Washington Oregon Wireless Communications Site Environmental Assessment Bend/Fort Rock Ranger District Deschutes National Forest

DRAFT 1/31/02

CHAPTER I - INTRODUCTION

I. PLANNING AREA DESCRIPTION

The proposed site lies adjacent to the boundary area currently permitted to the Oregon Department of Transportation (ODOT) by the Forest Service for operation as a maintenance facility (Mt. Bachelor Sand Shed and stockpile site). It is located approximately 18 miles west of Bend, Oregon, in T. 18 S., R. 10 E., Section 30, W.M., and is along the Cascade Lakes Scenic Byway (Road 46). The proposed site is located in Management Area 9 - Scenic Views under the Deschutes Land and Resources Management Plan (Forest Plan), and Administratively Withdrawn under the Northwest Forest Plan. Scenic Views areas are managed to provide forest visitors with high quality scenery that represents the natural character of Central Oregon. Administratively Withdrawn are identified within the Deschutes National Forest Plan such as recreation, scenic views, and designated old growth where management emphasis precludes programmed timber harvest

II. MANAGEMENT DIRECTION

The Deschutes National Forest Land and Resource Management Plan, as amended in June 1995 by the Northwest Forest Plan, sets management direction for this project area. The analysis conducted for the Washington Oregon Wireless (WOW) project area tiers to the Forest Plan and its supporting documentation. Cultural resources on the Deschutes National Forest are regulated by the guidelines in a 1995 Regional Programmatic Agreement between the USDA-Forest Service, the Advisory Council on Historic Preservation, and the Oregon State Historic Preservation Office. Forest Service Handbook (FSH) 2709 also provides direction for the management of electronic sites on National Forest land.

III. PURPOSE AND NEED FOR ACTION

The Bend-Fort Rock Ranger District received a proposal from SpectraSite Communications, Inc. on behalf of Washington Oregon Wireless (WOW). As per the Telecommunications Act of 1996, the Forest Service "shall act on any request for authorization to place, construct or modify personal wireless service facilities within a reasonable period of time after the request is duly filed..." The primary purpose for the construction and operation of this facility is to provide a reliable PCS (Personal Communication Services) to central Oregon users where there currently is none. There is a need for WOW to provide Digital PCS coverage for a specific area to maintain their FCC (Federal Communications Commission) license. In particular, WOW is obligated to provide coverage for the central Oregon area.

IV. EXISTING CONDITION

1. Scenic Quality

The proposed project is located on the southern portion of the Mt. Bachelor Sand Shed Site, an ODOT cinder pit/maintenance facility under Special Use permit by the Bend/Fort Rock Ranger District. Located approximately 18 miles outside of Bend on the way to the Mt. Bachelor Ski area and the Three Sisters Wilderness area, access is from the Cascade Lakes Scenic Byway, which is designated a National Scenic Byway. This national designation seeks to preserve the intrinsic values of the area, which are, in order of significance, scenic, natural, and recreational qualities. As a scenic travel corridor, this site also has development restrictions under the Deschutes County Landscape Management Combining Zone. This zoning seeks to preserve scenic and natural resources and to maintain and enhance scenic vistas and natural landscapes as seen from roads within designated areas.

The project is located within a scenic viewshed that is considered foreground along a scenic travel corridor. Direct views to the site are from the highway along the existing west entry road and filtered views through the existing stand of mixed conifer trees along the highway.

Scenic Values

Scenic values are the way people relate or react to a particular landscape. These values can be affected through the memory of experiences within a certain setting. The anticipation of viewing a certain landscape can trigger emotional responses that enhance an experience and provide a stronger connection to a place. Visitors and residents alike enjoy traveling on the Cascade Lakes Scenic Byway to enjoy the natural setting and pristine feel one derives from being in the high lakes area.

In recent years, due to the continued growth of Bend and accompanying demands on utility and transportation systems, changes in the landscape are requiring more attention to scenic values. The removal of native vegetation and addition of structures and roads are visible changes that are especially noticeable in areas that are relatively undeveloped as well as areas that are partially developed.

Scenic Integrity Levels

Scenery Management Objectives are defined in terms of Scenic Integrity Levels which are used to describe the existing conditions and whether the landscape is visually perceived to be "complete" or not. The most complete or highest rating for Scenic Integrity Levels means having little or no deviation from the landscape character that makes it appealing and attractive to visitors and local residents. In addition to describing existing conditions, Scenic Integrity Levels also describe the level of development allowed and ways to mitigate deviations from the area's landscape character.

