facility. This will allow for existing businesses to expand as well as for anticipated rapid growth of new business interests in Biggs. Proposed new businesses include a motel and an RV park.

Wasco (Pop. 385)

The town is named after the county, and the county is named for a tribe of Indians, roughly shortened from Was-co-pam. The Wasco Indians were a Chinook tribe, formerly living on the south side of the Columbia River, near the present-day city of The Dalles. Was-co meant maker of basins, believed to refer to the intricately-sculpted rock canyon walls near the Columbia River. Sherman County and the town of Wasco were carved from Wasco Co. in 1889.

A small wheat-growing community, Wasco is the site of Sherman County's only airport. Although now used for commercial crop-spraying aircraft, it has the capability of being used by commercial aircraft. The

Resource:	Maryhill Museum of Art.
Location:	Near Highway 97 in Washington State.
Management:	Non-Profit Organization
Condition:	Excellent
Enhancement:	None needed.
Protection:	Curatorial capabilities are in place.
Resource:	Community of Biggs.
Location:	Highway 30.
Management:	Municipality.
Condition:	
Enhancement:	Wastewater treatment.
Protection:	None needed.
Resource:	Community of Wasco.
Location:	Highway 97.
Management:	Municipality.
Condition:	
Enhancement:	
Protection:	None needed.

Tour Route Management Plan

Oregon Trail passes north of Wasco. The historic McDonald Crossing of the Trail is on the John Day River approximately 13 miles east of Wasco. A kiosk is located at the crossing. Wasco offers a full service restaurant as well as a community grocery store.

Baker is already providing an Oregon Trail experience through the Oregon Trail Interpretive Center and marketing efforts are in place to support this effort through the Baker County Visitors and Convention Bureau and the Eastern Oregon Visitors Association.

Oregon Trail and Barlow Road

The Oregon Trail has proven to be an extremely important visitor industry resource. Baker City has very effectively capitalized on this resource through the Oregon Trail Interpretive Center. As a result, during the 1993 sesquicentennial, the Journey Through Time Tour Route area saw a 30% increase in visitor traffic.

The Sherman County Historical Museum, located at Moro, was the 1994 recipient of the prestigious Albert B. Corey award for recognition of a volunteer-based historical organization. This museum contains countless early settler artifacts, including an exhibit, "Oregon Trails, Rails and Roads in Sherman County."

Because of the power of this resource as a heritage attraction, and because Baker City is at an important strategic location as the eastern portal for the route, the Journey Through Time Tour Route complements the Oregon Trail theme.

With these resources in place, no further development of the resource is currently necessary, and the resource does not require protection efforts. The Journey Through Time Tour Route project will focus on weaving the Oregon Trail theme into its interpretive and marketing materials.

Resource:	Oregon Trail and Barlow Road Cut-off
Locations:	Baker City (Oregon Trail) and Moro, Oregon (Cut-off to the Barlow Road)
Management:	BLM, Baker City and Baker County partnership; Town of Moro and Sherman County.
Condition:	Outstanding views of ruts of emigrant's wagons are in good condition.
Enhancement:	Include in marketing efforts.
Protection:	None needed.

The two locations where this theme can be most effectively used are Baker City and at the town of Moro.

Journey Through Time

Tour Route Management Plan

Moro (Pop. 295)

Moro, the smallest county seat in the state, has an 1899 county courthouse. Historical records indicate that Henry Barnum was the first resident in this immediate area. He settled near the present town site in 1868, where he later established a trading post. There are several versions as to how the town was named. One states that it was named for Moro, Illinois, by Judge O.M. Stone who formerly lived in that eastern town. Moro has a full service grocery store, a 12 unit motel and a restaurant as well as being the location of the Sherman County Fairgrounds and RV Park.

A kiosk highlighting the Journey Through Time Tour Route is under development for Moro's downtown, to be located near the Sherman County Historical Museum. The kiosk will include maps, historical photos and points of interest.

Award-Winning Sherman County Museum

Moro is home to the Sherman County Museum, which was recently named the 1994 winner of the prestigious Albert B. Corey Museum Award. This award is for recognition of a small, primarily volunteer-operated historical organization that displays the best qualities of vigor, scholarship and imagination in its work. A maximum of one Corey Award per year is made to a deserving museum in North America so this award to the Sherman County Museum is a great recognition of achievement for this facility and its volunteer staff.

Resource:	Community of Moro.
Location:	Highway 97.
Management:	Municipality.
Condition:	Kiosk under development, downtown revitalization efforts.
Enhancement:	None needed.
Protection:	None needed.
Resource:	Sherman County Museum.
Location:	Highway 97 in Moro.
Management:	Non-Profit Organization
Condition:	Excellent
Enhancement:	None needed.
Protection:	Curatorial capabilities are in place.
Resource:	Community of Grass Valley.
Location:	Highway 97.
Management:	Municipality.
Condition:	Rest area, farm equipment museum, downtown revitalization.
Enhancement:	None needed.
Protection:	None needed.

Grass Valley (Pop. 160)

The community of Grass Valley was named for the abundant rye grass grown here. According to Oregon Historical Society records, a century ago the grass grew so tall that it reached a man's head as he rode horseback through this picturesque valley. The Grass Valley Canyon begins at Grass Valley, meandering north and eventually joining the canyon of the John Day River. The town

Tour Route Management Plan

Bureau of Land Management, and the Soil & Water Conservation Districts of Sherman and Wasco Counties. The North Central Regional Strategy tourism effort will work with this organization to identify ways to keep the key views open.

