



**PREPARED FOR:**

**OREGON FOREST RESOURCES INSTITUTE**

**Oregon Forests Values and Beliefs Focus Group Research**

**February 2015**

**PREPARED BY:**

**DHM RESEARCH**

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## 1. | INTRODUCTION AND METHODOLOGY

DHM Research conducted two focus groups on February 7, 2015, with residents living in the Portland Metropolitan area. The primary goal of this research was to assess residents' opinions about forest management issues in Oregon as well as perceptions regarding clearcutting and chemical use in Oregon forests.

**Research Design:** A total of twenty-two residents participated in the two groups. They were recruited at random from the Portland Metro Region. Both groups were weighted more heavily toward women than men. Group 1 was populated exclusively by residents ages 35-54, while Group 2 included only younger residents, ages 18-34. Past research shows that women and younger residents hold more negative views of the forest industry and tend to be more skeptical of forest management practices. These groups were chosen with the goal of discussing difficult topics (clearcutting and chemical use) with a more difficult audience.

A professional moderator led the focus groups, the content of which included written exercises and group discussion. The groups took place at a neutral facility located in downtown Portland and were filmed by a professional videographer. It should be noted that focus group members were paid \$75 for their time and participation.

**Statement of Limitations:** Although research of this type is not designed to measure the attitudes of a particular group with statistical reliability, it is valuable for giving a sense of the attitudes and opinions of the population from which the sample is drawn. Focus groups can be especially valuable for validating and providing context to quantitative research.

This report summarizes key findings from the discussions. Each section reviews a major topic and includes representative quotations, as well as evaluative commentary. The quotations and commentary are drawn from both written exercises and the conversations.<sup>1</sup> The referenced Appendices provide complete responses to all written exercises.

**DHM Research:** DHM Research has been providing opinion research and consultation throughout the Pacific Northwest and other regions of the United States for over three decades. The firm is non-partisan and independent and specializes in research projects to support public policy-making. [www.dhmresearch.com](http://www.dhmresearch.com)

<sup>1</sup> We have selected quotations from the discussions and written exercises to represent the range of opinions regarding a topic, and not to quantitatively represent the expressed attitudes. We have edited quotations as appropriate to correct punctuation and to eliminate non-relevant or repetitive intervening comments, asides such as "you know," "I mean," and the superfluous words of everyday speech.

## 2. | SUMMARY & OBSERVATIONS

### **Opinions on the forest products industry in Oregon are split between positive and neutral.**

- Eleven of the twenty-one participants had a “very” or “somewhat” positive impression of the forest products industry. Nine were neutral.
  - Younger participants were more likely to have a neutral opinion of the industry due to self-acknowledge lack of knowledge.
- Those with favorable impressions focused on the economy and jobs, the importance of forestry to the state, and supporting the renewable practices of the forest industry.
- Neutral impressions were given by those participants who felt that they were not knowledgeable enough of the industry. Regardless, many who held this opinion did recognize the value of the industry to the state.

### **Replanting comes to mind first when thinking about rules or regulations forest landowners are required to follow; though there is uncertainty that laws and regulations are actually being enforced.**

- Unprompted, most participants assume that Oregon has laws or regulations regarding replanting after harvest. Other rules and regulations like buffer zones and regulations of old-growth cutting are mentioned, but not with the same frequency.
- When asked directly if Oregon law requires forest landowners to replant trees, protect forest streams and water resources, and protect fish and wildlife habitat in forests managed for timber harvest, participants were split between “yes” and “unsure.”
  - Most mentioned a lack of knowledge or visual proof as to why they were unsure if the rule or regulation existed.
- The same level of uncertainty was seen when participants were asked if Oregon does a good job of enforcing forest protection laws. Some had a level of skepticism that landowners would abide by these rules or that there was state enforcement making sure regulations are followed.

### **Top of mind, “clearcutting” elicits mainly negative words and images, though most agree on some common benefits of the practice.**

- Unprompted, common words and images that came to mind when thinking of clearcutting were “ugly,” “sad,” “lack of animal habitat,” and “greed.”
- However, when probed, participants did recognize both the economic value of clearcuts as well as the environmental value of limited habitat disturbance.
  - Both of these messages, when presented in the handout from the OFRI publication stood out.
- Knowing that loggers must meet the strictest laws and regulations in the world – ensuring clean water, protecting wildlife, and planting native trees – was seen as the best reason to allow some clearcutting in Oregon forests.
- A more polarizing reason to allow some clear cuts was that clearcutting is an efficient way to harvest timber that limits soil and habitat disturbance to just once every 40 to 70 years.

- Some participants responded well to the limited disturbance message. However, for others, 40 to 70 years did not feel like an ample period of time regrowth and habitation of plants and animals.

**Chemical use was also initially thought of in negative terms among participants. However, when put in terms of promoting healthy forest growth, the practice was considered to be more palatable.**

- The main questions that participants had about chemical use in Oregon's forests centered on the immediate and long-term effects to wildlife and habitat in the area.
- Participants responded that the best reason to allow chemical use was to protect young trees and promote healthy forest growth.
  - The thought of healthy forest regrowth resonated positively with participants; as some described it, "a necessary evil."
- Other messages that resonated strongly related to protecting water sources when using chemicals. Clean water is a core value held among all Oregonians and messaging around its protection is viewed positively.

### 3. | KEY FINDINGS

#### Favorability of Oregon Industries

Participants were first asked to rate the favorability of six different industries in Oregon. They were then asked to explain the reasoning behind their evaluation of the forest products industry.

Responses were varied, though participants gave mostly favorable (very or somewhat) ratings to all industries. The younger group (Group 2) was more likely to hold neutral opinions than the older participants in Group 1. With regards to the “forest products” industry, responses were split between favorable and neutral ratings – only one participant held a negative impression of the industry.

Industry	TOTAL	Group 1	Group 2
<b>Forest Products</b>			
Very favorable	<b>8</b>	6	2
Somewhat favorable	<b>3</b>	0	3
Neutral	<b>9</b>	3	6
Somewhat unfavorable	<b>1</b>	1	0
Very unfavorable	<b>0</b>	0	0

When asked to explain their ratings, participants who had a favorable impression of the forest products industry referenced the economy and jobs, forestry being an integral part of the state, and their support for the industry’s renewable and sustainable practices.

- *"The timber industry in Oregon, that's how we've historically made our money. It's still a primary revenue source for the state. I think that the amount of jobs it supplies to our county is very important, and I also think that the timber industry is very self-regulating. I think that they do a significant job of reforestation. They take care of the forest."* – Group 1 (ages 35-54)
- *"We have an excellent resource in our forests, and I'm of the opinion that it needs to be sustainable. You can't wipe it out because we won't have it anymore, and I think it needs to be replanted, just like any crop."* Group 1 (ages 35-54)
- *"Forestry is a giant part of Portland and it touches a lot of communities."* – Group 2 (ages 18-34)
- *"Oregon is a forest state, let's use what we can to benefit everyone growth, stability, economy, and the future of Oregon."* – Group 2 (ages 18-34)

Those who held a neutral impression generally recognized the value of the industry, but didn't like to consider the removal of trees from the forest. The younger group's responses leaned towards neutral ratings due to a lack of knowledge or understanding of the industry.

- *"There are some forestry practices by some companies that I view as unstable, but on the other hand, I recognize it's an important part of many of the economies of communities in Oregon."* – Group 2 (ages 18-34)
- *"I do recognize that there are people whose livelihoods depend on logging. Those people aren't bad people for wanting to work in an industry that cuts down trees or*

*anything like that, so I think we have to be respectful to that, but at the same time, be respectful to the forests.” – Group 2 (ages 18-34)*

- *“We need products made from trees, but the trees are also needed.” – Group 1 (ages 35-54)*

### **Forest Rules, Regulations, and Laws**

Participants were asked to write down any rules, regulations or laws that they thought forest landowners in Oregon must follow when harvesting timber. Nearly all participants, across both groups, were under the impression that landowners were legally obligated to engage in replanting practices. Many participants were not entirely sure of their answers, and many questions were raised regarding how regulation functioned, and who acted as the regulatory body. Notably, many participants recalled seeing a commercial on replanting, though they were not probed on specifics.