The site is within a scenic viewshed classified in the Scenery Management System as having a **Scenic Integrity Level of High**, which refers to landscapes where the valued landscape character "appears" intact. Deviations could be present but must repeat the form, line, color, texture, and pattern common to the landscape character so completely and at such scale that they are not evident. This classification is the same as **Retention**, which was previously used in the Visual Management System.

2. Wildlife Habitat

The project area is identified as northern spotted owl dispersal habitat and is in an established lynx analysis unit (LAU).

Towers can be associated with high levels of avian mortality, especially if they are tall (200' or taller), attached to guy wires, or mounted with lights, or are located on a migratory flight path. It is unknown if the tower would be located on a migratory flight path, although it is unlikely, due to the location of the project area (on a hillside, not on a ridge, valley, or mountain side, or other landform that can concentrate migrants).

3. Proposed, Endangered, Threatened, and Sensitive Plants (PETS)

There are no known TES plant sites in the general area, nor is there any particular habitat for them here.

4. Survey and Manage Plant Species

The project area is comprised of a disturbed open area with a few small shrubs. It lies adjacent to a forest characterized by lodgepole pine, white fir, and a few ponderosa pine, with little understory. There is no habitat present for any potential survey and manage plant species, although a lichen that requires management of all known sites was located about 200' away from the project site, within the forest matrix. This lichen is not expected within the project site because there is no substrate present for it to colonize (trees without bark).

Vascular Plants

There is no habitat present within the project area for *Botrychium minganense* and *B. montanum*, the two grape-fern species that require predisturbance surveys if habitat is present. Additionally, there are no known sites present within the project area for these species that would require management of those sites.

Non-Vascular Plants

There is no habitat present within the project area for either *Schistostega pennata* or *Tetraphis geniculata*, the two moss species that require pre-disturbance surveys if habitat is present. Additionally, there are no known sites present within the project area for these species plus three others, *Buxbaumia viridis*, *Marsupella emarginata var. aquatica* and *Tritomaria exsectiformis*, that would require management of those sites.

Lichens

There is no habitat present within the project area for the one lichen, *Pseudocyphellaria rainierensis*, that requires pre-disturbance survey if habitat is present. Additionally, there are no known sites present within the project area for this species that would require management of those sites.

Fungi

There is no habitat present within the project area for the one fungi species, Bridgeoporous nobilissimus, that requires pre-disturbance survey if habitat is present. Additionally, there are no known sites present within the project area for this species or the five other species that would require management of those sites.

5. Noxious Weeds and Exotic Plants

The proposed tower location is near a known population of spotted knapweed (Centaurea maculosa), located about 300' away in the southwest corner of the parking area for the sand sheds, and a broader area along the Cascade Lakes Scenic Byway (Highway 46). These areas have been treated with herbicide but individual plants remain, as well as a presumed seed bank. The knapweed site in the SW corner of the parking area, which was small, was pulled completely in the summer of 2001, but there are likely to be seeds present in the soil.

6. Special Uses

The proposed site lies adjacent to the southern portion of an area currently permitted to the Oregon Department of Transportation (ODOT) by the Forest Service. ODOT does not have exclusive use for their permit area. As such, other uses are allowed within the permit area as long as these uses do not interfere with the operations of the facility by ODOT.

As per FSH direction (2709.11.48(3), 2709.11-94-1.48.1(6)), in general, a proposal such as WOW's would require at a minimum an electronic site "designation" (via the LRMP) and a Site Management Plan. Also, if the proposed location were not an approved site in the LRMP, then a Forest Plan amendment would be needed prior to approval of the site. There is an exception to forego these actions if the site is for a single use only.

7. Cultural Resources

The location of this proposal is within an area that was surveyed for cultural resources in 1992. No cultural resources were noted. There is a low probability that any cultural or archaeological resource would be located at this project site. No historic properties eligible for the National Register of Historic Places have been located.

V. PROPOSED ACTION

The proposed action (Alternative B) is described on pages 6-7. It was designed to be consistent with the Forest Plan, existing laws and Forest Service Manual direction.

