OSU Research Forests Planned Recreation Developments
Conditional Use Permit Application
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Note to Readers: The following format is used to direct readers to the appropriate locations on accompanying maps.

Example:

“Scout Trail (D4-5)” directs the reader to Appendix D4: Dunn Forest Project Area Map, Taxlot Code 5, where the Scout Trail is located.
Conditional Use Review Criteria

1 – Describe how the proposed use will not seriously interfere with uses on adjacent property, with the character of the area, or with the purpose of the zone. For a full discussion of recreation use and management, see pages 8-10. For a full discussion of potential recreation developments, see pages 14-18.

OSU Research Forests and the College of Forestry are committed to maintaining active forest management and educational use as the primary uses on the landscape, while also managing a welcoming recreation program with high quality facilities. The College of Forestry desires to allow public access to the OSU Research Forests as a service to the local community and as an avenue to share learning about natural resource management.

Without active management of recreation use, impacts to the character of the area and the purpose of the zone would increase. Proposed changes described in this document are intended to better manage existing use of the property, to reduce impacts from recreation use, to prepare the forest to be resilient to future increases in use, and to provide desired amenities for the local community. Current use is at high levels, estimated to be up to 145,000 visits in 2015. Use is expected to rise with or without the developments described here (Needham and Rosenberger, 2011). Thoughtful development of recreation facilities allows managers direct and indirect tools to encourage appropriate behavior, even as recreation use is expected to increase. Actively managing recreation use gives managers tools to address and reduce impacts from recreation use on other forest uses (such as educational use and forest management) as well as neighboring properties.

In addition to protecting the character associated with forest management and educational use on the OSU Research Forests, the potential developments described in this document are also designed to protect high quality recreation opportunities on the landscape. These developments are consistent with the recreation draft guidelines for recreation development drafted through a community involvement process in 2013 (Gustavson, Brown & Olsen, 2014). The intention is to develop recreation opportunities while retaining the existing character of the setting. Parking area expansions will be primarily gravel, and will remove minimal tree cover. Trails will be carefully located to enhance the ability of visitors to access the forest without degrading the natural setting. Recreation developments will also be carefully placed on the landscape to leave some areas less developed while managing other areas for more concentrated use, in addition to the many other considerations discussed in this document.

The presence of unauthorized, user created trails can cause damage to natural and cultural resources, educational and forest management activities, and neighboring properties. For a detailed discussion of unauthorized trails, see page 9. Official trails planned for construction are to be carefully designed to avoid impacts to these resources. One of the goals of trail development on the OSU Research Forests is to “replace” unauthorized trails with carefully designed authorized trails, and to restore the landscapes where the unauthorized trails once were. This transition to a more extensive authorized trail system is intended to reduce conflicts between primary forest uses and recreation use, as well as to provide high quality trail opportunities for forest visitors.

Actively managing recreation provides OSU Research Forests the opportunity to identify locations where impacts to neighboring properties may be occurring and to address the issues at specific locations through information and/or enforcement. For example, new trails will be clearly marked on forest
maps, and clearly signed on the ground. This is expected to reduce confusion (compared to unmarked and unmapped unauthorized trails), and prevent impacts to neighboring properties.

Recreation and engagement management on the OSU Research Forests is intended not only to provide a service to the local community, but also to serve as a venue for learning about forest conservation for individuals, community groups, and schools. By providing high-quality access to a local forest, we are also able to provide information about forest ecology and forest management. This furthers the purpose of the Forest Conservation Zone by providing community members with opportunities to learn about the value of forest conservation.

2 – Describe how the proposed use will not impose an undue burden on any public improvements, facilities, utilities, or services available to the area.

Law enforcement services are provided through a cooperative agreement with Benton County Sheriff’s Department. OSU Research Forests pay into a fund which supports a law enforcement officer to patrol and enforce regulations on timber lands in Benton County. The OSU Research Forests rely on this partnership to enforce important rules and regulations with the visiting public, and plan to continue this partnership into the future.

Fire protection services are provided by Oregon Department of Forestry. Please see page 12 for a full discussion of fire risk, protection and response.

Water is used for administrative purposes, including office, domestic and irrigation use at Peavy Arboretum, for office use at Oak Creek (D6-41 and 42; though not managed by OSU CoF), for residential use at Jackson Creek (D6-39), and neighbor (residential) use on 510 Road (D5-19; near Peavy Arboretum). Administrative drinking water at all locations is provided by wells, and irrigation water at Peavy Arboretum is taken from Cronemiller Lake (D5-19). The only public drinking fountain is located at the Forestry Club Cabin at Peavy Arboretum and is currently out of commission, to be replaced in 2017. Sewage is managed appropriately through septic tanks and leach fields.

The only restroom facilities currently provided for recreation use are portable toilets located at Peavy Arboretum (D5-22), Oak Creek (D6-41), and Lewisburg Saddle (D5-25). These are owned by a contractor and pumped and serviced weekly. As part of the Recreation Trails Program (RTP) grant from Oregon Recreation and Parks Department (ORPD), a vault toilet will be installed at Lewisburg Saddle, to provide a more permanent solution and increase user comfort. The vault toilet is entirely within the boundaries of the OSU Research Forests, is not located near running water, and will utilize a tested, fully sealed, pre-fabricated Cascadian style single-vault CXT structure. This toilet will be serviced by OSU Research Forests staff, and pumped as needed by a contracted service. Soap Creek is located approximately 0.7 miles north of the toilet site and is not hydrologically connected. As an isolated vault toilet, this addition is not anticipated to impact water or sewage utilities in any way. The necessary permit for installation will be obtained from Benton County Environmental Health.

Dog waste is an issue in some popular areas on the OSU Research Forests. For a full discussion of this issue and OSU Research Forests management of it, please see page 10.

New trails planned for development are located entirely within the OSU Research Forests, and access points are at existing trailheads. The addition of the new trails (as a single factor) is not anticipated to significantly increase current use occurring on public roads.
Current issues at parking areas include the disruption of forest management and educational traffic, maximized parking capacity, and safety concerns at parking areas and on public roads. With anticipated increased recreation use of the OSU Research Forests, these issues are expected to escalate without appropriate management interventions. OSU Research Forests intentionally take a conservative approach in designing increases to parking capacity. Design of parking improvements is intended to find a balance between safely accommodating a limited amount of additional use and reducing congestion, while also protecting the primary uses of the site and preventing additional safety concerns. Considerations and philosophy in developing parking on the OSU Research Forests are discussed in further detail on pages pages 19-23.

Among other considerations, planned improvements described in this document are intended to improve safety on public roads in anticipation of increased use in the future. While parking developments will provide limited additional parking capacity, they will also improve the safety on public roads. Properly designed and managed parking areas will lessen the burden on public roads, compared with impacts associated unmanaged parking. OSU Research Forests staff is working with Benton County Public Works staff to properly design measures to reduce speed and improve safety along public roads. Signage, visual cues, rumble strips, and convenient design of parking areas will be implemented to reduce problem parking behaviors. Right-of-Way permits will be obtained from Benton County Public Works for all projects in the County right-of-way.

3 – If the property is zoned EFU or FC, describe how the proposed use will not force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use.

The OSU Research Forests and surrounding forest landowners in the Forest Conservation Zone have been managing forests in the presence of recreation use for many years. The proposed developments are intended to better manage recreation use to allow for reduced impacts to the primary uses of the Forest Conservation Zone, and are not anticipated to force a significant change in forest practices on the OSU Research Forests or neighboring properties.

OSU Research Forests makes efforts to reach out to neighboring property owners when impacts to their properties from recreation use are anticipated or observed. OSU Research Forests intend to continue to be available and willing to work with neighbors to address concerns or issues arising from recreation use, and could foresee installing signage, planting visual barriers, decommissioning unauthorized trails, planning authorized trails, and working together to develop other creative solutions.

OSU Research Forests has enhanced the quality and frequency of communication with the visiting public and forest neighbors via on-site and web-based materials. Visitors are informed of forest management activities with advanced notice so they are able to plan their trips accordingly. This public information helps with maintaining the public safety closures necessary to allow forest management activities to move forward. This exchange of information has supported the OSU Research Forests in expanding forest management activities back into the McDonald Forest after an extended absence from this area, partially due to concerns with public support and safety. Public messaging will continue for all future forest management activities.
OSU Research Forests will continue current practices of utilizing existing communication channels to support neighboring forest owners in sharing information regarding forest management activities or changes in recreation access.