- *“I think for me it was replanting. I certainly don’t know if that’s a law, but I would assume because I’m seeing it, I guess. You see commercials that are kind of showing what they’re doing.” – Group 1 (ages 35-54)*
- *“I had the replanting, but after I read it, I wasn’t quite sure if that’s actually a law as I thought it was.” – Group 2 (ages 18-34)*
- *“Who is actually in charge of replanting? Is it the owners? Is it the loggers? Is it the county? Is it who? That’s my big question right there...Who is in charge of it now? Who can we blame if it’s not going right? Who is supposed to take care of it the proper way the first time?” – Group 2 (ages 18-34)*

Other laws and regulations were mentioned, such as those necessitating buffer zones around rivers and streams, the cutting down of old-growth to maintain forest health, and maintaining a standard harvest distance from roadways. However, none of these regulations were identified with any frequency.

Next, participants were asked directly if they believed that Oregon law requires forest landowners to replant trees, to protect forest streams and water resources, and to protect fish and wildlife habitat in forests managed for timber production. Similar to the previous discussion, participants were divided between “yes” and “don’t know” responses.

Statements	TOTAL	Group 1	Group 2
<b>Does Oregon law require forest landowners to replant trees after harvest?</b>			
Yes	<b>11</b>	6	5
No	<b>0</b>	0	0
Don't know	<b>10</b>	4	6
<b>Does Oregon law require forest landowners to protect forest streams and water resources during timber harvests?</b>			
Yes	<b>11</b>	6	5
No	<b>1</b>	0	1
Don't know	<b>9</b>	4	5
<b>Does Oregon law require protection of fish and wildlife habitat in forests managed for timber production?</b>			
Yes	<b>13</b>	7	6
No	<b>2</b>	1	1
Don't know	<b>6</b>	2	4

Again, many thought that these either were laws or should be enacted as laws, but were skeptical that there was truly functional regulation or that the industry abided by these rules. Many commented that they were not knowledgeable enough to say for sure. Even though the majority of participants mentioned replanting as a likely rule or law when asked to list forestry regulations unprompted, half responded with “don’t know” when asked directly if landowners were required to replant trees after harvest by Oregon law.

- *"It seems just so intuitive that there must be laws around [protecting streams and water resources]. I know we have plenty of regulations dealing with forests, and that seems like something that would be so common sense that we would have it."* – Group 2 (ages 18-34)
- *"I don't have enough information to evaluate. I believe they do [regulate], but really have no concrete evidence or knowledge of it."* – Group 1 (ages 35-54)
- *"I honestly don't know. I really hope we do all those things and do them well. I would need to research this or be given information from a reputable source to change my mind to be and actual option."* – Group 2 (ages 18-34)

When asked if Oregon does a good job enforcing forest protection laws, again, participants were split with a lean towards a positive view of Oregon forest management. Overall, ten agreed (strongly or somewhat) and eleven were unsure. While some mentioned seeing direct evidence of replanting through the presence of new trees and signs mentioning the policy, participants noted less observable evidence that the water and wildlife habitat were also being protected.

- *"I know that I can see the reforestation happening, but I couldn't verify, you know, I had nothing to prove that they were protecting the streams and that kind of thing."*

*So I just didn't have enough information to back up that number two and three."* – Group 1 (ages 35-54)

- *"I have an impression that I'm not sure where it came from exactly, and I'm not absolutely sure about the laws. But I feel like Oregon is kind of ahead of a lot of other places as far as taking care of all of our environment."* –Group 1 (ages 35-54)
- *"I feel like I've got a huge gap in information about what exactly these laws are, let alone if they are enforced."* – Group 2 (Ages 18-34)

### Private Forest Companies

Next, the groups were asked to consider private forest companies. First, they were asked to make a list of any private forest companies that they could think of that operate in Oregon. Echoing the results from the quantitative study, Weyerhaeuser was the most frequently mentioned company. However, half could not mention any private forest companies. Inability to recall a private forest company was much higher among the younger group as six of eleven participants were unable to name a private forest company.

Participants were then given some contextual information about private forest companies in Oregon and were asked to rate their performance regarding replanting after harvest, protecting fish and wildlife habitat, and protecting drinking water supplies. As with the other rating exercises, the groups varied in their responses, but were generally split between positive ratings and unsure ones. Once again, members of the younger group were more likely to be unsure if private forest companies were participating in any of these practices.

Private Forest Companies Performance	TOTAL	Group 1	Group 2
<b>Replanting trees after harvest</b>			
1—Very poor	<b>0</b>	0	0
2	<b>2</b>	1	1
3	<b>4</b>	1	3
4	<b>4</b>	3	1
5—Very good	<b>3</b>	3	0
DK	<b>8</b>	2	6
<b>Protecting fish and wildlife habitat</b>			
1—Very poor	<b>0</b>	0	0
2	<b>4</b>	3	1
3	<b>2</b>	1	1
4	<b>6</b>	2	4
5—Very good	<b>1</b>	1	0
DK	<b>8</b>	3	5
<b>Protecting drinking water supplies</b>			
1—Very poor	<b>0</b>	0	0
2	<b>1</b>	1	0
3	<b>5</b>	2	3
4	<b>5</b>	3	2
5—Very good	<b>1</b>	1	0
DK	<b>9</b>	3	6

Some of this displayed uncertainty seems to have stemmed from a lack of direct observable evidence to participants. While there is some visible evidence to show that forest companies are replanting trees, there is not as much direct evidence that Oregon water resources are being protected. Those who believe that forest companies are doing a good job in these areas tend base their beliefs off of their observable impressions of wildlife and forest health (i.e. salmon returning to waterways).

### Clear Cutting

Shifting gears, participants were asked to record the first thoughts that came to mind when prompted with the term "clearcut." Not surprisingly, a strong majority of participants responded that negative terms or images came to mind. Phrases frequently mentioned included "ugly," "sad," "lack of animal habitat," and "greed."

When asked to identify the benefits of clearcutting, both groups once again responded with a shared focus. Many identified a financial advantage to clearcutting, both for the forest companies as well as for the consumer: *"it's a quicker process. It's a higher profit"* (Group 2; ages 18-34). Another benefit frequently mentioned was the reduction of forest fires: *"the forest management, I believe, reduces the large forest fires, keeps it manageable"* (Group 1; ages 35-54). Finally, there was recognition that clearcutting may affect a small proportion of forest land leading to a diminished overall impact on the environment and animal habitat: *"it affects a smaller area than other kinds of logging, in terms of ruining the land for wildlife. It's a benefit. It's a smaller area. It's just a completely ruined area as opposed to a huge area that's slightly ruined"* (Group 2; ages 18-34).

When asked about the drawbacks of clearcutting, both groups held similar concerns. These drawbacks were seemingly related to the negative words and images that came to mind when first asked to think about clearcutting. Many mentioned the fact that clearcut land appears unsightly and renders the forest land devoid of its aesthetic value. The loss of natural habitats for plants and animals was a second common theme.

Participants were then presented with several statements regarding the practice of clearcutting and were asked to indicate the best and worst reasons to allow some amount of clearcutting practices in Oregon forests.

Two statements stood out as the justifications participants across both groups considered to be most convincing in arguing for some clearcutting in Oregon's forests. First:

Statements	TOTAL	Group 1	Group 2
<b>Oregon forestland owners and loggers must meet the strictest environmental laws and regulations in the world – ensuring clean water, protecting wildlife, and planting native trees and logging</b>			
Best reason	<b>7</b>	4	3
Worst reason	<b>2</b>	0	2

Seven of the 22 participants felt that the requirement to meet some of the strictest environmental laws and regulations in the world was the best reason to allow some clearcutting. Having widely acknowledged that logging is an important industry for the state, respondents then recognized clearcutting as a necessary practice once prompted

with the information that loggers are being held to strict standards and guidelines. For some, this statement made them realize that the forest industry was being selective in where and what they cut.

- *"I want it monitored and controlled, just because it's protecting something for all of us."* – Group 1 (ages 35-54)
- *"I just feel like it shows that they're looking at the big picture and not just cutting down the trees, the whole cycle, the whole forest and what lives there."* – Group 1 (ages 35-54)
- *"I mean it's a good point that hopefully if they log an area, it will be left alone for a significant period of time so that they can be repopulated by trees and animals..."* – Group 2 (Ages 18-34)

The statement which received the second most responses indicating it as a "best reason" related to an issue considered much more divergently by participants. The statement received 6 responses indicating it as a "best reason" as well as 6 responses identifying it as a "worst reason" for allowing some clearcutting in Oregon.

