McDonald-Dunn Forest Management Planning
Oct. 28 Community Input Session

BACKGROUND:
In developing a new plan for the actively managed McDonald-Dunn Forest, the College of Forestry held its second Community Input Session on Oct. 28, 2024. The purpose of the session was to provide an update on the management planning process, share additional background on the modeling and decisions made to date and seek public input on the management scenarios they prefer the most.

After a brief presentation (available here), attendees asked clarifying questions on the modeling, scenarios and outputs. A summary of these questions and answers from the session can be found in Section I below.

Although not the intent of the Community Input Session, many attendees also provided comments on various aspects of the Research Forests. These comments, with responses to provide contextual details, are included in section II and III below.

RESOURCES:
- For the Q&A from the previous Community Input Session hosted on June 5, see here.
- For additional background on the OSU Research Forests, view our About page.
- For more on the research conducted on the McDonald-Dunn, including a searchable database, see here.
- For Frequently Asked Questions on Research Forest operations, see here.

COMMUNITY INPUT SESSION Q&A:

I. Questions about Modeling, Management Scenarios and Outputs

Q: On the benchmarking exercise/ pie graph, why is there 0% of the even age short rotation in the exercise where wildfire resistance was maximized?
A: The actual acreage allocated to even-aged short rotation when wildfire resistance was maximized was 38 acres. Given that the entire McDonald-Dunn Forest is 11,500 acres, 38 acres rounds to 0%.

Q: What is the difference between long versus short age rotation?
A: As part of the new forest management plan, OSU will allocate different percentages of land to different treatment types. Even-aged Short Rotation and Even-aged Long Rotation are two of the five treatments (full descriptions of the proposed management strategies can be found here). Portions of the forest allocated to Even-aged Short Rotation treatments will be harvested every 30-60 years, with the majority falling between 35-45 years. Areas allocated to the Even-aged Long Rotation treatment type will be harvested between 60-90 years, with a small percentage managed up to 120 years.

Q: Are the short rotation stands indicated for the new plan already in existence? Or are they new ones?
A: This is to be determined, based on the final management scenario selected for the forest management plan. Some stands on the McDonald-Dunn Forest are currently managed on a trajectory similar to the proposed Even-aged Short Rotation option, as this type of treatment exists within the current management themes in the 2005 Forest Plan. Depending on the total percentage of the forest allocated to Even-aged Short Rotation in the new plan, some new even aged stands may be established as harvest and replanting occurs.

Q: Can you share the specifics of the "Ecosystems of Concern" category?
A: The "Ecosystems of Concern" management strategy includes restoration and maintenance of native oak savanna/woodlands, meadows and riparian/aquatic systems within the forest. More details can be found on page 6-7 of this document that was shared at the Community Input Session.

Q: Once everything is divvied up into the categories, is it true there is no new research that can happen?
A: No. The primary reason the McDonald-Dunn is managed the way it is – with several management strategies situated across the entire acreage of the forest – is to create the conditions across a landscape scale that enable research, education, and demonstration on a broad array of forest topics. Research can, and will be, conducted across the forest's 11,5000 acres, regardless of the management scenario selected in the final plan. The aim is to purposefully create a variety of conditions at all points in time so students and researchers can find the conditions they need for research, teaching, or outreach.

Q: Is there ever such a thing as an unmanaged reserve? Can you have an old growth reserve that isn't managed? Is there a category of "let it be"?
A: Yes. Currently, about 3.7% of the McDonald-Dunn is set aside as old forest reserves, where pockets of the oldest trees on the forest are protected, and those stands will continue to be protected. The college is looking to increase the acreage of the forest that is dedicated to reserves, in part due to public input. In expanding the reserve acreage, however, we must account for some level of restoration management in these stands, both initially and over time, to ensure the health and resiliency of the forest to pests, disease and wildfire.

Any treatments within the new category of managed reserves will be light touch and only implemented when necessary – for example, to remove invasives and structurally deficient trees that pose hazards to recreational users or roads, and to reduce crowding, allowing the oldest trees to continue thriving. This approach is necessary as groupings of the oldest trees on the McDonald-Dunn are very different than naturally occurring old growth forests in other locations around the Pacific Northwest since the McDonald-Dunn has been an actively managed forest for nearly a century. The current conditions on the forest do not reflect the natural structure nor function of the historical forests of the area, which were primarily oak savannah and likely open conifer forests, stewarded by the Kalapuya for generations prior to Euro-American colonization.