4 – If the property is zoned EFU or FC, describe how the proposed use will not significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use.

Goals 5 and 6 of the McDonald and Dunn Forest Recreation plan are to provide safe, quality recreation opportunities and to establish, maintain, and enhance good relationships with neighbors. As such, recreation and engagement is a fully funded program in the OSU Research Forests budget, providing funds to manage recreation resources and provide outreach and information to the community.

The proposed recreation infrastructure changes are to be funded primarily through grants and donations, while funding from the OSU Research Forests budget covers the cost of long-term management and maintenance. This anticipated increase in long-term management and maintenance is considered acceptable by the OSU College of Forestry who manages the lands to meet established goals.

The amount of recreation use occurring on neighboring lands is relatively small compared to the amount of recreation use occurring on OSU lands, and OSU Research Forests remains committed to supporting neighboring landowners with issues arising as a result of recreation use coming from the OSU Research Forests. As an example, we work closely with Starker Forests Inc. on regional recreation related issues and concerns.

Additional questions

1. Will the proposed use involve the use of water (plumbing facilities, bathroom, water for processing, etc.)? ____ NO ____ If yes:
   a. Is there an existing well or spring on the proposed parcel(s)? _______ Please attach a copy of a well log or pump test, if available, which identifies the rated yield of this water source.
   b. Is there an existing septic system on the proposed parcel(s)? _______ An evaluation by Environmental Health may be required of an existing system unless the system was recently installed or repaired. Please attach a copy of any septic system records you may have available.

2. Is the only access or proposed access to the property via a road that crosses a railroad? ____ NO ____

   If yes, please draw the location on your map and explain here:

Mitigating Measures Please answer in detail on a separate sheet of paper.

1. Describe any special measures you propose to undertake in order to minimize the impacts on adjacent properties and public services, and to ensure compliance with the purpose of the zone. Consider such features as: location of the use on the parcel; road capacities in the area; driveway location; parking area; on-site traffic circulation; landscape or fencing separations; size of structures; signs; exterior lighting; noise; air emissions; drainage.

To minimize the impacts of these developments, the following activities are planned:
Mitigation of conflicts between visitors and forest management activities is discussed in detail on pages 10-12.

Mitigation and prevention of wildfire impacts are discussed in detail on page 12.

Mitigation of conflicts between recreation users are discussed in detail on pages 8-10.

Mitigation associated with parking developments, including safety, social, and environmental, are discussed in detail on pages 19-23.

Mitigation of conflicts between recreationists and forest neighbors is discussed in detail on page 10.

Work with contract archaeologists to identify and protect cultural sites. A memorandum of understanding between OSU Research Forests and the Confederated Tribes of Grand Ronde requires OSU Research Forests to follow the National Historic Preservation Act guidelines, as administrated through the State Historic Preservation Office.

OSU Research Forest will apply for the following permits:
- “Miscellaneous Work in the Right of Way Permit” Benton County Public Works for Lewisburg Saddle and Oak Creek parking improvements
- Vault Toilet Installation: Benton County Environmental Health
Purpose of OSU Research Forests

The OSU Research Forests were donated to the College of Forestry to be managed for teaching, research and demonstration. Of the nine forest tracts throughout Oregon, the McDonald Forest, Dunn Forest, and Elizabeth Starker Cameron Demonstration Forest (OSU Research Forests) are located in close proximity to the community of Corvallis and are managed as a unit to include recreation.

Goals of the OSU McDonald Dunn Research Forests (OSU College of Forestry, 2005):

1. Provide diverse opportunities for learning, discovery and dissemination of new knowledge
2. Optimize net revenue to support education, research, and outreach in the College of Forestry
3. Sustain forest ecosystem services
4. Identify, protect, and perpetuate cultural heritage sites
5. Provide safe, quality recreation opportunities
6. Establish, maintain, and enhance good relationships with neighbors
7. Demonstrate a commitment to continuous improvement

Teaching and Research

Teaching, research and demonstration are compatible with the Forest Conservation Zone, and make up the backbone of the mission of the OSU Research Forests. This use is largely compatible with recreation activities on-site, with some exceptions. Recreation use must be managed appropriately to prevent and address current and potential impacts, and to allow these multiple uses to occur compatibly.

Many university classes use the OSU Research Forests each year to observe real-life examples of textbook concepts, conduct example studies, and learn about the natural world and how people interact with it. Class use is primarily from the College of Forestry, though it is also used by other Colleges throughout Oregon State University as well as other schools and organizations in the community. Improving parking and trail access for recreation use also improves access for class use, and recreation developments are expected to enhance this use. Infrequent impacts from recreation use affects class use, such as visitors “cleaning up” class survey ribbon or site markers. OSU Research Forests’ staff work with instructors to address these issues as they develop, and minimize impacts to class use. Future tactics to address impacts could include the use of information signage, moving of teaching sites, or closing teaching sites to recreation use.

The OSU Research Forests are used as living laboratories by researchers within the College of Forestry, other Colleges at OSU, other universities, agencies, and non-profit organizations. Many forest management activities involve a research component. Examples include evaluating vegetative competition and tree seedling growth after harvests, evaluating silvicultural treatments on forest structure, snags and wildlife habitat, and evaluating new harvesting methods such as steep-slope timber harvesting. Other research occurring on the forest includes aquatics (example: evaluating stream biota in Oak Creek), wildlife (example: purple martin use of created and native habitats), invasive species (example: how to eradicate the invasive grass false brome), recreation (example: evaluating recreation use of the OSU Research Forests) among others. Recreation use can occasionally cause impacts to research study sites. Examples include the creation of an unauthorized trail through a long term research plot measuring percent cover, and dogs using the same watering hole as stream researchers on Oak Creek. OSU Research Forests staff work with researchers to place their research sites in locations where they can minimize negative interactions with visitors. When issues do arise, staff work with
researchers to identify the best approach to addressing the issue. In the past, this has included informational signage about the project, the closure of certain areas to recreation use, and the building of a trail to route visitors away from long term research plots.

College of Forestry leadership places great emphasis on promoting the OSU Research Forests for class use and research, and educational use is expected to continue at similar or increased levels in the future. This use has been seen to be largely compatible with recreation use and management, with exceptions addressed on a case-by-case basis. OSU Research Forests staff prioritize the support of research and teaching on the forest, and will continue to work with instructors and researchers to prevent impacts from recreation use and address them when they occur.

Recreation Management
While recreation was not considered one of the original uses of the OSU Research Forests, Corvallis has grown over the years, and neighborhoods have been built along the Forest boundary. Many local residents viewed the forested hills north of Corvallis as an accessible and inviting place to pursue their outdoor interests. Over time, non-motorized recreation use has grown. OSU originally developed a recreation management program to prevent and address conflicts between recreation use and the primary uses of the forest. The perspective of OSU College of Forestry has expanded since then, and now considers recreation management to be a vital and important part of the OSU Research Forests mission, to serve as a venue with which to serve the local community and support learning about natural resources. Recreation use is now fully embraced and visitors are welcomed.

Approximately 145,000 visits were projected for 2015 on the McDonald Dunn Forests (Needham and Rosenberger, 2011). Twenty-six miles of trail and 114 miles of road are used by hikers, dog walkers, trail runners, mountain bikers, equestrians, community groups, schools, and forest neighbors. Developed facilities include Peavy Arboretum and multiple parking areas (see Appendix C: Parking Planning), which serve as access points to the Forests. In addition, many visitors access the forest from unauthorized (user-created, not OSU sanctioned) trails leading from backyards and neighborhoods.

Please see the accompanying map for the location of existing trails. A table of trail names, mileages and allowed uses is located in Appendix B (Trail Uses Table) of this document.

Managing Conflicting Recreation Uses
The vision of the OSU Research Forests Recreation and Engagement Program is to offer a variety of enjoyable opportunities for a diverse set of forest visitors to participate in close-to-home recreation and learning activities in a forested environment. The OSU Research Forests are intended to serve as a place where people feel comfortable engaging in outdoor activities as individuals or with their neighbors and friends, and come away learning something new about forests.