Statements	TOTAL	Group 1	Group 2
<b>Clearcutting is an efficient way to harvest timber that limits soil and habitat disturbance to just once every 40 to 70 years</b>			
Best reason	<b>6</b>	2	4
Worst reason	<b>6</b>	2	4

Building off of the advantages to clearcutting which group members had listed when asked unprompted, some participants saw this statement as practical. The idea that the land was left undisturbed for a long period of time between clearcutting was mentioned as an appealing consideration to many. Participants indicated that leaving the land untouched for 40 to 70 years in between clearcutting provided ample time for the habitat to heal and for plants and animals to repopulate the area.

- *"Just from the practical standpoint, again, I feel industry is critical to us Americans, Oregonians, and if you're going to have to do it, just do it. Do it and get it over with. Don't be going in there repeatedly into the forests and messing with stuff."* – Group 1 (ages 35-54)
- *"I picture it as you're disturbing this one section of ground, and the animals of going to move to the forested areas near it. And as it grows, they'll be able to come back."* – Group 1 (ages 35-54)
- *"Hopefully if they log an area, it will be left alone for a significant period of time so that they can be repopulated by trees and animals."* – Group 2 (ages 18-34)

However, this statement was also viewed by participants as one of the worst reasons to allow clearcutting in Oregon forests. There was a sense of shared concern among some that 40 to 70 years was not long enough to allow substantial regrowth: *"...at the same time, 40 to 70 years doesn't promote old growth"* (Group 2; ages 18-34). Others felt that clearcutting was an unnatural process unlikely to mimic nature adequately.

Next, participants were given a handout containing a section of the OFRI booklet on clearcutting (appendix L). They were then asked to indicate areas that stood out to them, prompted a negative reaction, or which they questioned. Looking at areas that stood out to participants, some effective messages were identified. These successful messages focused on areas of **efficiency, limited soil disturbance, protection of streams,** and a **generational change** in forest management practices. Several also found the segment noting that Douglas Fir trees need full sunlight to grow to be an appealing and informative statement regarding the benefits of clearcutting practices.

### Chemicals

Finally, the discussion moved onto the use of chemicals in forests, specifically the use of herbicides. Participants were given a brief background on herbicides and were asked unprompted to record their thoughts about herbicide use on Oregon forestland. The most common considerations and concerns centered on the chemicals' effects on wildlife and forest habitats.

After being presented with several statements, participants were asked to indicate the best and worst reasons for allowing use of herbicides in Oregon's forests. One statement stood above all others as the best reason to allow herbicide use.

Statements	TOTAL	Group 1	Group 2
<b>The legal use of herbicides protects young trees and promotes healthy forest growth</b>			
Best reason	<b>7</b>	4	3
Worst reason	<b>2</b>	1	1

Overall, seven participants found protecting young trees and promoting healthy forest growth to be the best reason to allow some use of herbicides in Oregon's forests. The concepts of a healthy forest and of regrowth resonated with participants: *"The purpose is for trees to be replanted. It gives us an opportunity to control the noxious weeds that threaten our forests"* (Group 1; ages 35-54).

The fact that the chemicals used in forest management are some of the same types sold to homeowners was clearly the least effective message, despite the fact that those chemicals are more highly regulated when used in Oregon forestry operations.

Statements	TOTAL	Group 1	Group 2
<b>The herbicides used in Oregon forestry operations are some of the same type sold to homeowners for use around homes, but in forests it is highly regulated</b>			
Best reason	<b>3</b>	1	2
Worst reason	<b>7</b>	5	2

Participants were not convinced by this argument for chemical use in Oregon's forests. Many acknowledged that they do not approve of or like the use of these chemicals in their homes, and as such were unconvinced by the safety of their use in Oregon forests. There was also a shared sentiment that the statement utilized fallible logic: *"just the logic, I guess, just because home owners can you use it, we can put it in the forest, kind of thing."*

*I'm not opposed to herbicides in the forest, but that particular statement is illogical"* (Group 1; ages 35-54).

Paralleling the exercise involving the clearcutting handout as described above, participants were then given information pulled from a section of the OFRI booklet on chemical use in forests (appendix O). They were asked to indicate areas that stood out to them, that prompted a negative reaction, or which they questioned. In looking at areas that stood out to participants some effective messages were identified.

The messages that stood out for most participants addressed the original questions and concerns participants had held over the safety of chemicals in terms of animal habitat and forest health. The following phrase stood out for most participants: *"It is illegal to spray herbicides in or near streams, where they might impact vegetation or insects, which are food sources for fish."* Protection of water was also a theme that resonated strongly with both groups. Clean water seems to be a universal value among Oregonians. The following phrase also held resonance with participants: *"Chemicals may not be applied if weather might carry them offsite."* Again, this information seems to relate to and address participants' original concerns over habitat protection and the preservation of clean water sources.

**OFRI Forest V&B Focus Group Research  
February 7, 2015**

**APPENDIX A  
Participant Demographics**

<b>City</b>		
	<b>Group 1</b>	<b>Group 2</b>
West Linn	1	0
Aloha	2	0
Portland	4	8
Oregon City	2	0
Tigard	1	1
Milwaukie	0	1
Gladstone	0	1

<b>How long have you lived in your community</b>		
	<b>Group 1</b>	<b>Group 2</b>
Less than 1 year	0	0
2-5 years	0	0
6-10 years	2	1
11-20 years	5	6
21-30 years	1	3
More than 30 years	2	1

<b>Occupation</b>	
<b>Group 1</b>	<b>Group 2</b>
General contractor	Nanny
LEA Limited Energy Technician	HR Generalist
Mechanic	Bar server
NR	Homemaker
Artist	Photographer
Sales engineer	Childcare provider/student
Retired—retail bank management	Owner of 50 Tree Productions
Service learning educator	Homemaker
Administrative assistant	Unemployed security guard
Homemaker	Construction
	Computer lab assistant

<b>Education Level</b>		
	<b>Group 1</b>	<b>Group 2</b>
Less than high school grad (1-11)	0	0
HS graduate	2	1
Some college/2 year degree	2	6
College degree/4 year degree	6	4
Post college	0	0

<b>Household Income</b>		
	<b>Group 1</b>	<b>Group 2</b>
Under \$15,000	1	2
\$15,000-\$29,999	2	3
\$30,000-\$49,999	0	1
\$50,000-\$74,999	2	2
\$75,000-\$99,999	1	2
\$100,000 +	4	1

<b>Age</b>		
	<b>Group 1</b>	<b>Group 2</b>
18-24	0	3
25-34	0	7
35-44	1	1
45-54	4	0
55-64	0	0
65-74	0	0
75+	0	0

<b>Gender</b>		
	<b>Group 1</b>	<b>Group 2</b>
Male	4	4
Female	6	7

<b>Ethnic Group</b>		
	<b>Group 1</b>	<b>Group 2</b>
White/Caucasian	9	7
Black/African American	1	1
Spanish/Hispanic	0	1
Asian/Pacific Islander	0	0
Native American	0	0

<b>Political Party</b>		
	<b>Group 1</b>	<b>Group 2</b>
Democrat	4	6
Republican	2	2
Independent	2	3
Other	1	0
Not registered	1	0

## APPENDIX B

Here are the names of five different industries in Oregon. For each, please circle if you have a very favorable, somewhat favorable, somewhat unfavorable, very unfavorable, or neutral opinion of the industry. If you aren't familiar at all with that industry, then circle don't know.