Shaniko (Pop.30)

Shaniko dates from 1900, when a spur of the Columbia Southern Railroad was extended south from the Columbia River Gorge to haul sheep and wool to market. The vast grasslands were home to thousands of cattle and sheep in the late 19th century. The boom gave Shaniko the title of "Wool Shipping Center of the World" for a brief decade. The usual assortment of frontier establishments were here: hotels, saloons, brothels and dry goods stores. Some of the last big battles between the cattlemen and the sheep ranchers were fought on the open range outside Shaniko.

The town takes its name from August Schmeckau, the operator of the store and stage stop. The town had nearly faded from existence until 1985, when Jean and Dorothy Farrell from Eugene purchased the hotel and re-

was incorporated as the result of a popular vote in 1900.

Grass Valley offers the only publicly accessible gasoline and diesel station between Madras and Biggs as well as a full service grocery store and restaurant facilities. The Oregon Department of Transportation has recently expressed an interest in placing a rest stop at or near the City of Grass Valley. This would greatly increase the number of vehicles stopping in the community and would therefore enhance opportunities for tourism activity. Although this project is only in the preliminary discussion stage, the City and County are anticipating working with ODOT to make this proposal a reality within the next few years.

A local resident who has a significant inventory of antique farm machinery has expressed interest in opening an outdoor farm equipment museum in Grass Valley along Highway 97.

Mountain Views

This is part of the Buck Hollow Watershed Project area, which is a collaboration of area landowners, the

Resource:	Mountain Views. Unsurpassed and unobstructed vistas of Mt. Jefferson, Mt. Hood and Mt. Adams. Highway 97.
Location:	Good.
Condition:	Private agricultural land adjacent to highway.
Management:	A pull-out with interpretive sign is needed.
Enhancement:	Awareness among land owners.
Protection:	Community of Shaniko. Highway 97. Municipality.
Resource:	Community of Shaniko. Highway 97.
Location:	Highway 97.
Management:	Municipality.
Condition:	Sewer system needed.
Enhancement:	None needed.
Protection:	None needed.

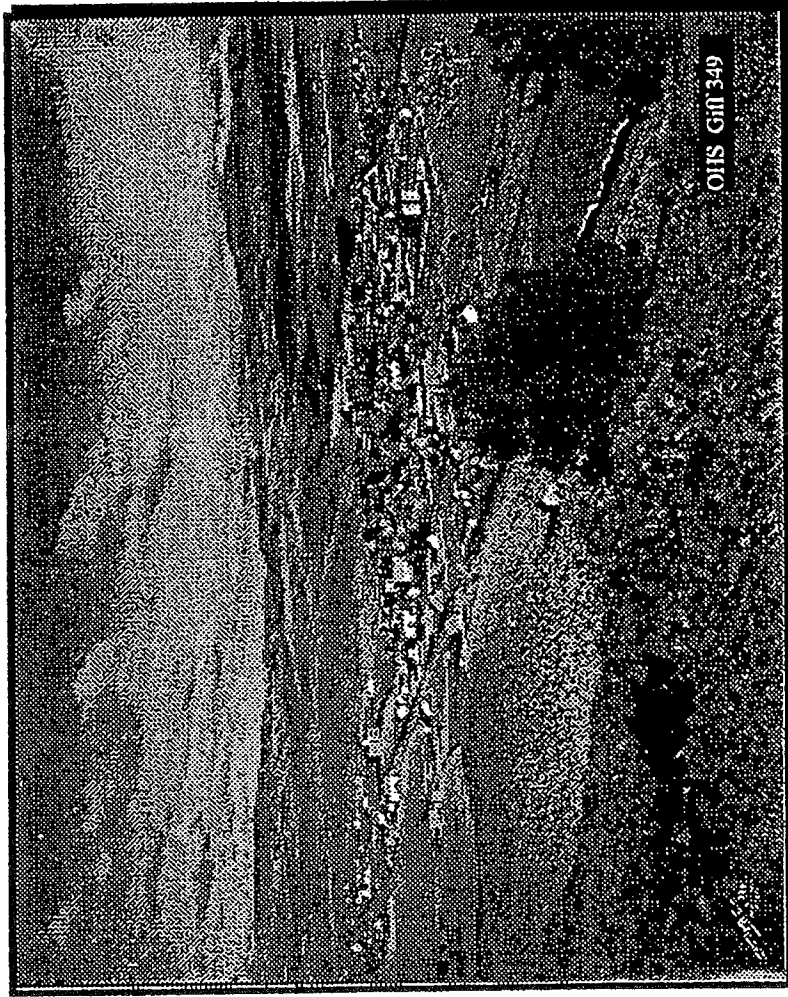
Journey Through Time

Tour Route Management Plan

stored it. The hotel, built in 1900, was known as "Southern Queen of the Highland Hostelryes." The dining room is a miniature museum of North Central Oregon with a beautiful backbar of an early saloon. In recent years Shaniko has been developing a "ghost town" theme and several Old West styled buildings have been relocated here or reconstructed.

Fossil (Pop. 470)

The eight-square-block downtown area is a mix of old brick and wooden false front stores. Fossil Museum, occupying the red brick IOOF hall on First Street, offers pioneer goods, farm equipment and other artifacts. Fossil was named for the numerous fossils discovered when the town was laid out in 1867. Scenic float trips along the John Day River have river access near here.



OHS Gift 349

Resource:	Community of Fossil.
Location:	Highway 19 and 218.
Management:	Municipality.
Condition:	
Enhancement:	
Protection:	None needed.