Q: Is there an age bracket where a tree is starting to get older but is not quite old growth? Is there anything that says "let it be" so it can move towards what is defined as old growth?
A: Definitions of old growth vary widely, but generally include multiple forest conditions beyond just the age of individual trees. Because the McDonald-Dunn has been an actively managed forest for 90+ years, and before that was stewarded primarily as oak savannah by the Kalapuya, these conditions are rare on

the forest. There is a small number of individual old trees, and patches of old trees on the McDonald Dunn that are currently part of reserves and those will remain reserves. Depending on the final management scenario selected for the new plan, and the total amount of the forest acreage dedicated to managed reserves, we will identify which stands will be moved into this category to promote these conditions in the future. Beyond reserves, we strive to preserve the oldest trees, known as "legacy trees," in harvest areas unless they are determined to be structurally deficient and/or pose a significant threat (or hazard) to infrastructure (such as roads or structures) or recreational forest users.

Q: Is the only type of restoration you are doing on oak woodlands or meadows?
A: No. There are several types of restoration and the type of restoration we conduct depends on the location and characteristics found across the 11,500 acres of the McDonald-Dunn. Restoration can include removal of invasives and thinning to release the largest trees within a stand to promote future resilience. Specifically for the "Ecosystems of Concern," (see pg. 6 of this handout for additional details) there are different goals for each ecosystem, and therefore the approach to restoration also differs. If we are restoring oak savannah, for example, firs are removed to allow the native oaks to thrive.

Q: I have not heard any mention of understory communities as attributes within the current model alternatives. Does this mean understories with rare or unusual plants are not acknowledged?
A: Understory plants are not part of the modeling process but that does not mean they are not valued. Specific attention will be called to management of understory species in the detailed guidelines developed for the Ecosystems of Concern (oak savanna and woodlands, prairies).

Q: All the charts are missing recreation acceptability survey data. Why is that?
A: The pie charts included on pg. 5 of the handout provided at the Community Input Session are outputs of the Woodstock model, whereas recreation acceptability was calculated via surveys. The recreation acceptability score for each management scenario is summarized in the chart on pg. 4 of the same document.

Q: What is the model we are currently under/ using in the research forest?
A: "Scenario A" essentially represents how the forest is being managed now, under the 2005 Forest Plan.

Q: I'm interested in which locations and parcels will be classified as reserves in the new plan. Can you share the maps?
A: These maps don't yet exist. The first step in the process to determine how the 11,500 acres of the McDonald-Dunn will be allocated, which is the process we are completing now. Once the management scenario has been identified and we have determined the acreage allocations for each strategy, we will move forward with creating the maps.

Q: Once you choose a scenario and assign the allocations, how do you review and determine how everything is turning out?
A: Forestry is a long-term process. Therefore, one important component of a forest management plan is a monitoring plan. The management plan will explicitly describe monitoring expectations. We will be reviewing certain metrics on an annual basis, some every two to three years. After five years, we will do a thorough review to determine if we need to change anything. Importantly, the new forest management plan is one that will allow for this type of adaptation, as climate change, disease, insects and many other factors make it impossible to determine the future conditions of the forest.

Q: Can you explain the measure of biodiversity? When I look at focal species, they seem contradictory. How can you maximize two different things?
A: Modeling of the "Max Biodiversity" metric represented on pg. 5 of the handout shared at the Community Input Session has been broken down into each of the taxa, however for the purpose of evaluating biodiversity, the score is summarized as a composite across all organisms modeled.

II: Questions Regarding Planning Process

Q: How does the power to make this decision get allocated? How much weight does each group involved in the development of the plan get, and who makes the final decision?
A: The plan is being developed with input from diverse voices. Two committees, comprised of 23 individuals total, have been providing input throughout the planning process. They both listen to and consider all public input received.

The Faculty Planning Committee (FPC) provides technical input related to the forest management plan. Members are helping develop the new draft plan, independently assessing modeled management scenarios, writing and reviewing various portions of the draft plan, helping contribute to public input being evaluated and considered in the forest management planning process, and providing input on the implementation approach and communication strategies for long-term engagement and accountability.