Industry	TOTAL	Group 1	Group 2
<b>Agriculture</b>			
Very favorable	<b>10</b>	8	2
Somewhat favorable	<b>5</b>	0	5
Neutral	<b>5</b>	1	4
Somewhat unfavorable	<b>0</b>	0	0
Very unfavorable	<b>1</b>	1	0
Don't know	<b>0</b>	0	0
<b>Construction</b>			
Very favorable	<b>8</b>	6	2
Somewhat favorable	<b>4</b>	2	2
Neutral	<b>5</b>	1	4
Somewhat unfavorable	<b>1</b>	0	1
Very unfavorable	<b>1</b>	0	1
Don't know	<b>2</b>	1	1
<b>Forest Products</b>			
Very favorable	<b>8</b>	6	2
Somewhat favorable	<b>3</b>	0	3
Neutral	<b>9</b>	3	6
Somewhat unfavorable	<b>1</b>	1	0
Very unfavorable	<b>0</b>	0	0
Don't know	<b>0</b>	0	0
<b>High Tech Manufacturing</b>			
Very favorable	<b>9</b>	6	3
Somewhat favorable	<b>7</b>	2	5
Neutral	<b>1</b>	0	1
Somewhat unfavorable	<b>0</b>	0	0
Very unfavorable	<b>0</b>	0	0
Don't know	<b>4</b>	2	2
<b>Tourism</b>			
Very favorable	<b>7</b>	5	2
Somewhat favorable	<b>5</b>	1	4
Neutral	<b>7</b>	3	4
Somewhat unfavorable	<b>0</b>	0	0
Very unfavorable	<b>1</b>	0	1
Don't know	<b>1</b>	1	0

## APPENDIX C

**Do your best to explain your rating of the forest products industry.**

Industry	TOTAL	Group 1	Group 2
<b>Forest Products</b>			
Very favorable	<b>8</b>	6	2
Somewhat favorable	<b>3</b>	0	3
Neutral	<b>9</b>	3	6
Somewhat unfavorable	<b>1</b>	1	0
Very unfavorable	<b>0</b>	0	0
Don't know	<b>0</b>	0	0

### **Group 1 Comments**

- (Very favorable) Because forest materials are essential in construction, which brings jobs. They are plentiful in Oregon.
- (Very favorable) I like forests!
- (Very favorable) We need to be using our resources to improve our industry. Sustainability of course, so that we will still have it.
- (Very favorable) Forest products have historically brought many jobs to our state and provide ongoing revenue. The trees make Oregon, Oregon. Proper management keeps jobs in Oregon.
- (Very favorable) Background—history of forest products with the state of Oregon. I look positively upon the use of renewable products.
- (Very favorable) Oregon uses sustainable forest practices these days.
- (Neutral) Forest products can be obtained in a good way and in a bad way.
- (Neutral) Because we cut down too many trees.
- (Neutral) We need products made from trees, but the trees are also needed—if, in fact, this is what forest products are about.
- (Smwt unfavorable) I respect that we need wood, etc. but clearcutting is awful and the lumber industry should be turned into help products as much as possible.

### **Group 2 Comments**

- (Very favorable) As an Oregonian, I recycle everything and I have waste. I'd like to see vintage, re-worked garments and creative, eco-friendly up-cycling.
- (Very favorable) Forestry is a giant part of Portland and it touches a lot of communities. It also builds more.
- (Smwt favorable) Oregon is a forest state, let's use what we can to benefit everyone and aid in the growth, stability, economy, and the future of Oregon.
- (Smwt favorable) I am an outdoors person and believe that water should be left alone.
- (Smwt favorable) I feel somewhat favorable because I have a friend who used to work in the industry in Forest Grove. I'm not super familiar with it, but he's a good guy from the area and I can't imagine him being involved in something negative or problematic.
- (Neutral) I'm not entirely sure what this entails. I imagine products built for sustaining Oregon's beautiful nature.
- (Neutral) I think forestry has been an essential part of Oregon's economy for generations, and I've seen old logging farms that have fallen apart after the industry was pressured by environmental groups. But I really don't like what logging has done to our environment.

- (Neutral) I'm not crazy about deforestation, in general, but I know it's a necessary industry for the northwest.
- (Neutral) I feel that if we are willing to replant what we use and make sure we continue to be known for our beautiful forest then I have no problem, but if they just use and nurture the plant makes more use.
- (Neutral) I am an ardent environmentalist and some forestry practices are unsustainable. But, I also recognize it is a vital part of some community's economy.
- (Neutral) Although deforestation has an incredible impact on the ecosystem, trees and these companies are necessary for so many reasons.

## APPENDIX D

### Write down any rules, regulations or laws that you think forest landowners must follow when they harvest timber?

#### Group 1

- The biggest rule I think they must follow is replanting; another rule is keeping old growth. // I think general regulation is working; I think the replanting effort is working.
- Distance from waterways; replanting; road construction; boundaries set by the government. // Lack of public education or awareness due to lack of reporting.
- Not sure, land owners can do what they want, I think. // In large scale cuts, I'd like to see biodiversity enforced instead of mono crop trees.
- Forest products—they need to put back what they cut down for the air. // The forest product industry needs to follow the law.
- Plant new trees to replace trees that were cut down. // Not sure what the actual laws and regulations are.
- Replant at a particular rate; leave a certain percentage of trees. // I think whatever the regulations right now seem to be working as far as reforestation, however, I don't have enough information to say whether they are good or not; I'd have to understand the financial impact.
- I believe they're required to replant new trees to replace those harvested; can only harvest from their own land; must follow OHSA. // Should be monitored in addition to self-regulation.
- Maybe they should replant a certain percentage of the trees within a certain amount of time; they need to get permits to cut, and this is likely surveyed for wildlife concerns. // I assume there is bribery and loopholes going on, and that the dollar is what drives most big industry's choices.
- Replant what they cut; protect the protected wildlife; pay different taxes; receive funds. // I don't know enough, but would expect them to replace what they take and the wildlife.
- I don't know.

#### Group 2

- Safety; minimal destruction or disturbance; thorough study of area before logging; pollution and hazardous materials. // I do not know a lot about these rules or even if they exist, but I think forestry laws should be strict because it is a very big problem that goes beyond the economy.
- Replant a certain percentage of trees; get permits from the city/state/property owner; harvest only what is needed or permitted. // Unsure if they are enforced, working or appropriate.
- I think that Oregon has stricter laws on the strategic ways they seem to cut trees down and I was thinking we mandated some amount of replanting laws. // All for Oregon having those laws! Please enforce—it's why we'll sustain in the industry.
- Plant trees; no dumping of oil, etc.; try and plant a variety of different size trees; safety first—watch for others. // I think that safety is a big problem—people get careless.

- Replanting; cannot cut old growth trees; can only take a few out of a certain area to maintain beauty. // I truly don't have much of an opinion; I would trust that Oregon has something in place to make sure they're enforced.
- Clearcutting only in special circumstances; strategic cuts; minimal cutting in endangered species habitat; replant. // I thought this was what we thought should be laws/rules.
- Plant new trees; use more eco-friendly machines; no logging out of an acre. // I don't know if the eco-friendly machines go outside of the designated area.
- Replant as many trees as they cut down; do not leave harmful materials behind; make a limit on how many trees can be cut down. // Not sure if these rules are enforced because I don't know enough about the forest business; I would hope these companies protect the forest we love.
- Replanting one tree for each tree cut down; ecological impact survey done for certain areas. // I'm not sure about replanting laws; I'm confident that the survey regulations are good.
- Buffering zones—can't cut close to waterways and rivers; replanting—replace what you took; animal watch—make sure wildlife can be sustained. // I think the new laws are helping but not yet being perfected yet; we do use wildlife habitats to support us; we have to do the same and help them.
- Timber harvesting shouldn't occur within a specified distance from the roads; Plant an additional tree for every third cut. // I'm not exactly educated about the laws, but my hope is that the laws protect wildlife and keep the industry sustainable.