In 2009, primary activities for visitors to the forest include hiking or walking (42%), trail running or jogging (21%), dog walking (17%), mountain biking (15%), horseback riding (3%) and nature viewing (1%). Overall, levels of conflict are relatively low on the Forests, as only 11% of users experienced conflict with people on foot or horseback, and 34% experienced conflict with mountain bikers (Needham and Rosenburger, p iii and iv). This survey is being replicated, with data collection during the 2017 calendar year and results to be shared in 2018.
Over 25 miles of unauthorized trails are located on the OSU Research Forests. Some of these trails arose long ago as a result of people wanting to access popular destinations, while others were intentionally built. Most of the intentionally built trails were created either to provide a technically challenging trail, or to access the forest from private property. Unauthorized trails have not been designed to meet trail standards or avoid conflicts with other forest uses. As a result, some of them cause damage to natural and cultural resources, as well as research and forest management activities. OSU Research Forests actively closes trails only when they are determined to be causing an impact to a specific resource. When forest management activities occur, unauthorized trails are not repaired from damage resulting from harvesting. Use of existing unauthorized trails is not condoned, and visitors are directed toward the use of official trails only. Construction of new unauthorized trails is actively investigated and prosecuted through the Benton County Sheriff’s Department, and the landscape is immediately restored.

In contract, official (authorized) trails are carefully designed and installed in areas specifically identified to reduce or eliminate damage to these resources.

Many OSU Research Forests trails are intentionally designated for multiple non-motorized uses to meet the mission and vision. During the public engagement process in 2013 and 2014, recommendations from the public included designing trails for multiple uses when they provide connectivity to desired locations (Gustavson, Brown & Olsen, 2014 p 24). Any of the newer multi-use trails added onto the system have been designed with specific safety features - including appropriate sight distance - to safely allow multiple types of travel to use the same travel way. Trail standards are based on the design parameters used by the USDA Forest Service (USDA Forest Service, 2008).

Some forest trails are managed for specific uses, either to reduce potential conflict or safety concerns, to prevent trail damage, or to provide for a specific experience. The following trails are identified as hiker only: Forest Discovery Trail (D5-19), Powder House Trail (D5-18, 19), Section 36 Loop Trail (D5-19), Woodland Trail (D5-22), Arboretum Trails (D5-22), Old Growth Trail (D5-26), New Growth Trail (D5-25), and Sulphur Springs Trail (D6-29). Extendo Trail (D6-31, 38), Intensive Management Trail (D5-20, 21) and Calloway Creek Trail (D5-14, 15) are closed to some uses during wet winter months. The No Secret Trail (D6-28, 30) is currently under construction and will represent the first “primary use” mountain bike trail on the forest, designed and built through the leadership of Team Dirt International Mountain Biking Association (IMBA) Chapter. This trail has been designed to deliver a level of challenge appropriate for an intermediate mountain biker, and will also be open to foot traffic, as trail runners use that area and pose little conflict potential. The trail was not designed to safely accommodate horses, and will be closed to this use.

Newer, “native surface” trails (Vineyard Mountain Trail (D5-25, 26), Dave’s Trail (D5-26, 18), Beautiful Trail (D6-31, 38, 39), and Firehouse Trail (D5-24)), are more sensitive to damage during winter months than the graveled trails in the system. Use of these trails is not allowed when travel will result in leaving a track in the mud, or when there is significant standing water on the trail. Access policies governing each new trail may change as managers track impacts from use and changes to the trail condition over the first couple of years. If significant issues regarding conflict, safety or trail damage are seen, OSU Research Forests retains the flexibility to change uses and/or the design of the trail if deemed necessary.

Additional strategies result in preventing or addressing user conflict. OSU Research Forests relies heavily on partnerships with local organizations who promote appropriate trail etiquette within their
communities. Information about trail uses, conflict concerns, and “share the trail messaging” are located on some forest signs and brochures. Parking improvements described in this document are intended to alleviate congestion and reduce conflict at key forest access points.

In future planning efforts, a trails plan will reflect the interests of the various trail users and identify management strategies to prevent and address conflict. A recreation plan will describe “opportunity classes,” each having a prescribed level and type of development, so visitors will have a choice of what type of experience they want to have on the Research Forests. This should prepare visitors for busy areas and allow them opportunities to seek out quieter locations.

Public messaging and changes to facilities are used to address conflicts on the Forests when they become apparent. For example, to address a more commonly reported conflict regarding dogs and dog waste, a twice-yearly public information campaign, as well as on-site permanent signs, inform visitors of what is required in order to bring their dogs onto the Forests.

Over 50% of visitors bring at least one dog with them on a typical visit to the forest (Needham and Rosenburger, p iii and iv). Over the years, pet waste from dogs has been a significant issue in specific locations (Homestead Trail loop (D6-37, 41), Peavy Arboretum and surrounding trails (D5-19, 21, 22), 540 Gate/Calloway Creek (D5-14), and Lewisburg Saddle (D5-25)). Horse waste is sometimes encountered along trails and roads, though use by horses is much lower (4%) (Needham and Rosenburger, p iii and iv), and horse waste does not carry the same health concerns as dog waste. Starting in fall of 2015, and continuing in spring and fall of 2016, a major public information campaign, Tails on Trails, was designed to address this issue. With input from dog walkers and local veterinarians, Tails on Trails was created to inform dog owners about the impacts from dog waste and rules regarding dog behavior and to remove waste from the forest. In addition, new signs, bag dispensers, and trash cans were provided and strategically placed at several popular locations to enable visitors to make responsible choices regarding disposal of pet waste. This effort has been shown effective, with less waste being picked up during each community effort, less waste observed, and positive feedback from the community. OSU Research Forests plans to continue this twice-yearly campaign as long as needed to protect local waterways and prevent health concerns.

OSU Research Forests strive to be a good neighbor. Specific concerns of neighboring property owners regarding recreation-related issues are addressed on a case-by-case basis by OSU Research Forests staff. One of the intentions of developing the authorized trail system and reducing the number of unauthorized trails is to discourage potential trespass onto neighboring properties. With authorized trails, managers can install clear signage at all trail intersections to reduce confusion, keeping visitors on trails and on the OSU Research Forests property. Free trail maps are distributed at trailheads to help visitors navigate the forest and similarly reduce impacts to neighboring properties. Visual barriers can be placed to encourage travel in appropriate directions and discourage travel onto neighboring properties. Managers are available to work with neighbors to address concerns or issues arising from recreation use and develop creative solutions.

Forest Management
Forest management is a primary use of the Forest Conservation Zone, as well as an essential and integral part of the OSU Research Forests’ mission. The OSU Research Forests operate a sustainable timber harvest program, removing an average of 5 million board feet (MMBF) from the McDonald and Dunn
Forests each year. Funds are used to finance the management of the Forests, which receive no outside funding. Funds are also used to support student learning in the College of Forestry. On the Elizabeth Starker Cameron Demonstration Forest, each timber harvest is designed as a demonstration for family forest owners of what they might do on their own lands, and any funds generated are used specifically to support the mission of that forest.

Harvest methods include a mixture of ground based and steep slope cable yarding systems. Prescriptions include both thinnings and clearcuts, depending upon the condition and needs of each stand. Research needs are often integrated into harvest prescriptions, or harvest prescriptions are determined by research needs. Alternative harvest methods are often utilized to demonstrate cutting-edge forest management, support a diversity of habitat types, and sometimes as a way to reduce aesthetic impacts for visitors, neighbors and the viewshed of Corvallis.

Compared to the current average harvest level of approximately 5 MMBF per year, the McDonald and Dunn Forests are anticipated to harvest 6.3 MMBF in 2017, 5 MMBF in 2018, and 5 MMBF in 2019. Future harvest levels will depend on the direction of the updated Forest Management Plan, due for completion in 2018.

When setting the timber harvest program of work each year, OSU Research Forests leaders take into account a number of different factors including stand age, stocking density, stand trajectory, health and vigor, research opportunities, cultural and natural resources, revenue generation, road access, and impacts to recreation and neighbors. While impacts to recreation are considered when setting a harvest prescription, it is not a determinant of moving or not moving forward with a timber harvest.

Forest management activities extend beyond timber harvest. Among many other tasks, OSU Research Forests also manages and maintains 114 miles of road, applies herbicide application to forest roads and harvest units, conducts pre-commercial thinning and fuels reduction projects, and manages for invasive species, cultural sites, and wildlife habitat.

Forest Management and Recreation Use
Timber harvests and active forest management on the McDonald Forest, the most popular of the OSU Research Forests, has been increasing over the past four years, and is expected to continue at current or increased levels into the future. Because recreation use occurs throughout the OSU Research Forests, harvesting of stands adjacent to, or overlapping with, popular roads and trails is unavoidable. Impacts to recreation use include safety closures of popular roads and trails for weeks or months, aesthetic changes in well-loved areas, and the destruction of unauthorized trails.