APPENDIX R-3

Photographs



Appendix R-3. Klondike III Wind Project

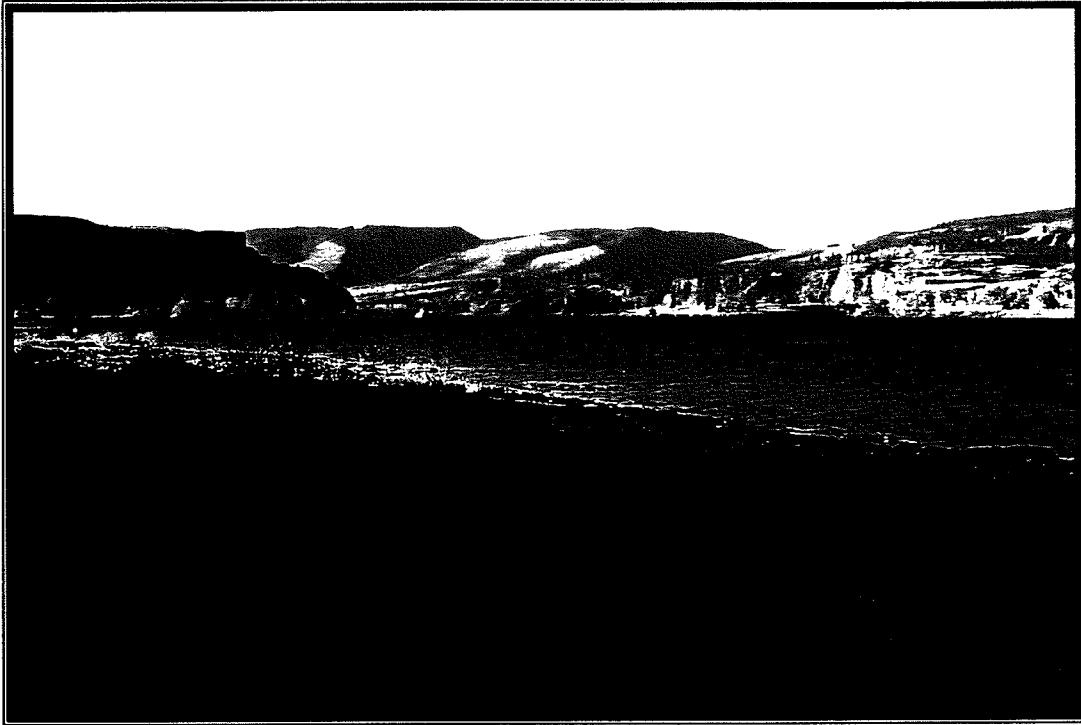
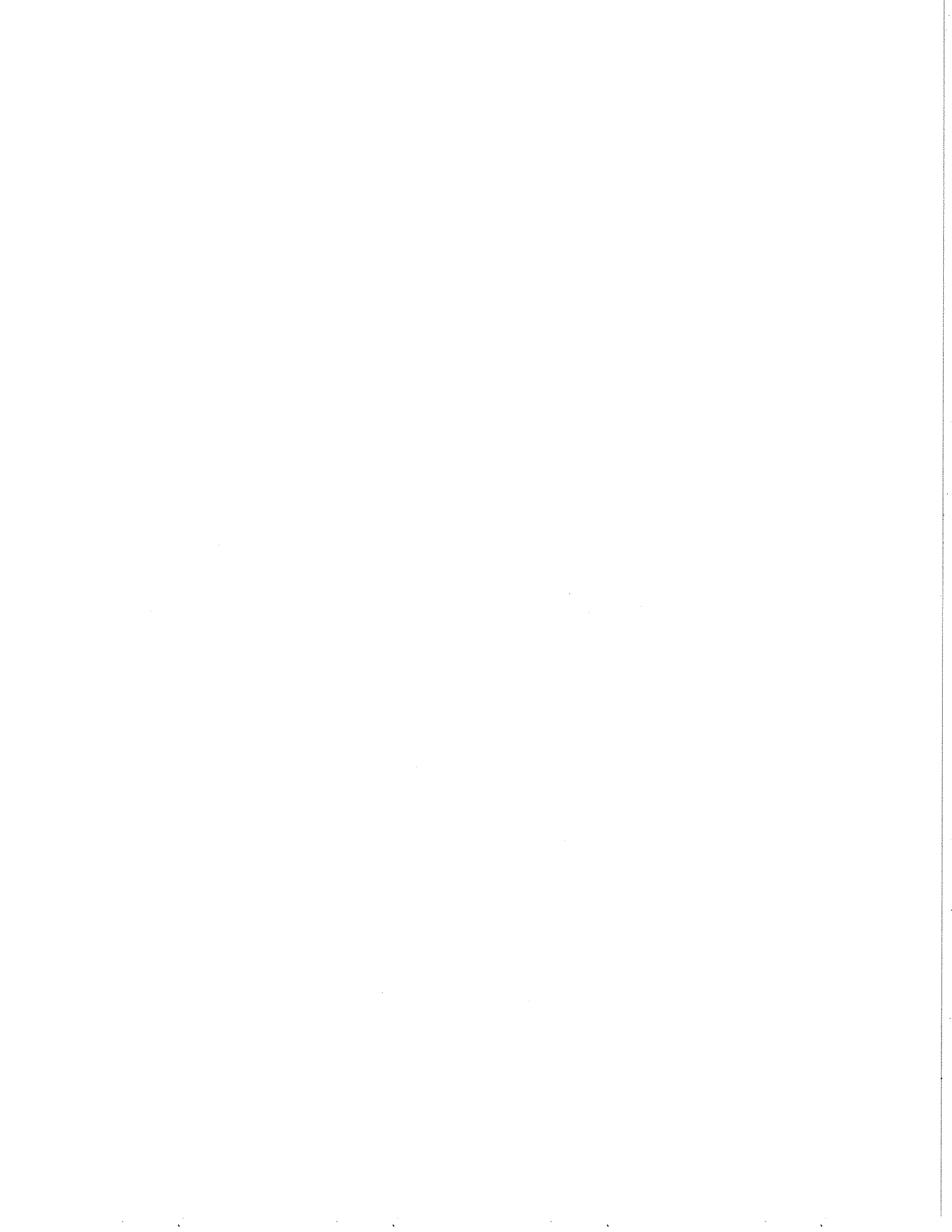


PHOTO R-1: Columbia River Gorge viewed from Mayer State Park looking west.