The Stakeholder Advisory Committee (SAC) engages a broad and diverse array of voices and perspectives in the planning process. The SAC is not a decision-making body. Its primary role is to provide recommendations regarding the balance of forest uses, values and management practices and help to ensure that broader stakeholder and public input is understood and reflected. SAC members are requested to share concerns and aspirations regarding the management of the forests to contribute to community expectations being understood by College of Forestry leaders and reflected in the alternative scenarios developed and evaluated during the management planning process.

The SAC works in tandem with the FPC to inform the development of the new management plan that will ultimately be reviewed and approved by the College of Forestry Executive Committee and Dean.

Q: Why is there no soil science representation on the faculty planning committee? Is there soil science happening on the research forest?
A: There have, and continue to be, many studies on forest soils conducted on the McDonald-Dunn. Some of these can be found in the Research Forest searchable research database. Although there is not a soil scientist on the Faculty Planning Committee, the dean of the College of Forestry who will approve the final plan, Tom DeLuca, is a soil scientist himself and recently hosted a Starker Lecture at Peavy Lodge, discussing among other topics soils within the McDonald-Dunn. A recording of the lecture can be found here. He and department head Jeff Hatten (also a forest soil scientist) have a graduate student conducting an extensive project on forest soils of the McDonald-Dunn.

Q: How can we offer input after the meeting?
A: Input can be shared anytime via the McDonald-Dunn Forest Management Planning website. You can submit written comments via our webform, or submit questions via email to McDonaldDunnPlan@oregonstate.edu. We aim to respond within 14 days.

Q: Is there a model that would've been chosen and moved forward with, without the community input?
A: No. We consider community input an essential part of the planning process. The planning committees would not advance their recommendations for a forest management scenario to the dean

without the input from the public.

Q: Are videos of the previous meetings on the website?
A: Yes. Since the planning process began in 2022, we have posted all meetings, agendas, slides and zoom recordings, including written summaries, on the McDonald-Dunn Forest Management Planning website.

Q: You are providing a lot of information at this event, and then asking for immediate feedback. Why not give out this information in advance so the public can better consider the information to give thoughtful comments?
**A:** We understand that the information we are providing is very technical, as it is designed to support forest management experts and ecologists in making informed decisions. We choose to present the information at the Community Input Sessions rather than posting the information online without context, so that we can talk through the information and offer the chance for the public to ask questions immediately. The community is welcome to submit comments or input via the McDonald-Dunn Planning webform at any time. Additionally, all meetings, agendas, slides and zoom recordings, including written summaries, are on the website for the public to access and follow along.

III: General Questions Regarding the McDonald-Dunn and College of Forestry

Q: It seems like there has been more harvesting on the McDonald-Dunn this year. Why is that?
A: As harvests rotate throughout the 11,500 combined acres of the McDonald-Dunn Forest, there are periods where harvest activity is more visible to recreational forest users and community members because management is near popular trails or local roads, however, the overall harvest level has remained the same across the combined McDonald-Dunn Research Forest over time. Following the implementation of the 2005 Forest Plan, there was more harvest activity on the Dunn Forest for about a decade and less on the McDonald. Because the two forests are managed collectively as the McDonald-Dunn Research Forest, sustainable harvest activity varies over time on each of the two individual forests, but overall sustainable harvest remains constant and below the anticipated harvest volume outlined in the existing 2005 Forest Plan of 6 million board feet per year. In fact, since 2020, the average annual harvest volume has been below 5 million board feet per year.

HARVEST VOLUME OVER TIME
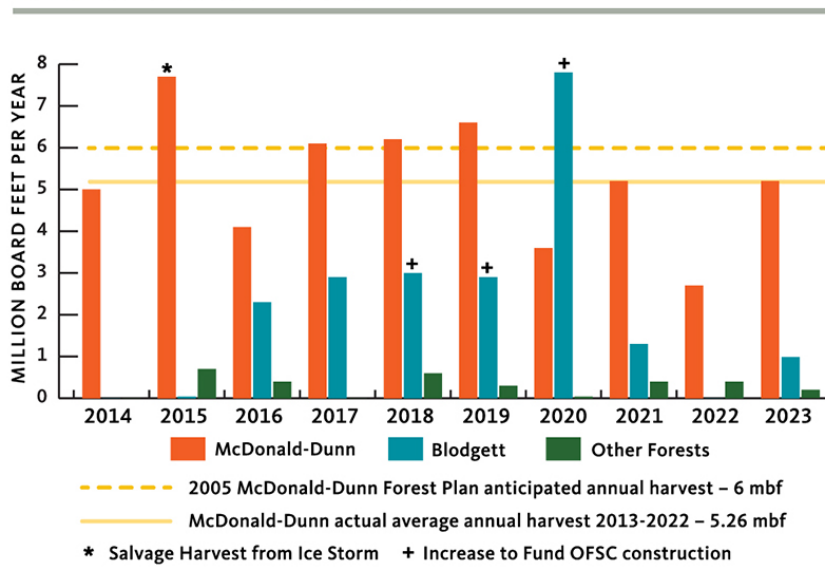
Q: How much of the HJ Andrews LTER is actively managed or logged? Why doesn't the McDonald-Dunn operate like the H.J. Andrews?