1. Decision to be Made

The decision to be made by the District Ranger is whether or not to permit the construction of this facility under terms of a Special Use permit administered by the Bend-Fort Rock Ranger District. As there was no interest by other PCS or cell providers to co-locate at this site at this time, an amendment to the Deschutes Forest Plan to designate the area as a Communication Site would not be needed (See Existing Conditions, Special Uses section). Other reasonable and feasible alternatives that meet the purpose and need for the project could be considered. The decision would be based on the findings in this Environmental Assessment, including public comments to this proposal.

2. Incorporated by Reference

The following documents were used in this analysis and are incorporated by reference. These documents are available for public review at the Bend-Ft. Rock Ranger District Office:

- All specialists reports, including their literary references.
- 1990 Deschutes National Forest Land and Resource Management Plan This plan was developed to guide all natural resource management activities and establish standards/guidelines on the Deschutes National Forest.
- 1994 Record of Decision for Amendments to the Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl Developed to adopt a common management approach to the administration of lands throughout an entire ecological region.
- 2001 Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures and Standards and Guidelines.

CHAPTER II - ALTERNATIVES

I. SCOPING

The scoping process identifies public, Forest Service and other agencies issues regarding a proposal to implement an action. Public scoping was initiated early in the process by including this project in the summer, fall and winter (2001) editions of the Schedule of Projects (SOP) for the Ochoco and Deschutes National Forests and the Prineville District of the Bureau of Land Management. Letters were mailed to the Project mailing list requesting comments on the Proposed Action (August 23, 2001). Public comments are used by the IDT to identify issues, further develop the proposed action and develop alternatives to the proposed action.

There were 9 comments to the WOW cell tower proposal: 6 in the form of letters or emails, 3 were left on a telephone answering machine. The answering machine messages did not leave a name or number to contact them. Messages left on the answering machine were in opposition to the tower for scenic quality reasons and/or thought it was inappropriate to site a communications tower along a Scenic Byway.

The following is a list of letter/email comments received to date.

- "...we can still welcome this technology into our community without it marring our beautiful natural landscape and skyline...does the tower need to be as high as proposed? Can its visibility be mitigated even further by camouflage? Can multiple shorter poles be less visible? Our concern is how these towers would impact the scenic beauty of our area."
- Another suggested that a laminated wood pole would be more appropriate rather than a steel lattice tower. The wood pole would blend
 in better with the trees than a metal tower. The commenter did not think they could serve that highway without another site somewhere
 along the highway closer to town. The commenter also thought making the pole as short as possible and putting up several others of the
 same height to accommodate other users could serve better than one or two tall towers.
- Deschutes County had several concerns in regards to the proposal not meeting the County Code (DCC) 18.128.340(B)(4). Most of the comments address the County's requirements for developers of cell towers and other facilities to apply for a conditional use permit through their (Deschutes County) process of approval (public hearing, etc.). Other comments from the County address concerns that the tower proposal would not meet the County Zoning Ordinance or Deschutes County Code. DCC limits height of support structures to 30 ft. in Landscape Management Combined Zone (LM), consistent w/regulations adopted to protect scenic views from the Cascade Lakes Highway. This standard applies in the LM zone for 1,320 linear feet of the centerline of the Cascade Lakes Highway. Structures need to blend with the existing environment, such as earth tones or natural wood finish.
- One commenter is in favor of the construction and operation of a multi-user communications facility and believes the location, purpose
 and need, and proposed action are all in line and reflect thoughtful course of action for the proposed tower.

II. ISSUES AND MEASURES

The scoping process for the WOW Environmental Assessment, including public involvement, identified a total of one issue related to the proposed action. This issue, together with applicable laws, regulations, and policies, were used as alternative design criteria. The ability of how each alternative addresses the issue involves the use of "key indicators" or "measures of responsiveness" (measures). Measures were used in this analysis to clarify and compare the difference between alternatives and not as a strict quantitative measure of environmental effects. Measures must be taken in context when interpreting effects.

Issue 1 - Impact on Scenic Integrity

The proposed action would construct a 100' steel lattice tower (See Exhibits 1-3) with up to three available platforms to house radio transmitting antennas and/or similar equipment to collocate additional users. The tower location is approximately 800 feet from centerline of the Cascade Lakes Scenic Byway (County Road 46). The tower itself could adversely affect the scenic integrity along the Byway.

Units of Measure - Tower visibility from the Scenic Byway

- Number of times the tower is clearly visible from the Byway.
- Length of view that the tower can be seen.
- Type of tower and antennas.
- Height above the tree tops.