PHOTO R-2: John Day River Canyon viewed from OR 206 looking north (downstream).



Appendix R-3. Klondike III Wind Project

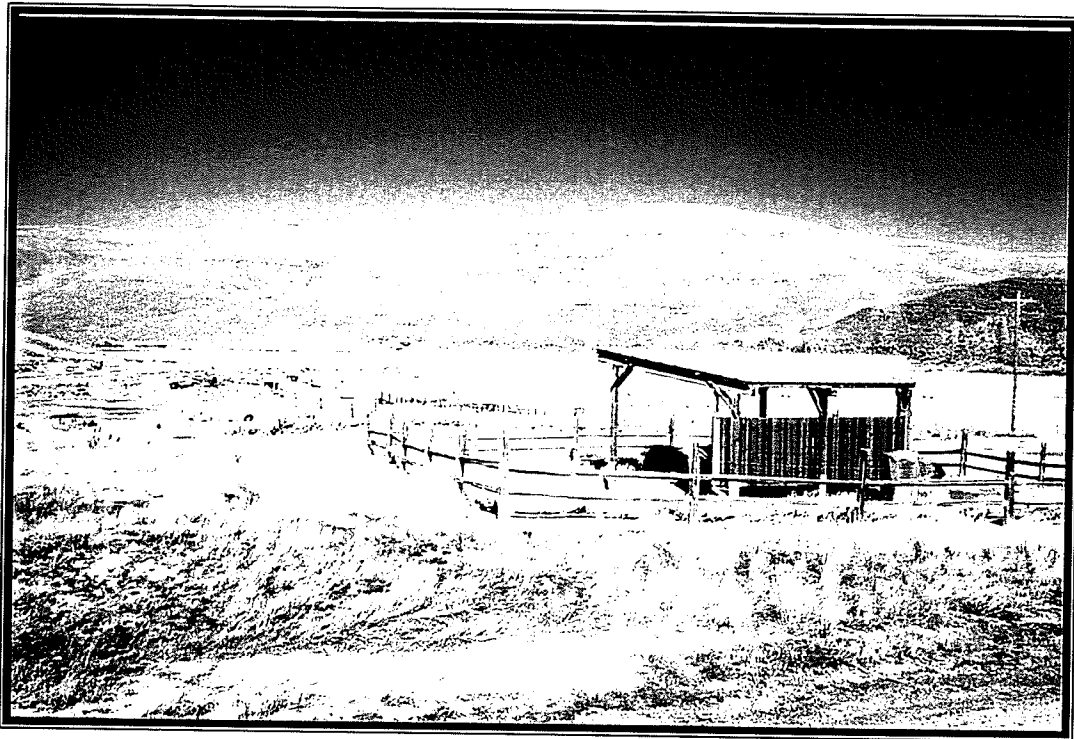


PHOTO R-3: John Day River Canyon viewed from Oregon Trail interpretive site looking northeast.