## APPENDIX E

Please answer the following questions

	TOTAL	Group 1	Group 2
<b>1. Does Oregon law require forest landowners to replant trees after harvest?</b>			
Yes	<b>11</b>	6	5
No	<b>0</b>	0	0
Don't know	<b>10</b>	4	6
<b>2. Does Oregon law require forest landowners to protect forest streams and water resources during timber harvests?</b>			
Yes	<b>11</b>	6	5
No	<b>1</b>	0	1
Don't know	<b>9</b>	4	5
<b>3. Does Oregon law require protection of fish and wildlife habitat in forests managed for timber production?</b>			
Yes	<b>13</b>	7	6
No	<b>2</b>	1	1
Don't know	<b>6</b>	2	4
<b>4. Do you agree or disagree that the State of Oregon does a good job enforcing forest protection laws?</b>			
Strongly agree	<b>1</b>	1	0
Somewhat agree	<b>9</b>	4	5
Somewhat disagree	<b>0</b>	0	0
Strongly disagree	<b>0</b>	0	0
Don't know	<b>11</b>	5	6

### Question 4 Comments

#### Group 1

- (Strongly agree) I agree because I see replanting.
- (Smwt agree) I believe they do, but don't trust that I'm well informed.
- (Smwt agree) Lots of activities, regulations seem difficult to enforce, unless the activity gets really bad.
- (Smwt agree) The state of Oregon only cares about money. They don't care who or what they harvest.
- (Smwt agree) I believe it does, but am unsure of the specific laws regarding forest protection.
- (DK) I don't have enough information to evaluate. I believe they do, but really have no concrete evidence or knowledge of it so I answered don't know.
- (DK) I am unaware of how well they do at enforcement.
- (DK) I have no idea how much they are actually doing. I assume it's a lot of bureaucracy, so it likely slows down a bit.
- (DK) I feel yes, because Oregon is still beautiful and trees are seen everywhere. The water (creeks, some rivers) seems clean except for the Willamette.
- (DK) I am not familiar with forestry laws.

## Group 2

- (Smwt agree) Not secure with my answers, I would need to learn more about the specific topics. This shows how little an average Oregonian knows about forestry.
- (Smwt agree) It could be worse, but the laws could better protect important environments.
- (Smwt agree) It looks like the forest areas are being replanted, but at what rate or who's doing the replanting—I don't know.
- (Smwt agree) I say they do because of the television commercials I see.
- (Smwt agree) I don't see a lot of news stories that speak ill of it.
- (DK) I honestly don't know. I really hope we do all of these things and do them well. I would need to research this or be given information from a reputable source to change my mind to be an actual option.
- (DK) I'm not sure that we do have laws; I think Oregon does, though I think the fact there are even laws helps a lot more than other states. But government never seems to have enough budget monies for adequate employees. I'd imagine it's unmonitored, more than would be ideal; so monitor more strictly and companies who abide by state standards should get tax breaks for their cooperation to promote no impact on the logging business. If possible, try to not negatively impact the employees in the industry and give tax breaks for proper implementation that would promote company cooperation.
- (DK) I don't know enough about the laws.
- (DK) I imagine Oregon would be good about enforcing wildlife and forest regulation rules.
- (DK) Will the state of Oregon fine the companies that don't follow the forest protection laws? Is there a way the community can find out?
- (DK) I feel like I've got a huge gap in information about what exactly these laws are, let alone if they are enforced.

## APPENDIX F

### Perspectives

#### Group 1

- I have not had any change of mind. I recognize that I need to learn what the laws are. Although I don't know specific laws, I feel the forest industry is doing a good job.
- Private land forest regulation.
- A lot of people are connected to the industry. It made me think of the people involved. People see it as driving growth.
- Replace the trees for the good.
- What are the actual laws regarding reforestation on public and private lands? Are we really so short-sighted that we wouldn't see the need to replant for the future?
- People living in town seem to be more sensitive about replanting. It seems like there's concern on an individual basis.
- It has made me wonder/consider why clearcutting is done—is there a reason? I really haven't thought about how one would know if laws/regulations are being followed.
- We all seem to agree that clearcutting is bad. I am interested and sad that private landowners can do what they want with their trees. That's crap. I manage the property I'm on in the city, and it seems I'm more limited than they are.
- Basically it just enforced my thinking.
- I think a person's view of the world can greatly influence how we view industry.

#### Group 2

- How little we know about important aspects of our economy, forest, and community. We all agree on many common sensical things.
- Environmental protections associated with logging. I lack of knowledge on the issue. We all seem to have pieces of information, but no one person seems to know a lot about the laws/regulations. Lots of assumptions.
- Curious on the exact laws that are presently in place in Oregon—for both private and public landowners and company regulations. I'm curious about the mandate that is in place. Though, I understand, we're about the best for having these laws at all.
- Trees and replanting. I think that different size trees should be planted.
- Importance of replanting. Taking for granted being from here—should I be more aware? Are there alternative to paper products and cutting trees?
- NR
- Learning that the forest is important. A lot of people take it for granted. Replanting.
- Maybe I should get into nature a little more to reconnect with Oregon? People have so much love for Oregon.
- I'd honestly never thought of Outdoor School as a kind of environmental experience—it was just kind of a camp to me.
- That environmental laws are different from state to state. That with people living in more of a susceptible environment to change and how it affects us all.
- I think it's really important to improve education on forest issues. I'm sad that we as a group, more or less, seem to notice a bit of a gap in what we know. If Oregon is a green state we as residents should know more. Imagine how little other people know.

## APPENDIX G

**Write down the names of any private forest companies that operate in Oregon. Add any impressions you have about those companies.**

### **Group 1**

- I don't know.
- Willamette; Weyerhaeuser; Louisiana Pacific. // Unsure.
- Weyerhaeuser—owns lots of land.
- I don't know.
- Louisiana Pacific; Weyerhaeuser; Georgia Pacific; Neidermeyer Martin.
- Boise Cascade—good; International Paper—scary; Weyerhaeuser—good.
- Weyerhaeuser.
- Meade? // The lobbyist to make marijuana illegal and shut down the hemp industry in the 1930's.
- Georgia Pacific; Weyerhaeuser—are they still around; Blue Heron—closed.
- I don't know.

### **Group 2**

- Parr Lumber—cosmetic side of forestry industry—homes; USDA—Forestry?
- Bremik—maybe just construction; I don't really know.
- No idea.
- I don't know.
- I don't know.
- Don't know.
- I have no clue.
- I don't know, but wish I did.
- I don't know despite having watched a reality show about Oregon loggers.
- Weyerhaeuser—commercial from years ago. It's a company that helps replanting in the Northwest.
- Weyerhaeuser—I know they're in Washington and very instrumental in restoring forests on Mt. St Helen's.

**APPENDIX H**

There are about 50 large forest landowning companies in Oregon. Collectively, they manage about 6 million acres of forestland, which is 20 percent of all forestland in the state. A few of the largest landowners are Campbell Global, Roseburg Forest Products and Weyerhaeuser. Just focusing now on private forest companies, on a scale of 1 to 5, with 1 being very poor and 5 being very good, how would you rate private companies' performance on the following items: replanting trees after harvest; protecting fish and wildlife habitat; and protecting drinking water supplies.

<b>Industry</b>	<b>TOTAL</b>	<b>Group 1</b>	<b>Group 2</b>
<b>Replanting trees after harvest</b>			
1—Very poor	<b>0</b>	0	0
2	<b>2</b>	1	1
3	<b>4</b>	1	3
4	<b>4</b>	3	1
5—Very good	<b>3</b>	3	0
DK	<b>8</b>	2	6
<b>Protecting fish and wildlife habitat</b>			
1—Very poor	<b>0</b>	0	0
2	<b>4</b>	3	1
3	<b>2</b>	1	1
4	<b>6</b>	2	4
5—Very good	<b>1</b>	1	0
DK	<b>8</b>	3	5
<b>Protecting drinking water supplies</b>			
1—Very poor	<b>0</b>	0	0
2	<b>1</b>	1	0
3	<b>5</b>	2	3
4	<b>5</b>	3	2
5—Very good	<b>1</b>	1	0
DK	<b>9</b>	3	6

## APPENDIX I

**Write the first thought that comes to mind when you hear the term "clearcut".**

### **Group 1**

- It's the cheapest way to remove lumber.
- Brush removal, hunting, firewood permit and fertilizer.
- Death, destruction, lack of biodiversity, erosion, and carbon.
- Don't know.
- Ugly, sad, and greedy.
- Cutting all large trees off of an area of land. Usually a fairly large piece of land.  
Harmful to animals.
- Ugly. Rape of the land. Why do they do that?
- Bastards. The hills shaved clean. Habitats destroyed. Animals without homes. You can never really bring back the perfect balance of nature.
- Wiping out an area of trees.
- Ugly, bare habitat.