A: The H.J. Andrews Experimental Forest is not an OSU-owned research forest. Rather, it is administered cooperatively by the USDA Forest Service's Pacific Northwest Research Station, Oregon State University, and the Willamette National Forest. It is one of 28 sites funded through the National Science Foundation's Long-Term Ecological Research Program. Research foci have changed over time, with efforts in the 1950s focused on increasing efficiency of forest operations, such as forest regeneration, road engineering, and logging systems appropriate for old-growth forests. Also at that time, USFS scientists initiated three sets of experimental watersheds designed to study the effects of logging on hydrology, sediment yield, and nutrient losses. Treatments included clearcutting and partial cutting, and one watershed was left in its "natural" forested condition as a reference watershed. More information can be found here. Very little of the H.J. Andrews is now actively managed, as logging stopped decades ago, with the exception of thinning.

The difference between the McDonald-Dunn Research Forest and the H.J. Andrews has to do with their purposes. The Andrews attracts researchers from all over the world to do long-term ecological research. In contrast and by design based on the donations that made its acquisition possible, research on the McDonald-Dunn is more varied, with an emphasis on active management, silviculture, sustainable forest management and effects of logging. It is also a training ground for the next generation through our student logging program, a laboratory for students in their classes on a wide variety of subject matters, and an important demonstration site for small woodland owners engaged in active forest management.

With the five proposed management strategies for the new plan, we are attempting to create forest conditions similar to those found on forests managed by a variety of entities such as industrial, small woodland owner, Tribal, state and federal entities. We are establishing conditions to demonstrate and research the tradeoffs associated with various forest management approaches so that we can educate students and others on best practices

Q: What is the College of Forestry educating for?

A: The Oregon State University College of Forestry is one of a few institutions that conducts research and educates students on all aspects of forestry across its six undergraduate and four graduate degree programs – from to habitat conservation and sustainable recreation to wood products and engineering to sustainable forest management. As part of our land grant mission, we also have the largest Forestry & Natural Resources Extension program in the nation, utilizing our nine research forests across the state as education and demonstration sites for small woodland owners and industry professionals.

A wide variety of disciplines across the university use the McDonald-Dunn Forest for teaching students on topics including, but not limited to, forestry, forest engineering, road engineering, forest ecology, soil science, botany, dendrology, restoration ecology, forest health, prescribed burning, recreation, wood quality, wood degradation, water quality, water yield and geotechnical engineering. Also, research is regularly conducted on the McDonald-Dunn Forest by faculty and students from various colleges across OSU beyond the College of Forestry. For example, research publications emerging from data collection on the Research Forests from just the past few years (2020-2023) includes these units outside the College of Forestry: *Animal and Rangeland Sciences*; *Biochemistry and Molecular Biology*; *Biological and Ecological Engineering*; *Fisheries, Wildlife and Conservation Sciences*; *Integrative Biology*; *Mechanical, Industrial, and Manufacturing Engineering*.

Q: Why does the forest need to make revenue?
A: Funds required for management of the forests are not provided by the College of Forestry, Oregon State University, the State of Oregon, by user fees, or by taxpayers and therefore the forests must be self-sustaining. Additionally, as described in the official vision, mission and goals of the OSU Research Forests, our intent is to be recognized as a model for an actively and sustainably managed forest system that advances forestry through scientific inquiry, education, and the application of new knowledge to inform best practices of forest management. More specifically, one of our missions is to demonstrate how an actively and sustainably managed forest fosters economic prosperity, biodiversity conservation, and resilience amidst disturbances and global change. By generating revenue from the forest, we are showcasing economic sustainability, and how to balance this with ecological and social sustainability.