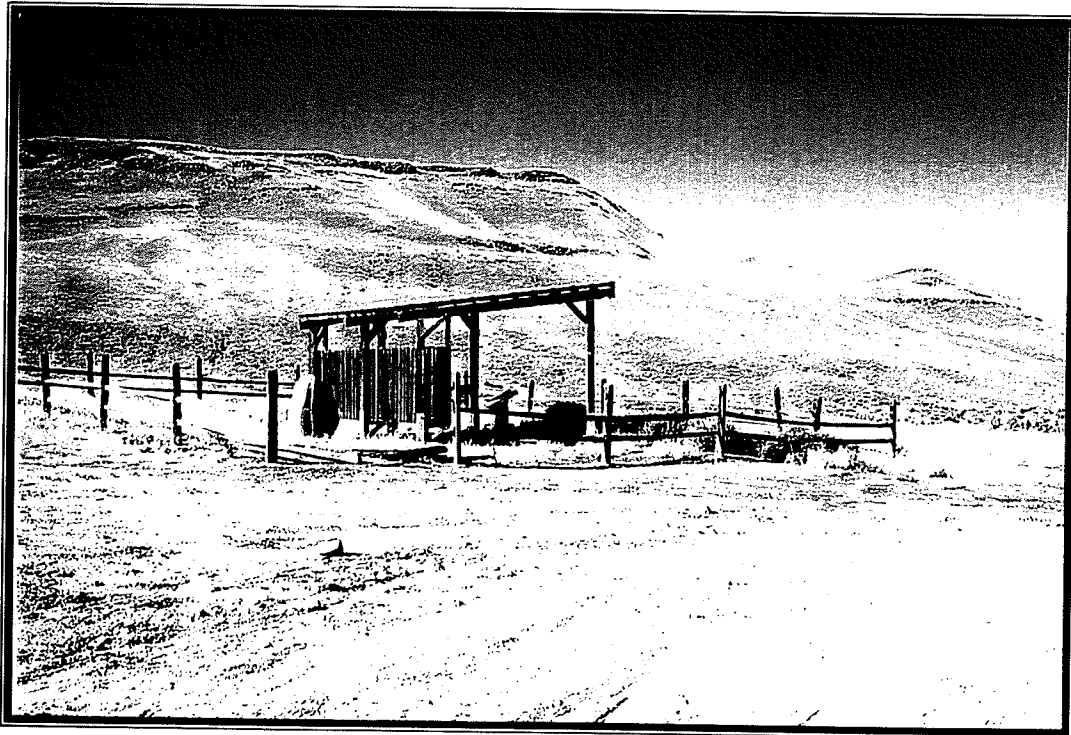
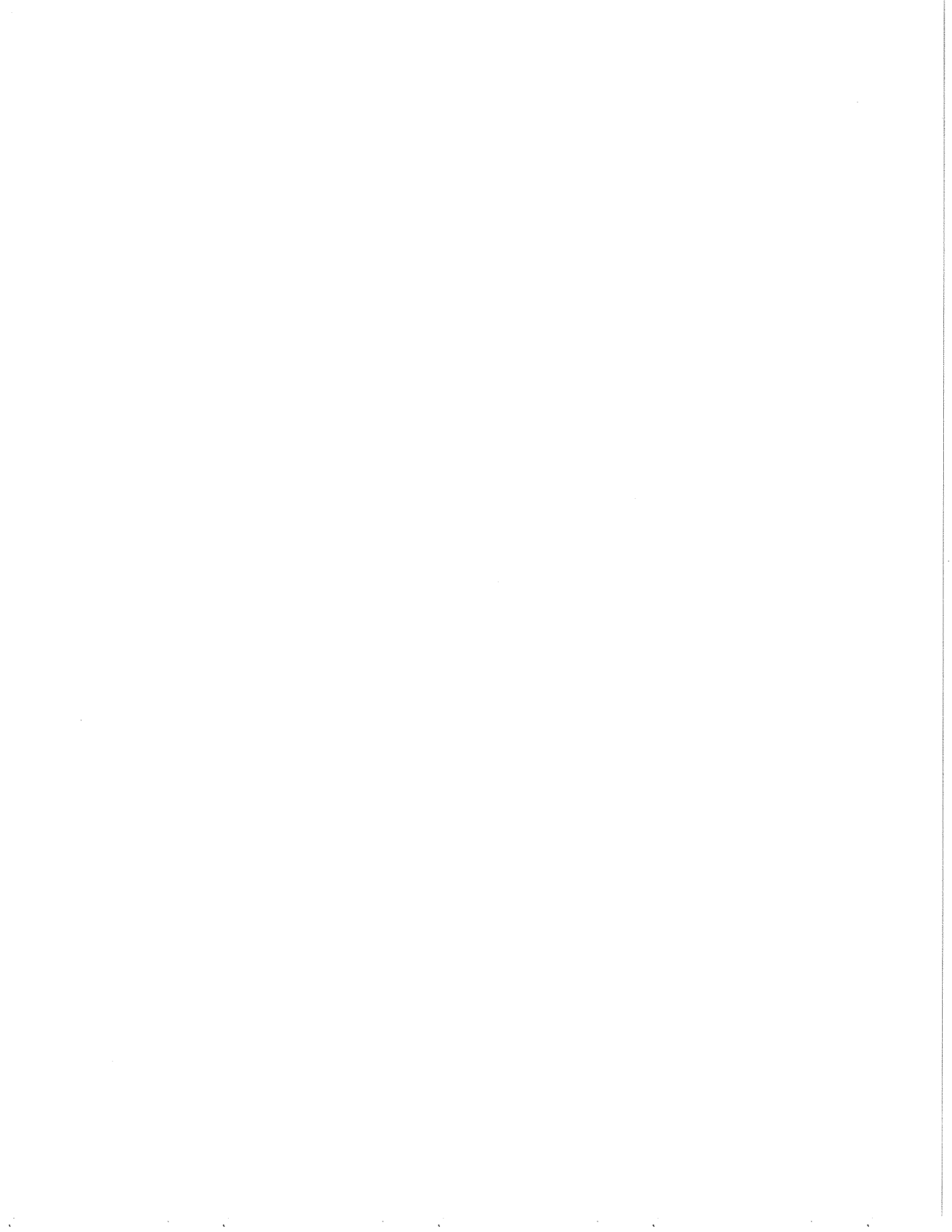


PHOTO R-4: BLM interpretive facility near McDonald Crossing looking northwest.