### **Group 2**

- Weather; animal habitats; ecosystem destruction; profit; isn't there a better way?
- Naked sad land; stumps everywhere; loss of forest; gone; devastation.
- Mass deforestation without consideration of environmental impacts. Better options exist without sacrificing company profits.
- Bad; ugly; stumps; landslides.
- Big open forestland; stumps; fresh smell of wood.
- Bald hills, ugly views and desolation.
- Wipe out the forests.
- All trees cut down; bare lands; animals wandering around with no home; sad.
- Ugly hillsides of stumps and debris that are seen from the road; greedy.
- Clearcut—a company that is given an area and harvest the area completely of all trees.
- A forest reduced to stumps and broken twigs as far as the eye can see. Dead and boring land that's ugly to look at.

## APPENDIX J

**A clearcut is an area of forestland where most of the standing trees are logged in a single operation, and a few trees remain after harvest. Make a list of any benefits of clearcutting that come to mind. Put a star next to the most important. // Make a list of any drawbacks of clearcutting that come to mind. Put a star next to the most important.**

### **Benefits of Clearcutting**

#### **Group 1**

- \*Cheaper lumber; fire lines; focus on one area with less disturbance of other areas.
- \*Brush removal; easier hunting; compost; elimination of disease; products.
- \*Money.
- No response.
- \*Preventing forest fires; lumber for the economy.
- \*Wood supplied for industry; jobs for forestry workers—mills, paper, loggers; cleanup of forest to prevent forest fires.
- \*Reduction of forest fires; economic; go back in less often—less disturbance.
- \*Big assholes get big money at a cheap cost; land for more idiots to move on and build a town on.
- Fire safety.
- \*More usable resource; quicker.

#### **Group 2**

- \*Easier; quicker process; higher profit.
- \*Efficiency; some trees remain; almost all trees are gone so they can easily replant new trees.
- \*May prevent forest fire possibilities or concerns especially in dry seasons; jobs; economy; necessary to cut, but not clearcut; we need wood.
- \*Paper; getting rid of dead trees; getting rid of sickly or broken trees.
- \*Paper products; jobs; sustainable community.
- \*Less space for teenagers to engage in hanky panky; profit; large output.
- \*Money; jobs.
- \*If there are houses that need to be built; some kind of nature picnic area; maybe stopping area for fires; camps.
- \*Efficient and easy for loggers; smaller area affected or ruined.
- \*Possible farm land, constructing of new homes, raising animals for food.
- \*Maximum profits for companies; easier to see pretty views; allows more people to live in that spot.

### **Drawbacks of Clearcutting**

#### **Group 1**

- \*Unightly; erosion issues; displaces wildlife.
- \*Death of species; easier hunting.
- \*Death; mono crop; habitat loss; abuse of nature; erosion; carbon.
- No response.
- \*Removes natural habitat for forest creatures; erosion.
- \*Harmful to wildlife; sometimes looks ugly; can be harmful to environment with all the work going on there; fewer trees.

- \*Disturbance of wildlife; it is unsightly; takes a long time to regrow.
- \*Nature cannot be replaced in balance; animals are homeless or dead; less beauty; habitat destroyed; water messed up; ugly; landslides.
- Losing our landscape; animal's habitats being destroyed; losing nature's filter for clean air; changing the ecosystem.
- \*Poor habitat for animals; unsightly.

#### **Group 2**

- \*Weather manipulation—huge impact; animal habitats destroyed.
- \*Natural habitats are eroded and dissolved; the land looks devastated whether or not it actually is.
- \*Devastates local ecosystems; too significant for easy, quick or possible regrowth.
- Stumps; looks bad; dangerous; landslides.
- \*Affects nature, animals, etc.; eliminates beauty; people not replanting.
- \*Harmful to animals; ugly; unsustainable; leads to landslides; brush fires; removes habitat; less forest for the fun times.
- Oxygen depletion; wildlife; share for the forest floor; vegetation.
- \*Animals have maybe lost a place to live.
- \*Aesthetically displeasing; totally ruins the area for wildlife.
- The land becomes unusable; loss of habitats for animals; the loss of topsoil in the area.
- \*Loss of habitat; endangered animals put at risk; ugly to look at; hard to walk through; disappointing.

## APPENDIX K

Here are several statements about the practice of clearcutting. For each, indicate on a scale of 1 to 5, with 1 being very poor and 5 being very good reason to allow some clearcutting of Oregon's private forestlands. Place a star by the best reason and an X next to the worst reason.

Statements	TOTAL	Group 1	Group 2
<b>1. Douglas fir – the predominate commercial native species grown in western Oregon – requires large openings and full sunlight to grow well</b>			
1—Very poor	<b>1</b>	1	0
2	<b>4</b>	1	3
3	<b>7</b>	1	6
4	<b>5</b>	4	1
5—Very good	<b>4</b>	3	1
<b>2. While clearcutting remains a practice in Oregon, reforestation immediately after harvest with native trees is now clearly a priority for the logging industry</b>			
1—Very poor	<b>2</b>	2	0
2	<b>4</b>	1	3
3	<b>4</b>	3	1
4	<b>6</b>	2	4
5—Very good	<b>5</b>	2	3
<b>3. Oregon forestland owners and loggers must meet some of the strictest environmental laws and regulations in the world – ensuring clean water, protecting wildlife, and planting native trees after logging</b>			
1—Very poor	<b>2</b>	0	2
2	<b>2</b>	2	0
3	<b>4</b>	1	3
4	<b>8</b>	5	3
5—Very good	<b>5</b>	2	3
<b>4. A clearcut is when most of the trees on a site are removed, though the laws require landowners to leave forested buffers and other vegetation to protect rivers, streams and wildlife habitat</b>			
1—Very poor	<b>1</b>	0	1
2	<b>6</b>	2	4
3	<b>5</b>	1	4
4	<b>6</b>	5	1
5—Very good	<b>3</b>	2	1
<b>5. Clearcutting is an efficient way to harvest timber that limits soil and habitat disturbance to just once every 40 to 70 years</b>			
1—Very poor	<b>4</b>	2	2
2	<b>2</b>	1	1
3	<b>7</b>	1	6
4	<b>1</b>	1	0
5—Very good	<b>7</b>	5	2

Statements	TOTAL	Group 1	Group 2
<b>6. Oregon law requires forest landowners to reforest within two years after harvest</b>			
1—Very poor	<b>1</b>	1	0
2	<b>9</b>	1	8
3	<b>3</b>	2	1
4	<b>4</b>	3	1
5—Very good	<b>4</b>	3	1
<b>7. Modern forest management – including logging – is done in a way that mimics the forests natural cycle and help ensure a healthy forest ecosystem</b>			
1—Very poor	<b>2</b>	2	0
2	<b>3</b>	1	2
3	<b>6</b>	2	4
4	<b>6</b>	3	3
5—Very good	<b>4</b>	2	2

### Best/Worst Reasons

Statements	TOTAL	Group 1	Group 2
<b>1. Douglas fir – the predominate commercial native species grown in western Oregon – requires large openings and full sunlight to grow well</b>			
Best reason	<b>3</b>	1	2
Worst reason	<b>0</b>	0	0
<b>2. While clearcutting remains a practice in Oregon, reforesting immediately after harvest with native trees is now clearly a priority for the logging industry</b>			
Best reason	<b>0</b>	0	0
Worst reason	<b>1</b>	1	0
<b>3. Oregon forestland owners and loggers must meet some of the strictest environmental laws and regulations in the world – ensuring clean water, protecting wildlife, and planting native trees after logging</b>			
Best reason	<b>7</b>	4	3
Worst reason	<b>2</b>	0	2
<b>4. A clearcut is when most of the trees on a site are removed, though the laws require landowners to leave forested buffers and other vegetation to protect rivers, streams and wildlife habitat</b>			
Best reason	<b>0</b>	0	0
Worst reason	<b>3</b>	2	1
<b>5. Clearcutting is an efficient way to harvest timber that limits soil and habitat disturbance to just once every 40 to 70 years</b>			
Best reason	<b>6</b>	2	4
Worst reason	<b>6</b>	2	4
<b>6. Oregon law requires forest landowners to reforest within two years after harvest</b>			
Best reason	<b>0</b>	0	0
Worst reason	<b>4</b>	1	3

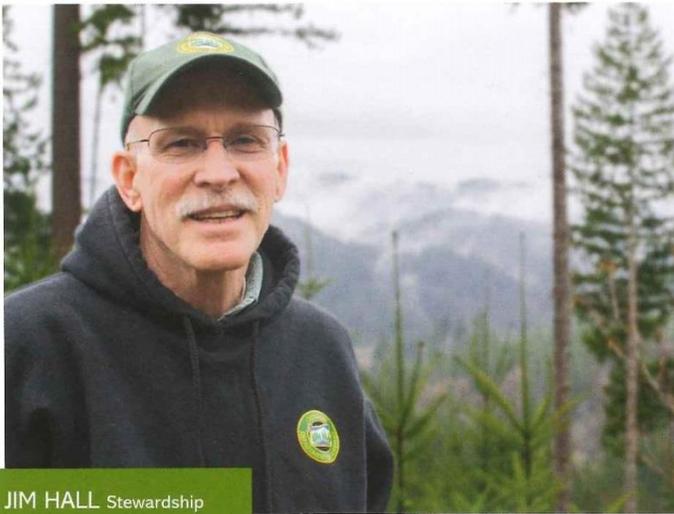
<b>Statements</b>	<b>TOTAL</b>	<b>Group 1</b>	<b>Group 2</b>
<b>7. Modern forest management – including logging – is done in a way that mimics the forests natural cycle and help ensure a healthy forest ecosystem</b>			
Best reason	<b>3</b>	1	2
Worst reason	<b>1</b>	0	1

\*Not all participants ranked the statements best and poor.