OSU Research Forests staff minimize impacts to recreation use by protecting official/authorized trails, signs, benches, and other recreation features from logging impacts and repairing any damage when impacts are unavoidable. Additional mitigations include designing buffers along trails when appropriate to the harvest prescription, designing clearcuts to be less aesthetically impacting, placing snags near trails to support wildlife viewing, and providing accurate and timely public information regarding closures and impacts.

The safety of visitors, staff, and contractors is the first priority for the OSU Research Forests when it comes to active forest management. This is the primary motivator for reducing interactions and conflicts between forest visitors and forest management activities. Conflict between visitors and forest
operations is prevented primarily through a proactive public information effort, focused on providing transparent information regarding timber harvests and other forest operations so visitors know what to expect when coming onto the forest.

Detailed information regarding timber harvests, herbicide application, road maintenance and other forest management activities is published in regular newsletters and sent to more than 500 subscribers (visitors, neighbors and volunteers) via e-mail. Signs are placed on-site, and information is shared via Facebook, list serve and on OSU Research Forests webpage.

Prior to starting each timber harvest, a fact sheet is created, describing why and how the timber harvest is occurring, accompanied by a map of closure areas and haul routes. This fact sheet is posted at trailheads and main access points leading into the closure area, sent out to the e-mail list, posted on Facebook, and included in the Current Activities page of the OSU Research Forests website. When the timber harvest starts, closure signs are posted at all road and trail entries into the closure areas. Closures are generally in effect 24 hours a day, 7 days a week, as operators sometimes work on weekends and early mornings or evenings. When compliance is low, Benton County Sheriff’s Department assists with enforcement of the closure through public education and issuing citations. Some harvest operators choose to post a host onsite to stay with the equipment during all hours.

In addition, forest contractors are trained and monitored carefully to assure that they understand the complexities of operating in a popular recreation area. Drivers are required to drive slowly and carefully on forest roads, and harvest operators are made aware that trespassers may enter the closure area.

Taken together, the actions described above eliminate the vast majority of potential conflicts between recreation users and forest management operations. However, some trespass does occur within harvest closure areas. Many safety precautions are strictly observed by OSU Research Forests staff while conducting forest management activities to provide for visitors’ safety.

A similar approach is expected to continue into the future, with the intent to improve this system each time a forest management activity is planned so the public can be best prepared for what to expect and compliance can continually improve. While recreation use is expected to continue and increase into the future, the OSU Research Forests is committed to managing an active forest management program, while continuing to support educational uses as well.

Forest Management and Neighboring Property Owners
Efforts are made to reach out to neighbors when impacts are anticipated from forest management activities. When harvests are adjacent to residential neighborhoods, forest managers meet with local residents to anticipate impacts from the operations. Mitigations of impacts to neighbors have included quiet hours, addressing specific concerns located on either side of the property line, personal notice of herbicide application for neighbors with chemical sensitivities, and incorporating requests for changes to the prescription when they meet the goals of the harvest. OSU Research Forests personnel will continue to be available to meet with neighbors regarding concerns along the property line.

Wildfire Prevention
The OSU Research Forests are surrounded by several wildland-urban interface communities and subdivisions, especially around the McDonald Forest. Wildfire is a huge concern for the Research Forests
because of the many long-term research projects, recreation values, potential loss of forest cover, and proximity to neighboring properties.

Fire of any kind is prohibited on the OSU Research Forests, and the vast majority of visitors abide by these rules, which are posted at all trailheads and on forest maps. However, staff and volunteers regularly find cigarette butts on hiking trails and other places and occasionally find remnants of party fires and fireworks. In an effort to address this issue, highly visible signs prohibiting fires and smoking were posted at all OSU Research Forests parking areas during the summer of 2016. Extra signs, special alerts and news releases, and additional law enforcement has been employed in past years during peak fire season.

In July 2016 the Peavy Fire burned 3.5 acres on the McDonald Forest. The immediate call in by recreation visitors allowed the prompt response by local fire emergency responders. Fortunate weather conditions also contributed to keeping this human-caused fire small. OSU Research Forests partner with the Oregon Department of Forestry (ODF) for initial attack on any fires. Research Forest staff members have hand fire tools in all vehicles and are trained on how to use them, but the Forests possess no pumps or other fire-fighting apparatus (aside from the equipment required at the Student Logging Training Program work site). Research Forest staff members provide a support role to ODF when a wildfire breaks out.

In 2015, Vineyard Mountain Estates residents, Oregon Department of Forestry, Benton County Public Works, and the OSU Research Forest partnered to re-construct an egress route for residents through the Forest from the end of Cardinal Drive. The neighborhood now has access to the forest to use as emergency egress in case of fire in the Vineyard Mountain area.

In recent years the Oregon Department of Forestry has been working with homeowners to conduct fuel reduction projects in the WUI adjacent to the Forests. Recent timber harvests along forest boundaries have been carefully designed to also reduce fuel loadings in those areas. The Research Forests are in the process of evaluating fire risk on their perimeters with the goal of conducting fuel reduction on the Forests’ side to complement the fuel reduction work going on by adjacent homeowners. The OSU Research Forests plans to work with neighbors in this process to maximize the effects of these efforts.
Phased Plan for Recreation Development

Justification for Developments:

In 2013-2014, extensive community engagement resulted in recommendations (Gustavson, Brown & Olsen, 2014) from the visiting public regarding the desired future direction of the OSU College of Forestry Research Forests Recreation and Engagement Program. In 2015, working groups of each of the major modes of travel identified many potential trail developments (unpublished) on the McDonald Forest, which has guided trail development and set the stage for future trail planning.

Concurrently in 2015, faculty and staff from the College of Forestry and the Research Forests met and reviewed public recommendations alongside internal needs and mandates. This group developed a set of goals and objectives for the future of the Recreation and Engagement Program (OSU College of Forestry, 2015).

The phased plan described below is consistent with the substance of these documents, and is intended to meet the goals of the Recreation and Engagement Program on the OSU Research Forests:

- The Research Forests are, and will continue to be, an integral part of the local community
- Offer a diversity of high quality, safe, and sustainable recreation opportunities
- Recreation use is to be consistent with College of Forestry and Research Forests goals

Not all of the recommendations included in the Collaborative Community Recommendations (Gustavson, Brown & Olsen, 2014) are proposed in this phased plan. Reasons for not including certain developments include (but are not limited to) management considerations such as the location of cultural sites, locations and timing of future harvests, research or teaching uses, expense, and the balancing of interests across user groups.

OSU Research Forests regularly utilizes the perspective and expertise of the Forest Recreation Advisory Council (FRAC), made up of representative forest visitors. FRAC meets quarterly to advise staff on potential recreation development and impacts, and provide a valuable link to local recreation communities.

Phase I: Existing Recreation Management and In-Progress Developments

Existing Management and Maintenance

Ongoing management activities include:

- Maintaining existing trails: brushing, tread work, monitoring conditions, upkeep of features and structures, and short re-routes
- Maintaining trailhead parking areas and Peavy Arboretum (D5-22): vegetation and invasives management, sign maintenance, kiosk upgrades, ADA access, free map handouts, information, dog bags, garbage service
- Providing interpretive information regarding forestry and forest resources: signs, small installations, and written materials
• Outreach and engagement: hosting educational and outreach events and programs, supporting use by community groups, and outreach to current forest visitors, OSU community, youth, and groups currently underserved by program offerings
• Managing hunt program on the Dunn Forest
• Community involvement: volunteers and partnerships, fundraising, seeking public input on recreation program, quarterly meetings of Forest Recreation Advisory Council (FRAC)
• Installing and maintaining features: benches, directional signs, picnic tables, bike racks, etc
• Decommissioning unauthorized trails, when causing specific impacts to research or forest resources
• Working with neighboring landowners to reduce impacts from recreation use
• Providing information about OSU Research Forests activities and closures on-site and via electronic sources
• Enforcing safety closures and addressing illegal/unauthorized activities through public information, signage, and cooperation with Benton County Sheriff’s Department
• Protecting cultural resources through archaeological surveys of potential work sites
• Administering permits for three running races, OSU events, and various smaller community events

Trail Improvements

Recreation Trails Program Grant – Oregon Recreation and Parks Department
Several recent trails have been built on the McDonald Forest through a Recreational Trails Program grant from Oregon Parks and Recreation Department for 2015-2016. The goal of this project was to start a single-track trail connection between Peavy Arboretum and Lewisburg Saddle. This was one of the projects identified as a high priority through the public involvement process and supported by the Forest Recreation Advisory Council. For more detail regarding locations, see the Appendix D5. These trails include:

• Vineyard Mountain Trail (1.8 miles completed) (D5-25, 26)
• Dave’s Trail (phase 1) (0.8 miles completed) (D5-18)
• Sidesaddle Trail (0.25 miles - project completed) (D5-25)

No Secret Trail
The OSU Research Forests are in the process of building the forests’ first primary use mountain biking trail through a partnership with Team Dirt, the local chapter of International Mountain Biking Association. One mile of the No Secret Trail has been completed, with 0.4 miles currently in progress (D6-28, 30).