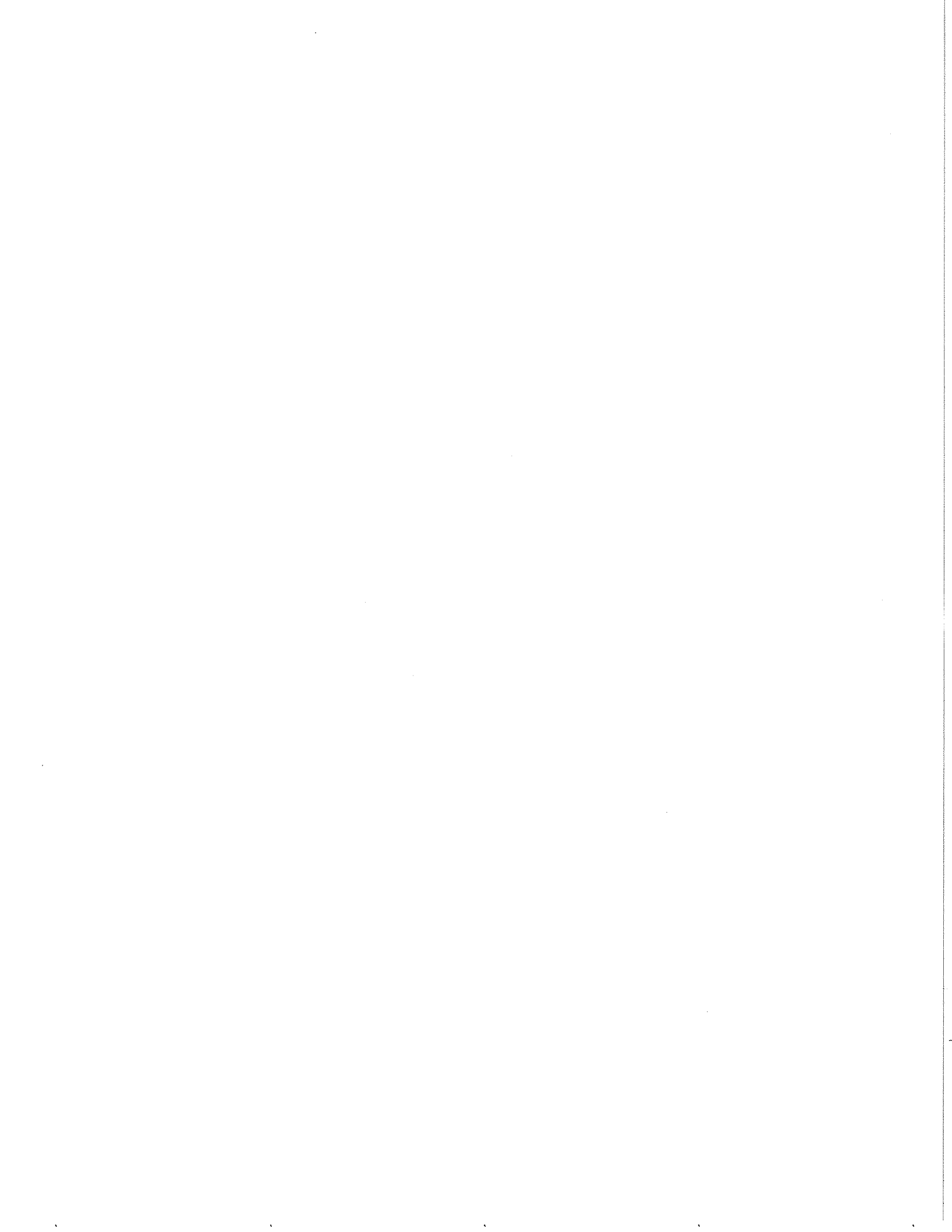
Appendix R-3. Klondike III Wind Project



PHOTO R-5: Approximate Barlow Road Cutoff Trail alignment viewed from Sandon Road looking northeast.



PHOTO R- 6: US 97 at MP 12 looking south.



Appendix R-3. Klondike III Wind Project



PHOTO R-7: US 97 at MP 12 looking north.



PHOTO R-8: View from Wasco County Museum looking east.