III. ALTERNATIVE DESCRIPTIONS

Alternatives are designed to move towards the desired condition specified in the Forest Plan consistent with the standards and guidelines in that Plan.

A. Alternatives Considered But Eliminated From Further Analysis

To minimize any adverse scenic impact, and to partially mitigate concerns brought up during the scoping process, an alternative was considered that would put the tower height at 85ft., with the tower itself being a wood laminate monopole. This alternative was removed from consideration after it was determined by "drive tests" that the 85ft. height would not allow for adequate transmission of the signal to adjacent facilities. The drive tests determined that "gaps" in coverage would be at either end of the service area for the proposed tower. Similarly, there would be weaker coverage within the gap areas, which could result in an increase of dropped calls. These gaps and weaker coverage areas would serve PCS clients so inadequately that the cost to construct, operate and maintain the facility would be infeasible for the service provided. Also, to provide for stability of the antennas and microwave dish, the wood laminate pole would have been a larger diameter than what a steel monopole would need to be (approx. 2-3ft. and approx. 2ft. respectively), which could have made it more obvious to the casual observer from the Cascade Lakes Scenic Byway.

Another alternative considered but eliminated was to develop plans that would be consistent with Deschutes County regulations for siting wireless telecommunications facilities. This would require the proposed tower to be constructed to a height of 30' to ensure that the site would be consistent with the regulations adopted to protect scenic views from the Cascade Lakes Highway. It would also require an application for a conditional use permit from Deschutes County. These items were considered but eliminated because the height of the surrounding vegetation at the proposed site would block the PCS signal to other relay towers. The 30' height limit requirement would make this site, and others along the Cascade Lakes Highway where the service is needed un-useable. Also, as per an agreement between the Deschutes National Forest and Deschutes County, the applicant is not required to apply for a County conditional use permit because the Deschutes National Forest Plan is the

determining document for land use decisions on Federal lands within the Deschutes National Forest.

B. Alternative A - No Action

The no action alternative is a baseline against which to measure relative changes that would result from implementation of the action alternatives. Under this alternative, the proposed project would not take place. There would be no tower or associated facilities constructed on the site near the ODOT sand shed. There would continue to be gaps in PCS coverage along portions of the Cascade Lakes Scenic Byway on the approach to Mt. Bachelor (both east and west of the junction of Roads 46 and 45).

C. Alternative B - Proposed Action

The proposal is to construct a 100' steel lattice tower with up to 3 available platforms to house radio transmitting antennas and/or similar equipment to collocate additional users. The 100' level of the tower would be utilized by WOW for a broadband PCS facility and loaded with 12, six-foot tall panel antennas. In addition, microwave dish antennas could be located on the tower. The two remaining platforms would be available for future carriers.

The lattice tower is proposed to be located within a 60' X 60' fenced compound on a 100' X 100' ground lease area that would house necessary radio equipment required by tower tenants. The fence would be a 6' tall chain link fence topped with barbed wire for security reasons. Future ground mounted radio equipment and/or small radio equipment buildings could be located in the lease area to house the equipment of collocation tower tenants. The fenced portion of the facility could be extended in the future to encompass the boundaries of the full 100' X 100' lease area if future tenants require the space for ground equipment. The facility would include a generator for backup power. Power for the site would be provided from an existing ground level facility currently servicing the ODOT sand shed. No other utilities would be needed for the site. The power line to the tower would be underground.

Construction of a 12-foot wide road to the site would be necessary for a distance of approximately 300 feet on a previously impacted area. Other than several small (less than 10 feet) lodgepole pine trees, the removal of existing vegetation would not be required. The road would be of natural surface; there is no need to rock or gravel the site.

Currently, the proposed site location is not identified as a Communication Site in the Deschutes Forest Plan. As such, because the proposal is for a multi-use site, a Forest Plan amendment would be required to implement this proposal.

D. Alternative C

Alternative C was developed to address the comments received on the proposed action and the issue of the effect to the scenic integrity of the Cascade Lakes Scenic Byway due to the tower's location and construction.

The location of the tower and associated facilities is the same as in Alternative B. However, the height of the tower would be reduced to 95 feet. The tower itself would be a steel monopole, with flush mounted antennas (both to the pole and to the top of the tower itself). Also, both the tower and antennas would be painted to blend with the surrounding area. The tower would be for a single user/provider; there would be no other providers at this site at this time. As such, a Forest Plan amendment or site management plan would not be needed.