## APPENDIX L

# HARVESTS AND CLEARCUTTING

Today's techniques increase efficiency and reduce soil disturbance



**JIM HALL** Stewardship forester, Oregon Department of Forestry, Florence

### WHY CLEARCUT?

- It limits the disturbance and presence of machinery to just a month or two every 40 years or so.
- It's an economically efficient way to harvest wood and establish the next forest.
- Native Douglas-fir seedlings will not grow well if planted after a thinning – they need full sunlight to thrive and grow into a new forest.
- Historically, Douglas-fir forests were established in large openings created by natural disturbances such as wildfires.

Jim Hall's been a forester around Florence since the late 1970s. As a state stewardship forester, his job is to make sure landowners comply with forest practice rules.

Hall knows it's difficult to make a clearcut loveable. "People just think they're ugly," he says. And past practices, illegal now, still color public opinion.

He recalls one 700-acre clearcut he encountered in his earlier years as an example. "I knew a guy who used to say a deer would have to pack a lunch to get across it," he quips. The limit today is 120 acres.

"People assume a clearcut means erosion. That's not necessarily the case with the logging that's practiced today," Hall says. "It's different."

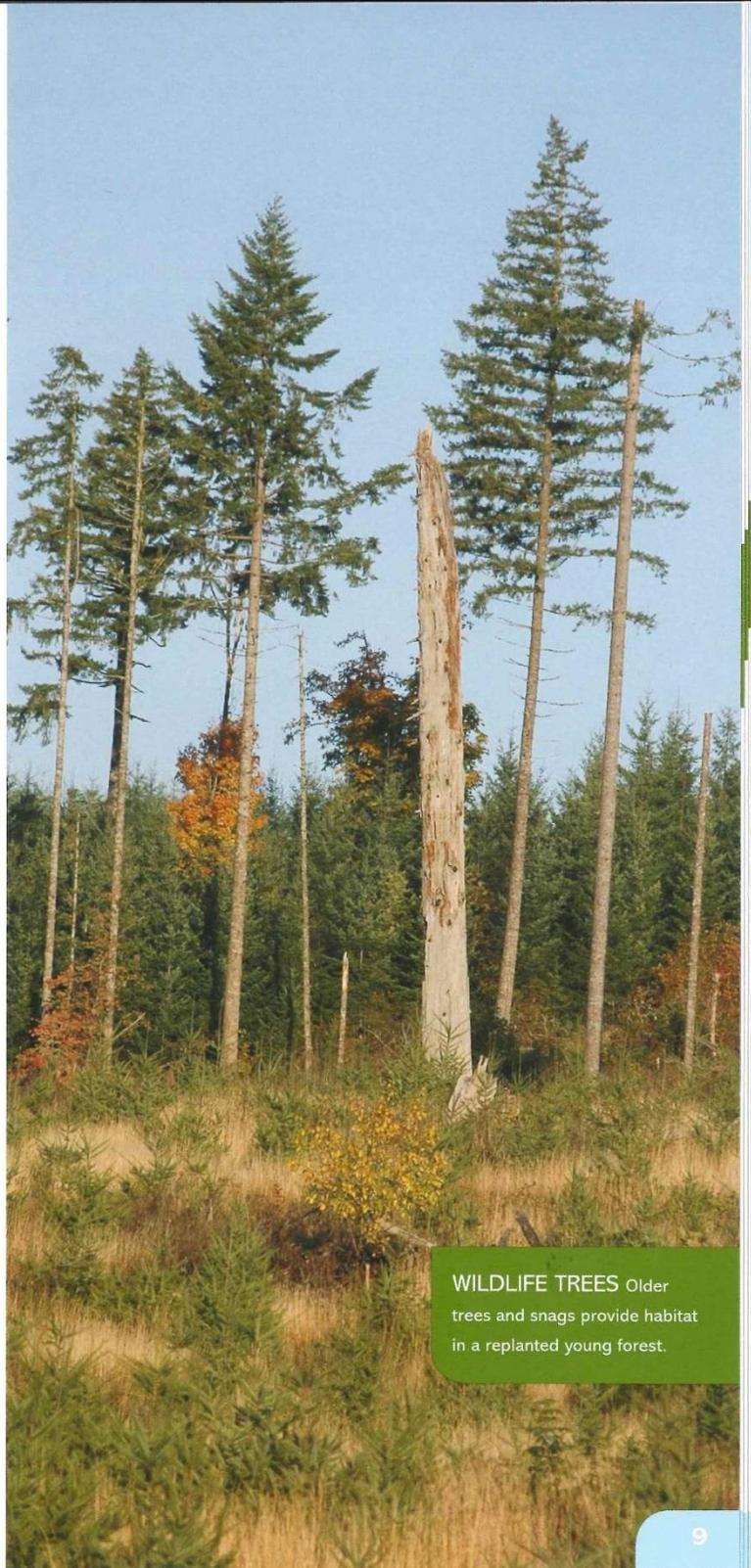
In the past, logs were dragged across the ground downhill to roads near creeks. Now cables carry suspended logs uphill to a road on the ridgeline. Less soil is disturbed, and roads, trucks and other equipment are kept away from streams. Skyline logging is not only better for the environment but also more efficient.

"It's a win-win," Hall says. "Most of the loggers and landowners I work with

know the importance of environmental protections. They understand the social license. They saw things like their grandfathers not bothering to reforest and the consequences of that. There's a generational change, definitely. I've seen the Forest Practices Act become a way of life, and it's continually changing for the better."

#### OREGON FOREST PRACTICES ACT: KEY RULES

- **Acreage:** Clearcuts cannot exceed 120 acres within a single ownership, including the combined acreage of any clearcuts within 300 feet of each other.
- **When is a clearcut no longer a clearcut?** Once replanted trees reach 4 feet tall, the young forest is no longer considered a clearcut, for the purposes of harvesting adjacent areas.
- **Related rules:** Rules related to reforestation (see page 5), wildlife habitat (see page 6) and landslides (see page 11) might apply.



**WILDLIFE TREES** Older trees and snags provide habitat in a replanted young forest.

## APPENDIX M

**Herbicides are chemical used to control unwanted plants such as blackberry, Scotch Broom and vine maple from taking root or spreading. After harvesting an area of forest, landowners will sometimes use herbicides to control competing plants to help quickly establish new tree seedlings. Write down any questions, concerns, or comments about herbicide use on Oregon forestlands.**

### **Group 1:**

- No concerns on herbicides.
- Vine maple is a great bow wood; unnatural; Agent Orange; long term.
- Herbicides can really harm small animals, frogs, and bugs.
- I don't know.
- How does it affect the wildlife, other plants, water and fish - besides the ones it kills?
- How does it affect the animals? Are there natural methods?
- Good idea—used to control noxious weeds and plants; prevent spreading of those that are harmful to native trees and species.
- Well, I volunteer to remove ivy and blackberry vines so I am for keeping that down. I am also concerned about the air quality in the area and what it's killing nearby and how it affects animals.
- I don't like it, but it may be a necessary evil in order to replace the trees in a timely manner.
- Good to prevent invasive species; bad to put chemicals into the ground.