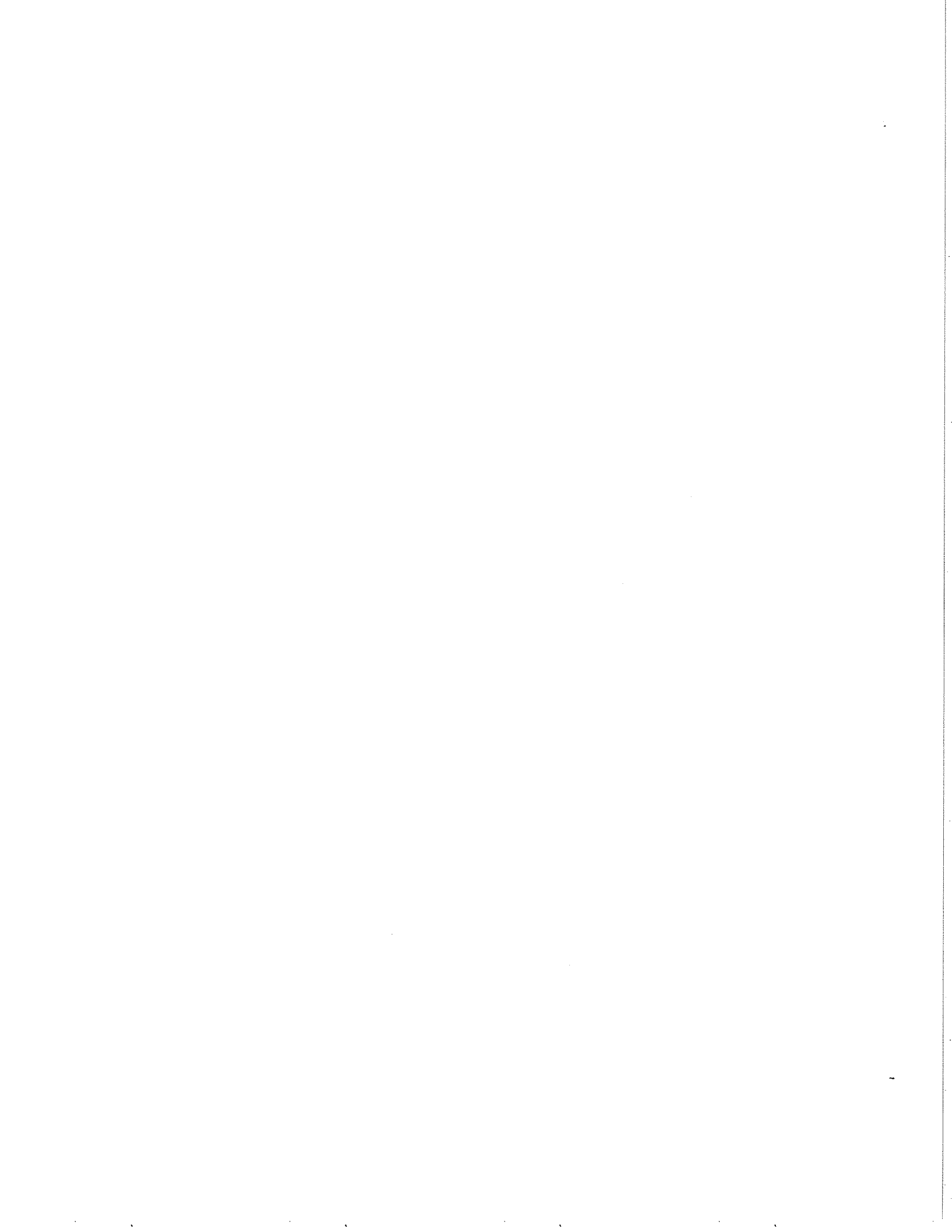
Appendix R-3. Klondike III Wind Project



PHOTO R-9: View from US Highway 30 near The Dalles looking east.



PHOTO R-10: View from Cherry Heights Road west of The Dalles looking east.



Appendix R-3. Klondike III Wind Project

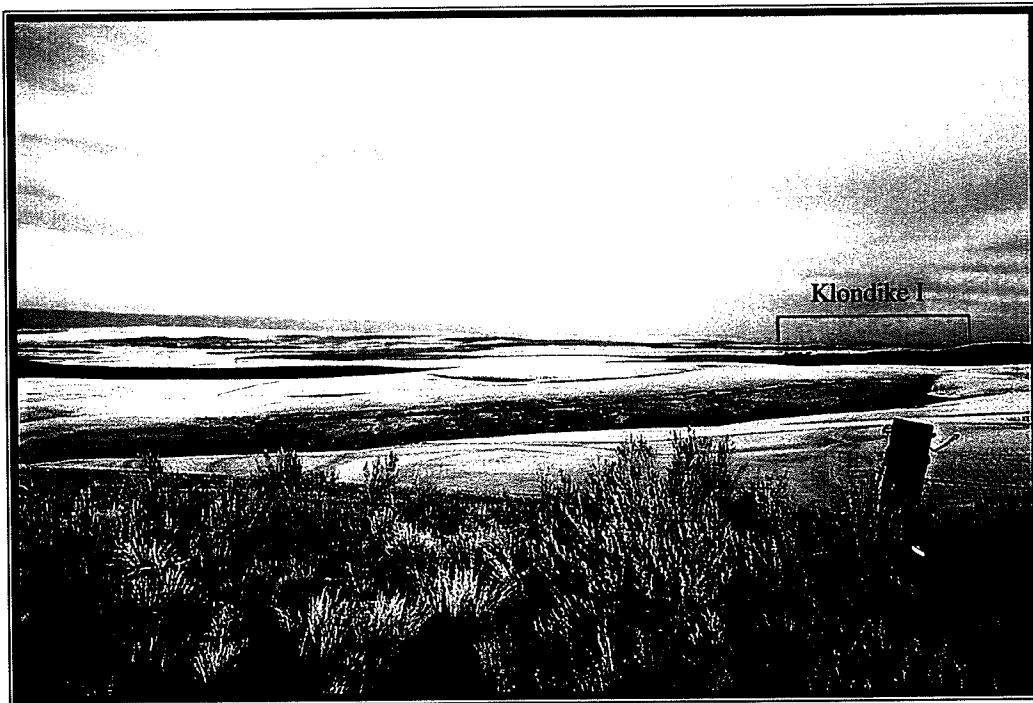


PHOTO R-11: View of Klondike I Wind Project from Gordon Ridge looking east.