Following the completion of the No Secret Trail, Team Dirt may start another trail project on the south zone of the McDonald Forest, which is to be determined.

Beautiful Trail
OSU Research Forests staff and volunteers are in the process of replacing several sections of an unauthorized trail with a sustainably built, official trail. One mile of the Beautiful Trail has been redesigned and adopted, and a 0.1 mile re-route is currently in progress (D6-31, 38, 39).
Program Improvements:

- Updating content and revising the format of OSU Research Forests website to make it more useable and informative.
- During summer 2016, hours of access were changed to be 5:00am-9:00pm (previously as open from dawn until dusk), and the change in hours is reflected in signs and publications.
- Addition of signage, dog bag dispensers, and trash cans to address issues with dog waste; three public information campaigns addressed issues with dog waste and behavior.
- Improvements to the hunt program included changes to the application and selection process to favor hunters not selected in past years, as well as additional permits for spring turkey hunt, youth hunt weekend, and new elk archery hunt.
- Improving wayfinding signage on system trails, including updates to carsonite directional signs and “you are here” map signs.

Planning

Recreation Study
A study of recreation use on the McDonald and Dunn Forests is underway with OSU College of Forestry Assistant Professor Ian Munanura as Principal Investigator. Data collection at forest trailheads will run through calendar year 2017, with results to share with the public in 2018.

Forest Planning
OSU College of Forestry has hired a consulting firm, who has formed a steering group to work on the first phase of revising the OSU Research Forests Forest Plan. The steering group, which includes members of the Corvallis and College of Forestry community, is working on an “umbrella” Forest Plan to provide a vision and mission for managing all nine OSU Research Forests tracts in Oregon. This will be used to develop revised tactical plans for the McDonald and Dunn Forests, as well as the other OSU Research Forests in 2018. The tactical plans will include prescriptions for recreation management, and will integrate previous planning work to be consistent with the plans described in this document.

Recreation Planning
The focus of staff time in 2017 is to catch up on projects, administer the RTP grant (described in Phase II below), and improve the condition of existing recreation trails and features. While additional recreation planning remains to be completed, this will occur in 2018 and future years (see Phase II).

Phase II: Within 3 Years (2017-2019)

Note: The improvements listed here encompass what could be accomplished within the next three years. However, resources including funds and available staff time will limit the actual work accomplished. At the end of three years, it is expected that some of this list will be completed, but not all of it. In addition, items considered as “maintenance” of existing trails and facilities are not included in this list.

RTP Grant Funded Trail and Trailhead Developments (2017-2018)
OSU Research Forests were successful at obtaining a second grant through the Recreation Trails Program in partnership with Oregon Parks and Recreation Department to finish the connection between Peavy Arboretum and Lewisburg Saddle via single-track trail, and to address safety issues and enhance visitor services at Lewisburg Saddle parking area. These projects will include:
• Expansion of parking by approximately 15 spaces at Lewisburg Saddle parking area (for a detailed discussion, see pages 19-21). (D5-25)
• Slight expansion and delineation of parking opportunities at pullout to the north of Lewisburg Saddle for horse trailers (for a detailed discussion, see pages 21-22). (D5-25)
• Installation of a CXT Cascadian single vault toilet at Lewisburg Saddle (within the gate on the east side of Lewisburg Saddle) (discussed on pages 3-4). (D5-25)
• The completion of Dave’s Trail (1.5 miles) (D5-26, 27, 18)

Additional Trail Construction and Improvements
Other trail construction planned on the OSU Research Forests in the next three years could include the following, though time and resources will determine extent of accomplishments (see maps Appendices D4-D6).

• The reroute and extension of Banzai Trail (aprx. 2 miles) (D5-13, 14, 18)
• Design and construction of 510 Connector (aprx. 0.7 miles) (D5-18)
• Trails connecting Lewisburg Saddle to Dimple Hill; redesign of unauthorized trails “Bombs Away” and “High Horse” (aprx. 1.0 miles) (D6-33)
• Upgrade of trails in Peavy Arboretum and around Cronemiller Lake to provide ADA access (D5-19, 22)
• Reroute of existing UA trail “Innuendo” (dependent on partnership with Starker Forests, Inc) (aprx. 0.6 miles) (D5-31) or another trail in the McCullough Peak area as a primary use mountain bike trail
• Traction improvements on all trail bridges

Additional Parking and Traffic Improvements (details on pages 22-23)

• Improve safety at Oak Creek parking area: OSU Research Forests intend to contract out design work for developing this parking area in the short term (improvements in traffic flow, surfacing, and signage) and long term (consideration of additional parking area) (D6-41, 42)
• Improve safety at 540 Gate: As part of road work associated with harvest activities, the parking area outside the 540 Gate (across from Adair Village) may be leveled and graveled, and “no parking” areas will be clearly marked. This project is dependent on right-of-way allowances from Oregon Department of Transportation and Consumers Power Inc. (D5-14)
• Install signage at high use parking areas directing visitors to alternative parking areas providing similar access
• Investigate public transportation options to major trailheads with the City of Corvallis
• Install bike racks at popular trailheads

Peavy Arboretum Improvements (D5-22)

In addition to the trails improvements described above, we may implement the following developments for Peavy Arboretum:

• Improved wayfinding signage for vehicle traffic flow through the Arboretum
• Development and installation of new interpretive signs throughout the Arboretum
• Complete installation of Peavy Arboretum self-guided walking tour
- Replace water fountain at Forestry Club Cabin
- Inventory Peavy Arboretum tree specimens and develop a succession plan
- Improve irrigation around Business Office and at Firefighter Memorial Shelter
- Development of a pollinator garden in the proximity of the business office, including a variety of plantings designed to attract pollinators, as well as interpretive information for visitors and community groups.
- Installation of a simple nature play area. This installation will be built primarily out of native materials, and will provide an opportunity for children to engage in nature-based play. The design and exact location for this has not yet been determined.

Outreach and Interpretation Development
- Develop curriculum and interpretive installations for existing Forest Discovery Trail (DS-19)
- Spanish translations of select materials, signage, key information on web
- Redesign free maps at trailheads

Planning
Recreation Planning
Recreation planning will continue, and will result in the creation of subject-specific plans, rather than an overarching recreation development plan. Most of the planning and research has been completed for many of these plans, and some components are being implemented – completion of official plans will assure consistent application into the future. Plans will be consistent with the content of this document, and may include:

- Opportunity Class plan with planned recreation developments
- Trail development plan
- Trail design, maintenance and monitoring plan
- Sign plan
- Enforcement and education plan
- Special uses plan
- Arboretum master plan

Trails Planning
In 2015, working groups for each of the major modes of travel (running, hiking, horse riding and mountain biking) identified many potential trail developments on the OSU Research Forests. A multi-use group then came together to talk through trail developments together. A resulting draft trail development plan (an internal working document) has guided recent trail developments for the northern half of the McDonald Forest. Trail planning will require significant additional planning for the southern half of the McDonald Forest, based on the challenging topography surrounding McCullough Peak, as well as the potential to partner with Starker Forests, Inc. in developing connecting trails. Trail connection goals resulting from the workshop process were used to identify the trails listed in this document for development.

Forest Planning
Starting in 2018, the “umbrella” plan created by the steering team (described in Phase I) will be used to develop revised tactical plans for the McDonald and Dunn Forests, as well as the other OSU Research Forests. The tactical plans will include specific goals, objectives, benchmarks, and harvest schedules.
Prescriptions for recreation management will be included, and will incorporate all planning work to be consistent with the plans described in this document.