### **Group 2:**

- Herbicides from Monsanto; now as bad for the environment as it is for people.
- What is the future impact to the forestland—wildlife, trees, etc.; is there a better way than herbicides to achieve a similar result.
- Negative affects to water sources, land, and animals; what are the organic, eco-friendly options. Are there differences in cost and time between herbicides and possible safe options?
- They should not be used in the forest.
- Chemicals—sound bad; do these chemicals have side effects; how bad are the effects of the unwanted plants?
- Necessary evil to get forests back, but the clearcutting that causes it isn't necessary.
- It can cause poisoning of dirt, animals and plants.
- How do they affect wildlife or water systems; do they affect the trees?
- If it's a clear-cut then you've already, figuratively, burned it all down, herbicides become a small concern unless there're water bodies involved.
- I don't like the idea of herbicides; the after-effects that we can't measure or count; time is money so they use quick methods.
- Herbicides and pesticides are often made of artificial chemicals that can be harmful to people and animals; I want scientific research conducted from an outside organization, not paid by the chemical industry about its effects.

**APPENDIX N**

Here are several statements about the practice of using herbicides. For each, indicate on a scale of 1 to 5, with 1 being very poor and 5 being very good reason to allow herbicide use on Oregon’s private forestlands. Place a star by the best reason and an X next to the worst reason.

<b>Statements</b>	<b>TOTAL</b>	<b>Group 1</b>	<b>Group 2</b>
<b>1. The legal use of herbicides protects young trees and promotes healthy forest growth</b>			
1—Very poor	<b>0</b>	0	0
2	<b>6</b>	3	3
3	<b>7</b>	2	5
4	<b>5</b>	3	2
5—Very good	<b>3</b>	2	1
<b>2. The herbicides used in Oregon forestry operations are some of the same type sold to homeowners for use around homes, but in forests it is highly regulated</b>			
1—Very poor	<b>6</b>	4	2
2	<b>5</b>	2	3
3	<b>4</b>	1	3
4	<b>4</b>	3	1
5—Very good	<b>2</b>	0	2
<b>3. The forest sector believes in sensible regulation. People who break the rules need to be held accountable</b>			
1—Very poor	<b>2</b>	1	1
2	<b>5</b>	2	3
3	<b>7</b>	3	4
4	<b>3</b>	1	2
5—Very good	<b>4</b>	3	1
<b>4. Foresters use herbicides sparingly the first few years to give new seedlings a chance to grow, and then not again for another forty years or more</b>			
1—Very poor	<b>2</b>	1	1
2	<b>4</b>	2	2
3	<b>5</b>	2	3
4	<b>5</b>	2	3
5—Very good	<b>5</b>	3	2
<b>5. If the rules governing herbicides need to be changed, the forest sector is willing to work with legislators to address legitimate public concerns</b>			
1—Very poor	<b>2</b>	2	0
2	<b>3</b>	0	3
3	<b>8</b>	3	5
4	<b>6</b>	4	2
5—Very good	<b>2</b>	1	1

Statements	TOTAL	Group 1	Group 2
<b>6. According to state sources, forest landowners are responsible for only about 4 percent of all pesticides use annually in Oregon</b>			
1—Very poor	<b>6</b>	3	3
2	<b>3</b>	0	3
3	<b>5</b>	3	2
4	<b>6</b>	4	2
5—Very good	<b>1</b>	0	1

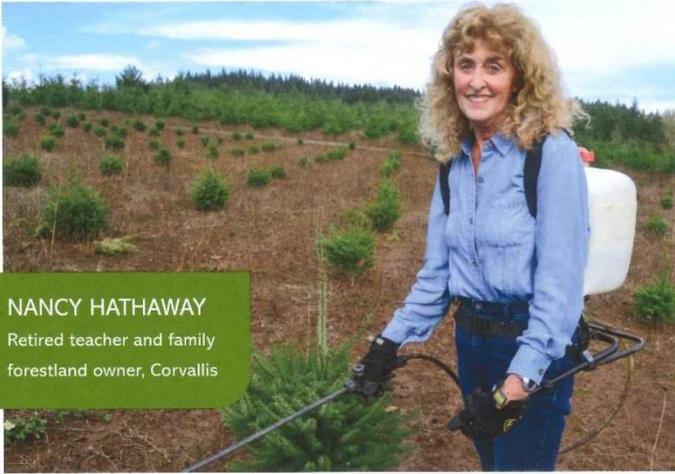
### Best/Worst Reasons

	Total	Group 1	Group 2
<b>1. The legal use of herbicides protects young trees and promotes healthy forest growth</b>			
Best Reason	<b>7</b>	4	3
Worst Reason	<b>2</b>	1	1
<b>2. The herbicides used in Oregon forestry operations are some of the same type sold to homeowners for use around homes, but in forests it is highly regulated</b>			
Best Reason	<b>3</b>	1	2
Worst Reason	<b>7</b>	5	2
<b>3. The forest sector believes in sensible regulation. People who break the rules need to be held accountable</b>			
Best Reason	<b>2</b>	1	1
Worst Reason	<b>3</b>	1	2
<b>4. Foresters use herbicides sparingly the first few years to give new seedlings a chance to grow, and then not again for another forty years or more</b>			
Best Reason	<b>3</b>	1	2
Worst Reason	<b>1</b>	0	1
<b>5. If the rules governing herbicides need to be changed, the forest sector is willing to work with legislators to address legitimate public concerns</b>			
Best Reason	<b>3</b>	1	2
Worst Reason	<b>2</b>	0	2
<b>6. According to state sources, forest landowners are responsible for only about 4 percent of all pesticides use annually in Oregon</b>			
Best Reason	<b>2</b>	1	1
Worst Reason	<b>4</b>	2	2

\*Not all participants ranked the statements best and poor.

## APPENDIX O

Now retired from a 30-year career teaching grade school in Corvallis, Nancy Hathaway, along with her husband, manages about 1,000 acres of forestland. Some she inherited from her forester father; some she bought herself.



**NANCY HATHAWAY**  
Retired teacher and family forestland owner, Corvallis

While she acknowledges ongoing public concern – especially about aerial spraying near homes – she’s been carefully using herbicides, similar to those homeowners use, for 30 to 40 years and says they have been a tremendous innovation in getting young forests growing.

“Remember that harvested land has to be successfully reforested within six years of harvest,” she says. “That’s harder when seedlings are buried under a mat of blackberry or scotch broom.”

She adds that herbicides are typically applied on any piece of ground just two or three times in 40 or 50 years. After a harvest but before planting, herbicides clear the site of fast-growing, often invasive species, such as blackberry. In the spring, after planting, herbicides are sprayed to kill plants that would compete with the new seedlings. Sometimes a landowner will spray again the following spring. But that’s usually the last spray until the next harvest decades later.

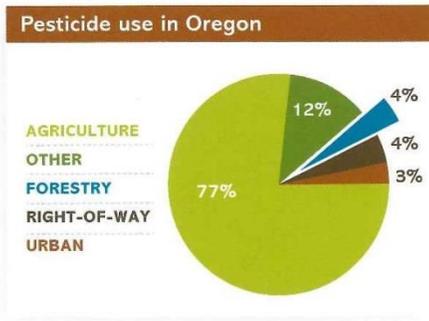
# CHEMICALS

## Landowners use herbicides to control unwanted vegetation

Most pesticides used in forestry are herbicides, which are a class of pesticides and are relatively low in toxicity to people, animals and fish.

The table breaks down pesticide and herbicide use reported in Oregon in 2008, the most recent data available.\* The total **does not include residential use** of chemicals by consumers, for which there is no reliable data.

\* Oregon Department of Agriculture. *Pesticide Use Reporting System Annual Report 2008, 2009.*



### OREGON FOREST PRACTICES ACT: KEY RULES

- **Buffers:** It is illegal to spray herbicides in or near streams, where they might impact vegetation or insects, which are food sources for fish. Aircraft must not spray within 60 feet of fish and domestic use streams. Ground spraying requires staying at least 10 feet away.
- **Weather:** Chemicals may not be applied if weather might carry them offsite.
- **Other:** Landowners must notify state officials of chemical use and keep daily records. Federal and state laws and label directions must be strictly followed.