A steel monopole was selected over a painted laminate wood pole structure for several reasons. First, a laminated wood pole at this height (95 feet) would be larger at the base and top (than a steel monopole) to meet the wind and ice loading requirements for the area. Wood poles are more common for 50'-70' applications, but are not recommended for taller applications. Also, a steel monopole can be painted (and repainted) to the appropriate color to blend in with the surrounding environment. Wood poles are chemically treated to maintain their structural integrity and commonly change color over time.

Usually the most effective way to meet Scenic Integrity Levels is to repeat visual form, line, color, texture, pattern, and scale common to the scenic values of the landscape character being viewed. For example, in natural and natural appearing landscapes, deviations such as created openings can sometimes be visually enhanced through repetition of size, shape, spacing, surface color, edge effect, and pattern of natural openings common to the landscape character. Adding structures or additions to existing structures to the landscape can often be accomplished by repeating architectural form, line, color, texture, pattern, and scale that visually relates to the surrounding site features. If repetition is designed to be accurate and well placed, the deviation could blend so well that change is not evident.

An additional long-term buffer for the site would be to plant mixed conifer trees around the proposed project site to provide an effective screen from the highway and surrounding areas.

The following table compares the Issue by Alternative.

Table 1 - Issue Comparison by Alternative.

Issues/Measures	Alternative A No Action	Alternative B Proposed Action	Alternative C
Issue 1 - Impact on Scenic Integrity			
Measure - Tower visibility from the Scenic Byway			
Number of times the tower is clearly visible from the Byway.	N/A; No effect.	Once.	Once.
Length of view that the tower can be seen.	N/A; No effect.	Minimal; approx. 1-2 seconds from a motor vehicle.	Minimal; approx. 1-2 seconds from a motor vehicle.
Type of tower and antennas.	N/A; No effect.	Steel lattice tower; triangular platforms w/antennas extending out from the tower.	Steel painted monopole that would blend w/the surrounding vegetation. Flush mounted vertical antennas.
Height above the treetops.	N/A; No effect.	Approx. 15 feet.	Approx. 10 feet.

IV. MITIGATIONS

The following mitigation measures would be applied to all the action alternatives whenever the applicable site-specific conditions are present.

Mitigation Measures Common to All Action Alternatives

a. Noxious Weeds

For the action alternatives:

- 1. To reduce the threat of weed spread to the project area, do not park equipment or vehicles on Highway 46 or in the SW corner of the sand shed parking lot, where spotted knapweed populations exist.
- 2. Monitor the sites where soil disturbance and displacement would occur for the introduction of knapweed or other weeds such as dalmation toadflax, and pull as needed.
- 3. To prevent introduction of noxious weeds from offsite, clean equipment used in conjunction with the project prior to entering the site.
- 4. To prevent spread of weeds from the site to the next job, clean the equipment prior to its next assignment.

b. Cultural Resources

For the action alternatives, avoidance measures would be implemented if necessary.

CHAPTER III - ENVIRONMENTAL EFFECTS

I. ENVIRONMENTAL EFFECTS

This section describes the beneficial and adverse impacts to the environment that would occur if the alternatives were implemented. Estimated effects are discussed in terms of environmental changes from the current situation and include qualitative as well as quantitative assessments of direct, indirect, and cumulative effects.

1. Scenic Resources

Alternative A (No Action)

Without construction of the site, there would be no effect to the vegetation, cultural, scenic or wildlife resources. Travelers would continue to lack PCS service along that portion of the Cascade Lakes Scenic Byway near the proposed site location as they go to and from Mt. Bachelor to Bend. Overall scenic views on the site and as viewed from the highway and surrounding areas would remain the same.

Alternative B: Proposed Action

The scenic integrity of the site would be most affected by how far the tower extends above the surrounding landforms or vegetation. The tower should be no higher than 10 feet above the dominant trees and not higher than the tallest tree within the immediate area. It would be located as far away from the highway as possible. It would not be a distance above the tree canopy that would require aircraft lights or a strobe.