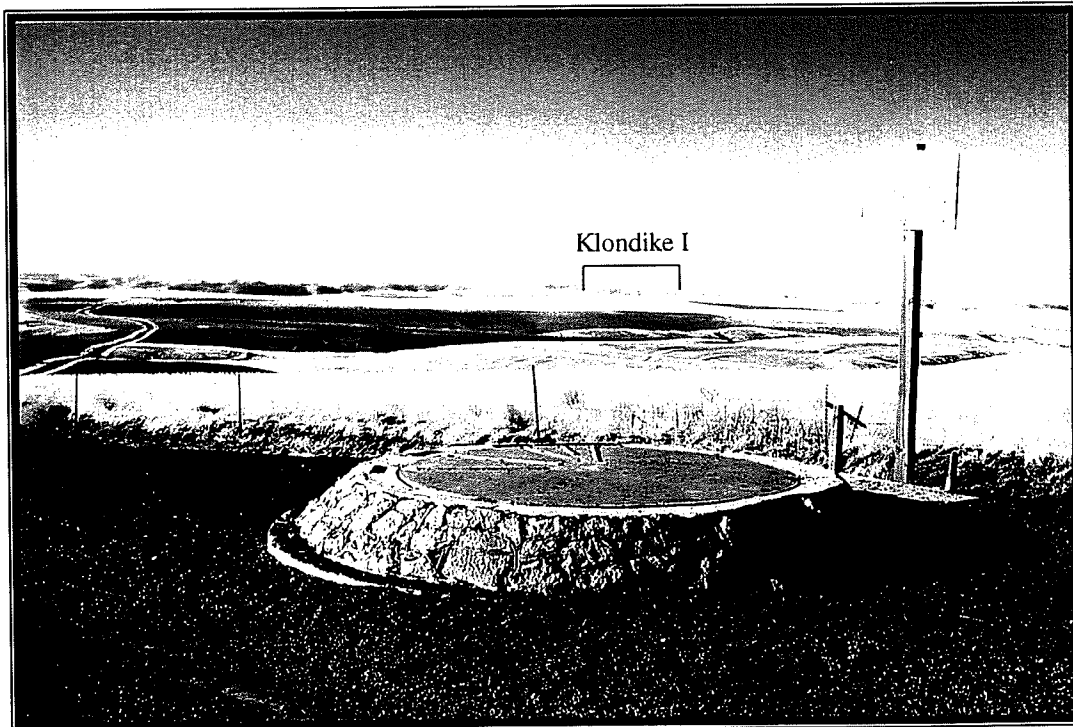
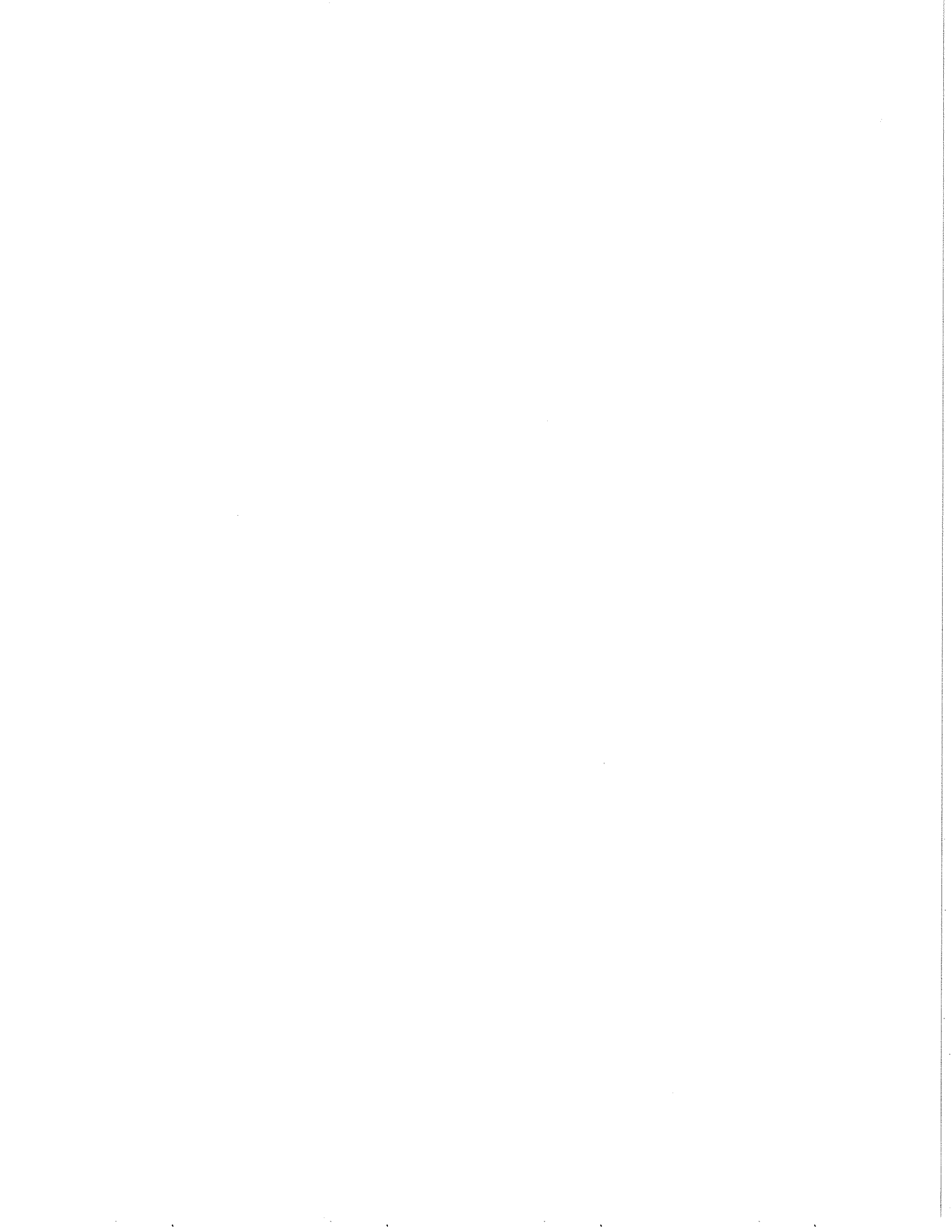


PHOTO R-12: View of Klondike I Wind Project from Highway 206 viewpoint looking west.



APPENDIX R-4

BLM Correspondence



From: <Heidi_Mottl@or.blm.gov>
To: "Sean Sullivan" <Sps@deainc.com>
Date: Wed, Mar 16, 2005 9:35 AM
Subject: Re: project description

Sean:

Thank you for the information. My only concern is knowing that none of the proposed towers will be visible from any point along the Wild and Scenic River. I'm hoping the scene area analysis you send will answer that question. At this point, I don't anticipate BLM will have any other concerns.

Thanks,

Heidi Mottl

Recreation Planner

Prineville District BLM

541-416-6718 voice, 541-416-6798 fax

"Sean Sullivan"

<Sps@deainc.com>

To

03/14/2005 06:19

<hmottl@blm.gov>

PM

cc

"Dana Siegfried" <Dns@deainc.com>,

"Ethan Rosenthal" <Ejro@deainc.com>

Subject

project description

Hi, Heidi.

Here's the description for the wind project you requested. We're still working on finalizing maps and will send them as soon as they're available.

thanks also for the documents you sent. they were most helpful.

sean

Sean P. Sullivan, L.A., Associate

David Evans and Associates, Inc.

2100 SW River Parkway

Portland, OR 97201

Phone: 503.223.6663