Phase III: After 3 years (2020 and Beyond)

Trail Construction and Improvements

Other trail construction planned on the OSU Research Forests in the future could include the following, though time and resources will determine extent of accomplishments. The exact location of each of these trails is still to be determined in the trails planning process.

- Lewisburg Saddle to Dimple Hill (D6-25, 31, 33, 38, 39)
- Oak Creek Beginner Loop (D6-37, 41)
- Oak Creek to McCullough Peak (D6-30, 41, 37)
- Oak Creek to Dimple Hill (D6-38, 42)
- Primary Use Mountain Bike Trails – 700 Road System (D6-28, 29, 30, 31, 37)
- Log Bridge and Iris Meadows (D6-28, 29)
- Dunn 100-200 Trail Connector (D4-3, 5)
- Connector trails through Elizabeth Starker Cameron Demonstration Forest (D5-16, 23, 24)

Peavy Arboretum (D5-22)

- Pave gravel road and implement one way traffic flow
- Develop challenge course near Peavy Arboretum in partnership with OSU Adventure Leadership Institute
- Other action items as a result of Peavy Arboretum master planning

Trailhead Facility Improvements

- Increase capacity for parking at Dunn 200 Gate (D4-6)
- Toilet at Oak Creek Parking Area (not at Peavy Arboretum because of heritage concerns) (D6-41, 42)
- Reach out to City of Corvallis to discuss potential parking improvements at Chip Ross Park and Timberhill Natural Area. (D6-39, 40)
- New signs/maps for major trailheads
Phased Plan for Parking Development

Phase I Existing Parking
Existing parking (with exception of Peavy Arboretum) was originally created as staging areas and pullouts for forest management and research activities. Over the years, these areas have been increasingly used for visitor parking by recreationists. The estimates of capacity listed in the table in Appendix C (Parking Planning) reflect how visitors choose to park themselves, and are not based on engineered determinations of parking capacity. No official bicycle parking currently exists at forest access points. Issues with access to the forest were one of the most commonly cited concerns of recreationists in the Collaborative Community Recommendations (Gustavson, Brown & Olsen, 2014).

OSU Research Forests approaches development of parking conservatively to protect the primary uses of the forest. Any parking capacity added to the forest will eventually accommodate additional recreation use, as recreation demand is expected to grow along with Corvallis population (Needham and Rosenberger, 2011). Parking developments will be intentionally designed to thoughtfully limit capacity in popular areas to protect forest resources, activities, and character. The character of the Forests as a forested, rustic recreation destination is important to retain throughout any recreation development. It is important to conservatively grow the program to avoid exceeding OSU Research Forests’ carrying capacity, impacting the social experience, or causing harm to other resources on the Forest such as education, forest management, and natural/cultural resources.

Other considerations limiting the development of parking on the OSU Research Forests include concerns with increasing traffic through local neighborhoods, the need to coordinate with other land owners and right-of-way holders, known cultural resource sites, and limits in topography in many areas on the forest. In addition, different areas of the forest are appropriate to develop to different levels, as recommended on page 15-19 in the Collaborative Community Recommendations (Gustavson, Brown & Olsen, 2014). While a policy will be developed to establish a recreation opportunity class system, OSU Research Forests chooses to follow these recommendations in the meantime, when deciding the level of development for different parts of the forests.

Phase II Parking Developments
Lewisburg Saddle Parking Area (D6-25)
See Appendix D1 for a visual representation of this project

*Project description:* Visitors have commonly expressed concerns regarding capacity and safety at the Lewisburg Saddle Parking Area. At peak use times, all parking spots are filled, and visitors park along the shoulders of Sulphur Springs Road – walking along the road to reach the trailhead. Sight distance is limited by topography and vegetation, and vehicles sometimes travel too fast on Sulphur Springs Road. Recreation opportunities occur on both sides of Sulphur Springs Road, resulting in pedestrians, bikes, horses and dogs crossing the road.

The goals of this project are to improve safety and modestly increase capacity at Lewisburg Saddle Parking Area. The addition of 15 parking spaces is meant to fully accommodate current use during peak times and provide a safer alternative to parking along road shoulders. As use increases in the future, it is expected that this parking area will be full during peak use times.
The current parking development site and design were chosen because they meet safety requirements as provided by Benton County, provide access to Lewisburg Saddle trailhead via trail, and require minimal disturbance, construction and fill. Topography, expense, and concern with extensive disturbance prevented the development from being located entirely within the forest, instead selecting the area adjacent to Sulphur Springs Road.

This will require the removal of several smaller trees, as well as some earthwork to flatten the area. Construction will include the addition of approximately 15 graveled, front-in diagonal parking spaces. The topography may allow additional parking spaces to be constructed to the north in the future, if deemed necessary or desired.

Impact resistant delineators will separate the parking area from traffic traveling on Sulphur Springs Road and will serve as a high-visibility traffic calming device on Sulphur Springs Road. Traffic will be routed one-way (south to north) through the parking area to force head-in, diagonal parking and to keep parking traffic from infringing onto Sulphur Springs Road. Tire stops will be installed, consisting of logs or railroad ties with reflectors attached. Stalls will be painted on the gravel for the first year, or until parking habits have been established. OSU Research Forests staff will use public messaging, including parking slips and personal interactions to encourage appropriate parking patterns.

Outsloping of the parking area will provide adequate, diffuse drainage for the parking area. This design and construction approach addresses water quality issues, providing a wide vegetative buffer between sheet flow off of the road surface and the nearest flowing drainage way. The parking area will not drain into any waterways or drainages, as the closest (Soap Creek, 0.7 miles) is located far away from the project.

Construction is scheduled for summer or fall of 2017. If needed, a flagger will be utilized to allow passage of vehicles on Sulphur Springs Road during construction activities. Construction activities will occur only during daylight hours. It is unlikely that neighbors will hear significant noise from construction activities, as they the closest residences are located through a thick buffer of forest. These construction activities will have little impact on regular recreation use of Lewisburg Saddle, as the area is located a small distance away and will not block parking or access to trailheads.

The construction area has been surveyed by archaeologists and does not contain cultural resources or artifacts. If any suspected cultural resources are unearthed during construction, all activities on-site will cease until an archaeologist can evaluate the situation. A “Miscellaneous Work in the Right of Way Permit” will be obtained from Benton County Public Works prior to beginning construction.

**Parking lot specifications and dimensions:**

- 45 or 60 degree head-in parking
- Stalls: 10ft x 20ft
- Aisle width: 14ft
- Delineators on fog line to separate traffic on road from parking area
- Bumper/tire stops (railroad ties or logs with reflectors)
- Painting of stalls (first year)
- Total depth of parking area from fog line to farthest point: 35.21 ft
**Sulphur Springs Road Safety**

Visitors have expressed concern with traffic speeds on Sulphur Springs Road, along with the number of crossings by pedestrians and bikes. Additional concerns include shoulder parking and vehicles backing and pulling into traffic. In consultation with Benton County Public Works, several changes to address traffic speed will be implemented.

The following signs will be installed from each approach along Sulphur Springs Road to supplement the current signage:

- Brown wayfinding signs – tentative language: “McDonald Forest Trail Crossing and Parking Ahead”
- Yellow diamond “congestion” signs

The addition of rumble strips has been requested through Benton County to slow traffic as it approaches the summit of Lewisburg Saddle. Speedbumps are not installed on Benton County roads as a matter of policy. The delineators used for separating the parking area from Sulphur Springs Road will also serve as a traffic calming device by their placement and high visibility color.

Shoulder parking will continue to be allowed, in accordance with Benton County policy, though it is hoped that the additional available parking will reduce the shoulder parking. A crosswalk was considered and dismissed, as it may give a false sense of security for users. Using required standards for creating a speed limit for the road would result in a speed limit which is too fast to meet objectives. A blinking pedestrian crossing light was researched, and found to be infeasible due to lack of electricity (and lack of access to sunlight) to power the lights on-site.

**Lewisburg Saddle Trailer Parking (D6-25)**

**Project description:** Several small improvements are planned to fully utilize the existing footprint of a pullout on Sulphur Springs Road (north of Lewisburg Saddle Parking Area) to maximize capacity for trailer parking. This pullout is currently used for horse trailer parking and is associated with the Sidesaddle Trail, created in 2015 specifically to allow horses to access the McDonald Forest without needing to ride along Sulphur Springs Road. Trailer appropriate parking is not available at the main Lewisburg Saddle Parking Area.

To assure that the parking area is used primarily by trailers as intended, OSU Research Forests staff will use public messaging, including parking slips, signs, and personal interactions.