Q: Some data shows that the industry average age for harvest is 40 years, but many of the recent harvests on the McDonald-Dunn have been in stands much older than this. Why is that?
A: For the last five years (2020-2024), the average age for all timber harvested on the McDonald-Dunn Forest is 63 years. Harvest operations on the McDonald-Dunn are much different than they are in an industrial forestry setting, as one of the goals of our research is to identify the tradeoffs associated with different harvest types and rotations that can inform industry practices. One of the topics we are studying on the McDonald-Dunn is long rotation forestry, an approach that has been highlighted as a means of improving ecological function and services of even aged forestry (see this document describing management strategy). Conducting research on this approach will allow us to demonstrate the ecological benefits associated with longer rotation forestry, thereby encouraging industry adoption in the future.

Q: I've heard that very little of the research forest revenue is spent on research. How is the revenue generated by the forest used?
A: This is untrue. As part of the self-sustaining financial model, revenue generated through sustainable timber harvests is reinvested in the forests. Virtually all expenses underpin research, as staff salaries, harvest expenses, and forest regeneration activities all contribute to the conditions required for research to occur – or simply *are* the research, as much of the research on the McDonald-Dunn is has an emphasis on active management, silviculture, sustainable forest management and effects of logging. In addition, most research done by College of Forestry faculty and students on the research forests is funded through grants. These funds are not factored into the research forest budget, but are an important part of the research funding on the forest. For more details on the Research Forest financial model, including net revenue for the past 10-years, see our website.

Q: What would the forests look like if they were completely unmanaged moving forward? Would it help with wildfire resilience? What are the benefits of management on the forest?
A: The current conditions of the McDonald-Dunn are a direct result of 100 years of active management. The benefits of this include a 11,500-acre multi-age, multi-species forest with excellent ecological conditions that supports research and education, ecosystem services, sustainable timber production and respite for local wildlife and community members.

While it is difficult to predict what the forests would look like if they had never been managed, it is safe to say that they would look nothing like they do today. Looking ahead, if we were to stop all management on the forests, their future would be very unpredictable. The McDonald-Dunn is not a "natural forest," as many of its stands have been planted and stewarded with the intention of continued management. A lack of management would certainly not improve wildfire resilience, but rather result in higher risk. The forest would see an increase in ignitable shrubby invasive species (e.g., Himalayan

blackberry, false brome) in the understory and many stands that were planted with the intention of future harvest would become overcrowded, resulting in an increase in ladder fuels. Additionally, without reliable timber harvest revenue to sustain ownership and use for research, education and outreach by the College of Forestry, it is difficult to say who would own the forests, or how they would be used or managed in the future.

Q: What are the results of the forest acceptability studies?
A: A graduate student in the College of Forestry at OSU is currently examining visitor perceptions of forest management practices in the McDonald-Dunn Forest. They are conducting a randomized and systematic survey, using otherwise similar methodology as was used in the metric associated with the forest plan development process. The intent is to inform future management decisions. Results will be shared once the study is completed.

Q: When I look online, I see very little published research papers coming out of the McDonald Dunn Research Forest versus, for example, the HJ Andrews. Why is that and where can I learn about the research happening on the McDonald-Dunn Research Forest?
A: Hundreds of papers have been published as a result of research on the McDonald-Dunn. We have a searchable database where you can find information on research conducted 1926 – 2013. This same site also contains a list of nearly 90 publications from the period 2017-2023. We continue work to have all research papers indexed within the searchable database, and hope to have this work completed soon.

Q: Do you have to log to fund the research?
A: The College of Forestry aims for its research forests to be globally recognized as models for actively and sustainably managed forest systems. Much of the research on the forest is specifically devoted to understanding how different forms of active management influence a diversity of outcomes. Timber harvest is one component of active forest management. Additionally, a foundational College of Forestry principle is that the research forests are self-sustaining. Funds required for management of the forests are not provided by the College of Forestry, Oregon State University, the State of Oregon or by taxpayers. Revenue is generated through sustainable timber harvests and reinvested in the forests.

Harvest operations serve as learning and research opportunities for foresters, civil engineers, wildlife biologists, ecologists, silviculturists, social scientists, small woodland owners, community members and others. Also, timber harvests are key to creating forests with a variety of characteristics. For example, even-aged, two-aged, and multi-aged stands each offer habitat for different plants and wildlife. Active management through timber harvest can also maintain or improve forest health, by limiting insect and disease outbreaks and reducing risk of wildfires. Furthermore, we build student skills through their active participation in logging with the student logging training program, preparing them for future job opportunities.