A "balloon test" of the proposed site location was done to determine if the tower could be seen from the Cascade Lakes Scenic Byway (County Road 46; see Appendix A). A large red balloon was inflated and elevated to the proposed 100' height. Then the road was driven to determine any locations from which the tower would be visible. It was determined that there are three locations along the Cascade Lakes Highway where the tower would visible. The most readily visible is from the sand shed access road on the west end of the site. There were two other locations where the balloon could be seen: one due north of the tower site on Road 46, and another just west of the Wanoga Sno-Park. The first location was more visible then the second. However, all but the location at the access road were only visible due to the red color of the balloon and the viewer actually looking for it through the vegetation. The casual traveler on the Cascade Lakes Highway would unlikely not see the tower at all except from the access road area. Digital photographs of the balloon test, and photo-simulations of the cell tower are located in Appendix A.

The proposed action would not meet the Scenery Management Objectives of **High Scenic Integrity** because the lattice tower, panel antennas, and platforms would be visible at a height of more than 10 feet above the dominant trees and higher than the tallest tree within the immediate area. Located less than 1/4 mile from the highway, it would be visible from the highway. Also, the form and scale of the proposed structure does not repeat closely enough the form and scale of the surrounding features.

Exhibit 1: Alternative B 100 foot lattice tower with "top hat" antenna's.

OR0212 BACHELOR WAY



VIEW LOOKING FROM INSIDE ODOT FACILITY. PROPOSED 100 FOOT LATTICE TOWER.



Exhibit 2: Alternative B 100 foot lattice tower looking in from the access road.



VIEW LOOKING SOUTH FROM ODOT DRIVEWAY. PROPOSED 100 FOOT LATTICE TOWER.



Exhibit 3: Alternative B 100 foot lattice tower from westbound Cascade Lakes Scenic Byway.



VIEW LOOKING SOUTHEAST AT ENTRANCE TO ODOT FACILITY.
PROPOSED 100 FOOT MONOPOLE.



Alternative C

This alternative was designed to mitigate some of the comments received from the public on the Proposed Action. The tower would be in the same location as the proposed action, but would be a 95 foot steel monopole with antennas that are flush mounted with the pole. This pole would be a single user/provider tower with no other providers proposed at this time. This alternative would be less visible than the proposed action because of the lower height, color of the pole itself and narrower silhouette of the structure. Again, as in Alternative B, the casual driver would not be able to see this pole from the Cascade Lakes Highway, except at the access road location. Even here, the tower would resemble a tall snag and not a cell tower (see exhibits 4-6).

The Scenery Management Objectives of High Scenic Integrity would be met because the tower is located as far away from the highway and as close to the tallest trees as possible. The objectives are also be met because the color of the tower and all of the other structures including the fence, radio equipment cabinets, propane tank for the back-up generator and antennas would be painted or be a non-reflective color that would blend with the surrounding vegetation. The color would appear to be a shadow that is darker than the predominant color of the foliage. There would be no lights visible from any of the cabinets or any part of the tower or antennas. The form and scale of this structure would repeat closely enough the form and scale of the surrounding features.

Exhibit 4: Alternative C 95 foot monopole with flush-mounted antennas.



VIEW LOOKING FROM INSIDE ODOT FACILITY.

Proposed 95' tall painted monopole with flush-mounted antenna's



Exhibit 5: Alternative C 95 foot monopole looking in from the access road.



VIEW LOOKING SOUTH FROM ODOT DRIVEWAY.

Proposed 95' tall painted Monopole with flush-mounted antenna's.



Exhibit 6: Alternative C 95 foot monopole from westbound Cascade Lakes Scenic Byway.



2. Wildlife Alternative A None.

Alternative B (Proposed Action) & C

No effect. It is unlikely that the cell tower would contribute to any but incidental bird mortality, as it would be relatively short (100' tall or shorter) and freestanding; there are no guy wires that are the major contributor to avian mortality at cell tower sites.

All alternatives are consistent with 2001 Project Design Criteria as specified in the Joint Aquatic and Terrestrial Programmatic Biological Assessment for Federal Lands within the Deschutes Basin Administered by the Bureau of Land Management Prineville Office and for Federal Lands Administered by the Deschutes and Ochoco National Forests.

3. Proposed, Endangered Threatened, and Sensitive (PETS) Plants

Alternative A (No Action)

Under this alternative, there would be no direct effects on PETS plants.

Alternatives B (Proposed Action) and C:

There are no impacts expected to occur upon TES plants or their habitat.