**Changes include:**

- Minor expansion of egress to allow safer pull-out for trailers onto Sulphur Springs Road, including extension of existing culvert, and graveling. This will also allow passenger vehicles to safely turn left when exiting from the northern access point. (note – culvert may be extended by Benton County prior to project commencement)
- Reclamation of existing parking area through herbicide application (licensed forest staff), shoulder improvements, and re-grading of gravel pad
- Signage for trailer parking only. Open parking area allows horse trailers flexibility in how they park in the space.

Maintenance activities listed above are scheduled for Spring through Fall of 2017. No impacts to regular traffic on Sulphur Springs Road are expected. It is unlikely that neighbors will hear significant noise from
construction activities, as the closest residences are located through a thick buffer of forest. Trailer parking will not be allowed during construction activities.

Oak Creek Parking Area (D6-41, 42)
See Appendix D3 for an aerial view of the site.

Project description: Visitors, neighbors, staff, researchers and contractors have reported concerns at Oak Creek Parking area. The current parking situation is not clearly marked, making it hard for visitors to know the best way to park in the space. Consequently, at peak times, the travel way is in danger of being blocked by parked vehicles, creating an inconvenience for administrative traffic and log trucks, and a hazard in the case of an emergency. Other concerns include the mix of different uses such as dogs, kids, bikes, classes, runners, and vehicles in the confined space of the current parking area.

The initial goals of this project are to improve safety, maximize efficiency, and allow for reliable passage of administrative traffic in the current footprint of the Oak Creek Parking Area. Later phases of this project may include the conservative development of additional parking capacity at this location to better accommodate current use and allow for a conservative amount of future growth.

Changes include:
This plan is currently in development in cooperation with OSU Capital Improvements staff and Benton County Public Works. The initial phase will include smoothing and re-surfacing the parking surface and the use of signs, parking blocks and other devices to establish a clear traffic flow and parking strategy. The one existing streetlight near the laboratory buildings will be repaired as part of this effort, though no additional lighting will be added, because the forest is closed from 9pm-5am. Initial improvements to the parking area are anticipated to occur in 2017.

Future phases may add capacity by opening up an additional parking area, to be determined. This option is being investigated and may occur within the next three years, depending on the results of the design process and resources available.

During surfacing treatments, parking for visitors will be restricted or prohibited. Neighbors may experience noise from construction activities, which will only occur during daylight hours.

Any construction areas requiring disturbance of soil will be surveyed by contracted archaeologists to determine if construction may occur in that area. A “Miscellaneous Work in the Right of Way Permit” will be obtained from Benton County Public Works prior to beginning construction.

NW Oak Creek Road Safety
Visitors have expressed concern with traffic speeds coming into the parking area from NW Oak Creek Road. Other concerns include the mix of bicycle, pedestrian and vehicle traffic in the one-lane section of the road, as well as parking occurring along the shoulder. Benton County Public Works is investigating these issues to come up with some potential solutions to address them.

McDonald Road 540 Gate (D5-14)
Project description: Blockage of the Road 540 Gate by vehicles has been a recurring issue for OSU Research Forests staff and contractors. Visitors have expressed that the surface of the parking area is uneven, and that it often filled past capacity at peak and non-peak times. However, the OSU Research Forests intends to continue to manage this entrance primarily as access for forest management.
activities, allowing walk-in access for residents of Adair Village, and does not intend to add parking opportunities here.

During 2017, OSU Research Forests intends to resurface the parking area and clearly indicate “No Parking” areas to allow for administrative traffic to access the gate. This project is dependent on right-of-way allowances from Oregon Department of Transportation and Consumers Power Inc.

Dunn Road 200 Gate (D4-6)

*Project description:* The Dunn Forest was identified through the Collaborative Community Recommendations (Gustavson, Brown & Olsen, 2014) to remain a “remote” setting, with little recreation development. As such, the OSU Research Forests has decided to develop only one parking area to accommodate current parking demand. There is currently no parking area adequate to accommodate horse trailer parking, though this is a popular activity on the Dunn Forest.

The 200 Gate was chosen for this development because of the central location on the Dunn Forest, the flat topography, the fact that the entire parcel is on OSU RF land. Eventually, a trail may be built to connect the 200 Gate with the 100 Road system.

This development has not yet entered the design phase, and is not anticipated to begin until 2019 at the earliest.

**Other Parking Related Developments**

Based on requests from the public, bike racks may be added at popular trailheads to facilitate bicycle transportation to the forest. Ideally, these bike racks will be donated by community members as part of the Forests Connection program.

Signage may be installed at parking areas that are commonly over capacity, directing drivers to parking areas with more capacity and less use.

In the interest of reducing traffic and congestion, as well as providing access for currently underserved communities, OSU Research Forests plans to investigate options with local transportation providers regarding potential public transportation to popular forest access points.

Limited lighting of parking areas only occurs in Peavy Arboretum and Oak Creek. The addition of lighting is not planned at any other parking area, due to lack of power on-site and to discourage use outside of official hours of forest access (5:00am-9:00pm).
References


Needham, M. D., & Rosenberger, R. S. (2011). Public support, demand, and potential revenue for recreation at the McDonald-Dunn Forest. Final project report for Oregon State University College Forests and College of Forestry. Corvallis, OR: Oregon State University, Department of Forest Ecosystems and Society.


Appendix A: Legal Descriptions and Taxlots

Legal Descriptions
T10S, R4W: 30, 31
T10S, R5W: 7, 8, 9, 14, 15, 16, 17, 21, 22, 23, 25, 26, 27, 34, 35, 36
T11S, R5W: 2, 3, 4, 5, 6, 7, 8, 9, 10, 15, 16, 17, 18, 19, 20

Taxlots (OSU ownership unless noted otherwise)

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# Appendix B: Trail Uses Table

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<td>Alpha</td>
<td>0.4</td>
<td>Foot, Bike, Horse</td>
</tr>
<tr>
<td>Baker Creek</td>
<td>0.2</td>
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</tr>
<tr>
<td>Banzai</td>
<td>0.3</td>
<td>Foot, Bike, Horse</td>
</tr>
<tr>
<td>Beautiful</td>
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<td>Foot, Bike, Horse</td>
</tr>
<tr>
<td>Calloway Creek</td>
<td>2.3</td>
<td>Foot, Bike* (*4/15-10/31 only)</td>
</tr>
<tr>
<td>CFIRP</td>
<td>0.5</td>
<td>Foot</td>
</tr>
<tr>
<td>Dan's Horse Connector</td>
<td>0.7</td>
<td>Foot, Bike, Horse</td>
</tr>
<tr>
<td>Dan’s Trail</td>
<td>3.1</td>
<td>Foot, Bike, Horse</td>
</tr>
<tr>
<td>Dave’s Trail</td>
<td>0.8</td>
<td>Foot, Bike, Horse</td>
</tr>
<tr>
<td>Forest Discovery</td>
<td>1.3</td>
<td>Foot</td>
</tr>
<tr>
<td>Extendo</td>
<td>1.4</td>
<td>Foot, Bike*, Horse* (*4/15-10/31 only)</td>
</tr>
<tr>
<td>Fir Hollow</td>
<td>0.1</td>
<td>Foot</td>
</tr>
<tr>
<td>Firefighter Memorial</td>
<td>0.1</td>
<td>Foot</td>
</tr>
<tr>
<td>Firehouse (Cameron)</td>
<td>0.3</td>
<td>Foot, Bike, Horse</td>
</tr>
<tr>
<td>Homestead</td>
<td>0.5</td>
<td>Foot, Bike, Horse</td>
</tr>
<tr>
<td>Intensive Management</td>
<td>1.1</td>
<td>Foot, Bike* (*4/15-10/31 only)</td>
</tr>
<tr>
<td>Lower Horse</td>
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<td>Foot, Bike, Horse</td>
</tr>
<tr>
<td>Maritime Meander</td>
<td>0.2</td>
<td>Foot</td>
</tr>
<tr>
<td>New Growth</td>
<td>0.5</td>
<td>Foot</td>
</tr>
<tr>
<td>Old Growth</td>
<td>0.5</td>
<td>Foot</td>
</tr>
<tr>
<td>Pond</td>
<td>0.2</td>
<td>Foot</td>
</tr>
<tr>
<td>Powder House</td>
<td>1.0</td>
<td>Foot</td>
</tr>
<tr>
<td>Quercus Meadow</td>
<td>0.2</td>
<td>Foot, Bike, Horse</td>
</tr>
<tr>
<td>Redcedar Run</td>
<td>0.1</td>
<td>Foot</td>
</tr>
<tr>
<td>Ridge</td>
<td>0.6</td>
<td>Foot, Bike, Horse</td>
</tr>
<tr>
<td>Scout (Dunn)</td>
<td>0.7</td>
<td>Foot, Bike, Horse</td>
</tr>
<tr>
<td>Section 36 Loop</td>
<td>3.3</td>
<td>Foot</td>
</tr>
<tr>
<td>Sequoia</td>
<td>0.1</td>
<td>Foot</td>
</tr>
<tr>
<td>Sidesaddle</td>
<td>0.25</td>
<td>Foot, Bike, Horse</td>
</tr>
<tr>
<td>Sulphur Springs</td>
<td>0.1</td>
<td>Foot</td>
</tr>
<tr>
<td>Upper Horse</td>
<td>0.9</td>
<td>Foot, Bike, Horse</td>
</tr>
<tr>
<td>Uproute</td>
<td>0.7</td>
<td>Foot, Bike, Horse</td>
</tr>
<tr>
<td>Vineyard Mountain</td>
<td>1.8</td>
<td>Foot, Bike, Horse</td>
</tr>
<tr>
<td>Woodland</td>
<td>0.4</td>
<td>Foot</td>
</tr>
</tbody>
</table>
### Appendix C: Parking Planning