OSU has and continues to explore alternate ways to generate revenue for the forests. Active management will always remain a core tenet of the research forests' mission as a tool for teaching and demonstration, and provides a proven sustainable model for forest operations. Other revenue generation options such as recreation and parking fees would limit equitable access to the forest and are therefore not a viable option. Due to the way the carbon offset markets work, carbon revenue is also not a viable option. Beyond issues with current carbon offset protocols, even if all timber harvest were stopped on the McDonald-Dunn forest, the "carbon revenue" that replaced the harvest would only cover a fraction of the forest operational costs — generously estimated at less than half of the annual road maintenance budget.

Q: I noticed disturbance of a listed plant species – tall bugbane (*Cimicifuga elata*; syn. *Actaea elata*) – in the Woodpecker harvest site. What is done to protect rare species when harvests are planned?

A: As indicated in the 2005 Forest Plan, all known sites with statutorily protected species of threatened or endangered plants or animals, and species that are candidates for such listing, are managed to protect these species. Harvests on the McDonald-Dunn are planned at least 1.5 years in advance of taking place, allowing us to secure contractors, conduct ecological and cultural surveys and minimize impacts on the forest ecosystem and recreation. We follow recommendations in Kaye et al. (2003) for management activities in and around populations of tall bugbane. Tom Kaye, chief scientist at the Institute for Applied Ecology and associate professor at the OSU College of Agricultural Sciences developed these recommendations based on research conducted during the prior thinning (in 1999) of the Woodpecker site, concluding that this plant flourishes with canopy-opening disturbance.

In further research[1], it has been concluded that there is "no evidence that forest disturbances associated with timber harvest harm *Cimicifuga elata*, either in terms of plant size or population growth. Instead, canopy removal appeared to result in larger, more reproductive plants, and at least a temporary increase in population size. Plants in unmanaged forests tended to be the smallest and least reproductive of all management histories. Despite these differences, all populations of *Cimicifuga elata* included in this long-term study, whether in old-growth stands or habitats with other management histories, were relatively stable."

You can browse details of the additional research conducted on the McDonald-Dunn on tall bugbane via our searchable research database.

[1]*Kaye, Thomas N. 2000. Population dynamics of tall bugbane and effects of forest management. Final report, Oregon Department of Agriculture (ODA) Plant Conservation Biology Program, and USDOI Bureau of Land Management. Institute for Applied Ecology, Corvallis, Oregon.*

Q: Why should the public trust you to manage the forest responsibly?

A: It's been almost 100 years since the first parcel of the McDonald-Dunn was acquired by the college via generous donation. Since that time, the forests have been actively managed as living laboratories and outdoor classrooms, contributing to knowledge that guides an inclusive balance of forest uses and values not only in Oregon, but across the globe.

Thousands of students — both in the College of Forestry and beyond — learn in, and from, the forests. And hundreds of research studies have been completed over the years and new research projects are being undertaken (see our searchable database). In the process of learning, we have also made mistakes. Understandably, this has impacted the community's trust, and we continue working to rebuild this. Following the 2019 harvest of a stand that contained some very old trees, the college expanded the reserve network in the McDonald-Dunn. Through the current planning process, we are considering further expanding reserves and also adding more restoration projects for Ecosystems of Concern.

Importantly, however, it must be acknowledged that the McDonald-Dunn is not a park or a preserve, but an actively managed research and demonstration forest acquired via donation for a very specific purpose. The college has an obligation – not only to the original donors, but to future generations – to manage the forest in a way that is financially self-sustaining, while also contributing sustainable wood products to meet our growing population's demand, supporting workforce development, and contributing knowledge from research and demonstration on variety of topics.

The new forest plan will serve as a framework for the college to continue this work — finding solutions to today's most pressing environmental, resource and societal challenges — that are in alignment with the forest's established vision, mission and goals.

Q: What is the website for the OSU Research Forests and McDonald-Dunn Forest Planning page?
A: The research forest website is: cf.forestry.oregonstate.edu. More details on the McDonald Dunn Forest Management Plan and the process can be found at: https://cf.forestry.oregonstate.edu/our-forests/mcdonald-dunn-forest-plan