4. Survey and Manage Plants

There are no expected direct, indirect or cumulative effects under any alternative because there are no Survey and Manage sites or habitat located within the site.

5. Noxious Weeds

Alternative A (No Action)

The parcel was given a LOW risk ranking of introducing or spreading weeds because no equipment would be operating in or adjacent to the known knapweed populations.

Alternative B (Proposed Action) & C

The WOW cell phone tower project was given a HIGH risk ranking of introducing or spreading weeds because there is a known population of spotted knapweed (Centaurea maculosa) in the area - about 300' away in the southwest corner of the parking area for the sand sheds, and a broader one along Highway 46. It has been treated in the past with herbicide but individual plants remain, as well as a presumed seed bank. In addition to the weed sites, heavy equipment will be operating in the area, which increases the risk of weed introductions to the cell phone tower site.

5. Cultural Resources

Alternative A (No Action) and Alternative B (Proposed Action) & C

None. An appropriate inventory has been conducted for this project to determine properties eligible for listing on the National Register. None were found.

II. OTHER EFFECTS

All alternatives are in compliance with relevant Federal, State and local laws, regulations, and requirements designed for the protection of the environment. None of the alternatives establishes a precedent for future actions, or a decision in principle about a future consideration. If in the future another provider requests to co-locate at this pole/site another analysis, a communications site management plan and a Forest Plan amendment would be required prior to approval and implementation could occur.

1. Environmental Justice

Effects on consumers, minorities and women are within the scope of effects described in the Final Environmental Impact Statement for the Deschutes Land and Resource Management Plan (LRMP 8/90).

2. Unique Landforms/Geologic Hazards

Under alternatives B and C there would be some modification to the area from the construction of the proposed site. There would be no effect to any unique characteristics of the geological or ecological resources of the caves.

3. Effects on Noise

There would be some noise associated with this project during the construction in alternatives B and C, but it would be short term, less than one month.

4. Effects on Water Quality

None as there are no water sources, streams or lakes within the project area.

5. Public Health and Safety

No adverse effects to public health or safety have been identified. Increased PCS coverage of this traffic corridor could have a positive effect on public safety by providing better communications for emergency situations.

6. Irretrievable/Irreversible Resources

There would be some irretrievable commitments of resources due to the proposed tower construction.

7. Roadless

There are no inventoried roadless areas within or adjacent to the project area. There would be no change to the unroaded or undeveloped character as defined by the current proposed rule for roadless areas.

CHAPTER IV - CONSULTATION

CONSULTATION WITH OTHERS

Public scoping for this project began with the mailing of the proposed action to the public on August 23, 2001. This letter identified the tower proposal being considered. This project was also included in the winter (2000), spring, summer and fall (2001) Schedule of Projects. The responses were incorporated by the IDT into the Issues in Chapter II. The effects of the issues are discussed in detail in Chapter III, Environmental Consequences. The list of organizations and people, who were notified by letter regarding this proposal, as well as persons and organizations responding to the proposed action, and a copy of their comments, can be found in the project file.

List of Interdisciplinary Team

Leslie Moscoso IDT Leader/Recreation & Writer/Editor

Marcelle Boehme Wildlife Biologist
Chris Lipscomb Archeologist
Charmane Levack Botanist

Robin Gyorgyfalvy Landscape Architect Linda Carlson Special Uses Administrator

APPENDIX A

Site Map & Balloon Test Photos

Site Map. Note: the ODOT "Permit Boundary" is in blue.