<table>
<thead>
<tr>
<th>Forest Access</th>
<th>Current Approximate Capacity</th>
<th>Issues Reported/Observed</th>
<th>Future Plans</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>540 Gate</td>
<td>4</td>
<td>Parking over-capacity&lt;br&gt;Rough surface&lt;br&gt;Blockage of forest gate&lt;br&gt;observed&lt;br&gt;Parking on shoulder of highway</td>
<td>Smooth existing parking area, gravel, fully utilize existing footprint, and prevent blockage of gate for administrative traffic (2017).</td>
<td>This trailhead provides access for Adair Village residents, who walk across Highway 99 to access the forest. It is not intended to be developed into a large parking area. Potential to add bike racks</td>
</tr>
<tr>
<td>Lewisburg Saddle Trailer Parking</td>
<td>2 trailers</td>
<td></td>
<td>Improve surface and egress (2017)</td>
<td>Trailer parking only – connected to Lewisburg Saddle via Sidesaddle Trail (2015-2016 project). Intended to provide parking and access for horse trailers.</td>
</tr>
<tr>
<td>Lewisburg Saddle Parking</td>
<td>8</td>
<td>Congestion during peak times. Shoulder parking. Concerns with safety on Sulphur Springs Road and road crossing.</td>
<td>Add approximately 15 spaces (2017)</td>
<td>Additional parking spaces will be added in a new parking area to the north of the existing parking area, connected to the trailhead area by Sidesaddle Trail. Potential to add bike racks.</td>
</tr>
<tr>
<td>Oak Creek</td>
<td>10</td>
<td>Congestion during peak and off-peak times. Concerns with safety on Oak Creek Road, mixed uses of parking area. Blockage of forest gate observed.</td>
<td>Clarify parking strategy using signage and markers, improve surface (2017), add additional parking area (future years)</td>
<td>The potential to increase parking at Oak Creek to reduce congestion and provide more access is currently being investigated. At a minimum, parking strategies will be clarified, and the surface of the parking area will be improved. Potential to add bike racks.</td>
</tr>
<tr>
<td>Dunn 200 Gate</td>
<td>3</td>
<td>Limited parking for passenger vehicles and horse trailers</td>
<td>Conservative addition of parking spaces (future years)</td>
<td>Parking at this location may be conservatively developed to accommodate more vehicles (may include horse trailers) and serve as the primary entrance point into the Dunn Forest. Feasibility studies have to be completed before this plan is committed to or set in motion. Dunn Forest is intended to remain “remote,” precluding the</td>
</tr>
</tbody>
</table>
### Appendix C: Parking Planning

<table>
<thead>
<tr>
<th>Site</th>
<th>Parking Capacity</th>
<th>Future Improvements</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chip Ross Park</td>
<td>Limited parking for passenger vehicles and horse trailers</td>
<td>TBD</td>
<td>Chip Ross Park parking area is owned and managed by the City of Corvallis. Visitors use Chip Ross Park to access Dans Trail. Any future improvements of Chip Ross Park parking would be planned with the City of Corvallis.</td>
</tr>
<tr>
<td>Peavy Arboretum</td>
<td>70 cars</td>
<td>Parking at full capacity at 500 Gage parking area during peak use, and parking occurs in non-parking areas.</td>
<td>Signage and traffic control to encourage appropriate parking at 500 Gate and direct overflow to other parking locations in Peavy Arboretum. Peavy Arboretum has 5 separate parking areas, which is more than adequate to meet the demand of regular recreation use. Additional parking capacity for public recreation use is not desired to protect the social capacity of the trails. Parking is adequate to accommodate trailers and school buses at this location.</td>
</tr>
<tr>
<td>547 Gate</td>
<td>4 cars or 2 trailers</td>
<td>None</td>
<td>Parking is adequate to accommodate trailers at this location. It is underutilized as a parking area.</td>
</tr>
<tr>
<td>Baker Creek/Sulphur Springs</td>
<td>10 cars or 3 trailers</td>
<td>None</td>
<td>Parking is adequate to accommodate trailers at this location. Parking is more than adequate for the use this site receives. In the future, may direct 700 Gate traffic here for parking.</td>
</tr>
<tr>
<td>700 Gate</td>
<td>0</td>
<td>None</td>
<td>Increased use is expected at this entry into the forest. However, Baker Creek parking area is located nearby, so additional parking may be directed there.</td>
</tr>
<tr>
<td>800 Gate</td>
<td>8</td>
<td>None</td>
<td>Parking opportunities are more than adequate for the use this site receives. In the future, may direct Lewisburg Saddle (east) traffic here for parking to access the Alpha Trail area.</td>
</tr>
</tbody>
</table>
## Appendix C: Parking Planning

<table>
<thead>
<tr>
<th>Location</th>
<th>Max. Vehicles</th>
<th>Parking Description</th>
<th>Access Information</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jackson Creek</td>
<td>0</td>
<td>No public parking allowed; some illegal parking occurs. Concerns with impacts to community road from recreation use</td>
<td>None</td>
<td>Parking and official access to the Jackson Creek area is located at Chip Ross Park. Development of parking is not being considered at this time, out of consideration for neighborhood concerns.</td>
</tr>
<tr>
<td>Dunn 100 Gate</td>
<td>3</td>
<td>Limited parking for passenger vehicles and horse trailers.</td>
<td>None</td>
<td>Parking at this location is not proposed for improvement. Additional parking is located at Dunn 200 Gate, and a trail may be built in the future to connect these two access points. The Dunn Forest is intended to remain “remote,” precluding the development of substantial recreation developments.</td>
</tr>
<tr>
<td>Dunn 400 Gate</td>
<td>1</td>
<td>Very limited parking at this end of the Dunn Forest</td>
<td>None</td>
<td>Parking at this location is not proposed for improvement, as topography limits the space available. The Dunn Forest is intended to remain “remote,” precluding the development of substantial recreation developments.</td>
</tr>
<tr>
<td>Cameron 200 Gate</td>
<td>1</td>
<td>Parking adequate for 1 vehicle only, overflow parking at Lewisburg Rural Fire Station across Soap Creek Road.</td>
<td>Contact Adair Rural Fire Station and ask about use of parking area</td>
<td>Most access through the ESCDF is by local residents who do not drive to the site. Demonstration activities bring out more traffic to this site, and it is accommodated by the fire station parking area across the street.</td>
</tr>
<tr>
<td>McDonal 584,</td>
<td>0</td>
<td></td>
<td>None</td>
<td>Access gates only – no parking</td>
</tr>
<tr>
<td>McDonald 582,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>McDonald 611,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dunn 300, Cameron 100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Appendix D: Supporting Maps
D1: Lewisburg Saddle Parking Conceptual Design
D2: Lewisburg Saddle Trailer Parking Conceptual Design
D3: Oak Creek Parking Area Visual
D4: Dunn Forest Project Area Map
D5: North Zone McDonald Forest and Elizabeth Starker Cameron Demonstration Forest Project Area Map
D6: South Zone McDonald Forest Project Area Map