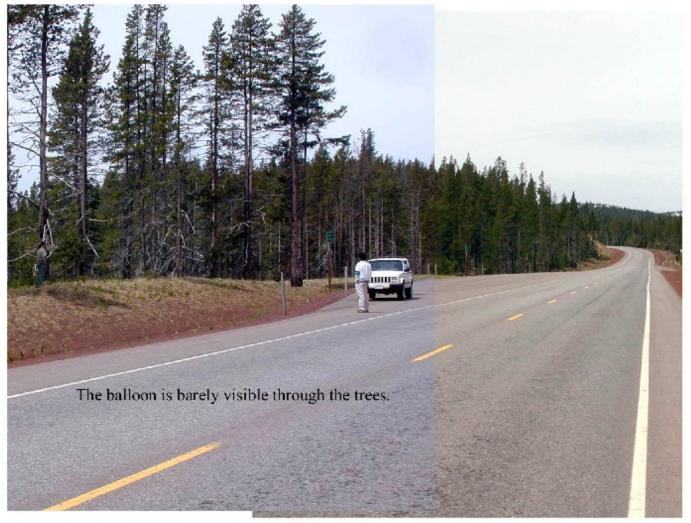
Project Description

OR0213 Bachelor Way - ODOT Sueu Formil Boardery N 42" 34" 38" E 1789.68 8 60' TO 105' FIRS PROPOSED 20' WIDE P ACCESS EASEMENT (900' PAVED, 300' DIRT) 9877 SITE PROPOSED 10' WIDE UTILITY EASEMENT Pit area as shown on (550") k k **EXISTING** 1988 Aerial Photo K TRANSFORMER 47 MEC 11577) PAVED DRIVE PAVED DRIVE 1 100 230-688 TO BEND 388 18 & Century Orma TO MT BACHELOR 5. 42° 34' 38" W 3. 30 C CASCADE LAKES HIGHWAY 74 . 27 44 P.O.T. 0 (STATE HWY 372, USFS RD 46) 283-8834 P.T. 500 SP 5 - 655 49 29755 0 - 0.7 R . 1537 P.2 299-64508 ML Bochelor Send Shed Site Deschutes County Jenuary 1993

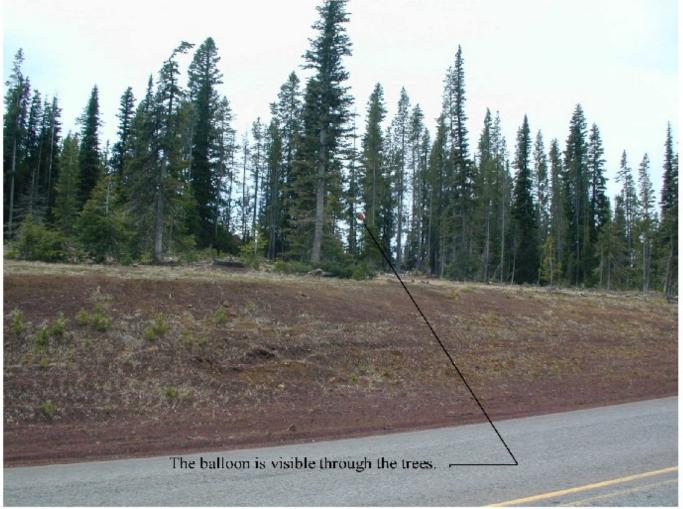
Exhibit 7: Balloon test photographs.



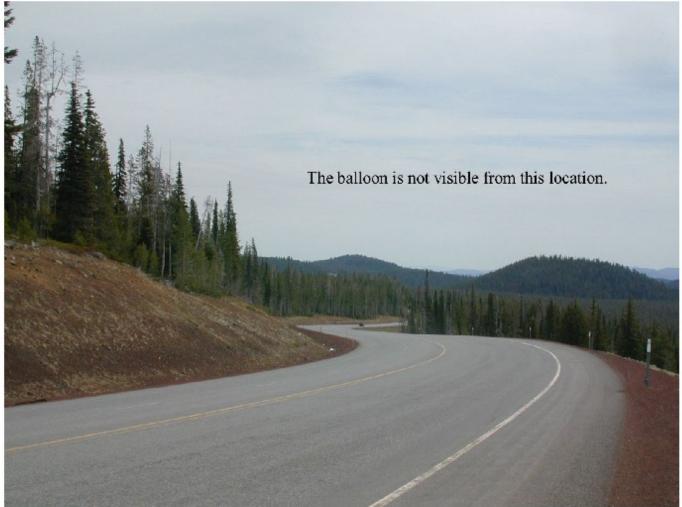
Looking West on Cascade Lakes Highway (.2 miles East of Wanoga Snow-Park)



Looking North-West from Cascade Lakes Highway (.6 miles East of Swampy Lakes)



Looking West from Cascade Lakes Highway. (100 yards East of exit driveway)



Looking East from Cascade Lakes Highway. (.7 miles West of Mt. Bachelor sign)

Deschutes and Ochoco National Forests Website

 $http://www.fs.fed.us/centraloregon/manageinfo/nepa/documentsbendfort/wirelesstower/wirelessea.html\\ Last Update: 2/6/02\\ R.A. Jensen$