

Headline: '3+1 Model' to equate to stable timber volumes

Subhead: Forest Service strategy analyzes how to pause now to get ahead later

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Portland, OR, Feb. XX, 2023—The Forest Service “3+1 Model” is adding strategy to a dynamic timber program across the Pacific Northwest Region. Intending to expedite the pace and scale of vegetation management, the “3+1 Model” is a formula to account for real-world challenges.

Challenges, connected to severe 2020-2021 wildfires in Oregon and Washington, have equated to significantly reduced timber volumes on some national forests. To respond, the region’s 16 forests in Oregon and Washington are collectively pausing to outline a path forward. Last year, the regionwide “3+1 Model” re-set timber targets, by forest units. Through this re-set, forest units would increase out-year volume expectations, on a case-by-case basis, through Fiscal Year (FY) 2026.

The “3+1 Model” is to produce a predictable and consistent amount of timber, avoiding the boom-and-bust cycle. “We’re really trying to get away from those big ebbs and flows of timber production to say, ‘Look, this is where we’re going,’” said Eric Burke, the acting timber program manager for the Pacific Northwest Region.

The “3+1 Model” requires its name to be spelled out. What is the “3”? What is the “1”?

- Before defining numbers, it’s necessary to refer to the National Environmental Policy Act (NEPA), signed into law in 1970. Three levels of NEPA documentation exist, including categorical exclusions; environmental assessments; and environmental impact statements. Proposed actions on federal land undergo an environmental analysis, ensuring protection of natural and cultural resources, prior to the issuing signed NEPA decisions to proceed.
- “3” refers to three minimum years of NEPA-approved shelf-stock; this could be one large-scale project or multiple smaller projects that clear timber volume actions over a multi-year window.
- “1” refers to one year of sale prep shelf-stock, which is a NEPA-approved project readied for project implementation. “For the +1 year, all the prep work is done—all the field work is done; the units have been identified; the timber is marked; you’ve got a cruise that provides a volume. You’re ready to put together the contract and the maps,” Burke said.

Regional direction is setting the future path to a sustainable timber volume. “Created in response to wildfires that reduced timber volumes, the ‘3+1 Model’ sets direction on how to have a sustainable timber supply to provide and plan on,” said Pacific Northwest Regional Forester Glenn Casamassa. “Each forest is making its own adjustments to increase timber scale and to work with the Oregon Department of Forestry or Washington Department of Natural Resources.”

Fire’s Disruption

Timber program managers define fire as the biggest hurdle disrupting their individual forest programs and halting program stability.

- **Willamette National Forest, Natural Resources Staff Officer Monte Kuk of Springfield, Ore.:** Experiencing a half million-acre burn in the past three years, the Willamette is in adjustment years after the fires. “If we loose that much acreage to fire, then what is our long-term

capacity?" Kuk asked. "The '3+1 Model' is a conscious process for us to consider the timing of our production ... so that when we have changes such as large fires, it helps us make better, informed decisions."

- **Umatilla National Forest, Integrated Vegetation Management Staff Officer Richie Gardner of Pendleton, Ore.:** With more than 100,000 acres burned on the Umatilla in 2021, the forest had more acres burn than in any other year in history. "We are not a forest that states 'if we get that next big fire' but 'when we get that next big fire.' We are a frequent fire forest ... and it really interferes with our ability to provide that consistent timber volume to the partners."
- **Malheur National Forest, Vegetation Management Staff Officer Amanda Lindsay of John Day, Ore.:** Not as affected by fire in the past three years, the Malheur still recognizes that fire is a natural occurrence on the landscape. "We see the need to get our forests back to a condition that they can receive fire. We need to allow fire that won't become catastrophic. Really our goal is to increase resiliency."

'3+1' Buy-in

Beyond natural resource impacts like fire or flooding, hurdles exist for timber program managers—including a lack of approved NEPA decisions; ongoing litigation; contract difficulties; and short staffing. "Some forests that are kind of right in the middle where they're saying, 'Yeah, you know, if the stars align and we don't get fires, we don't get litigated, and we hire some people, we're going to meet the '3+1,'" Burke said.

Despite the hurdles, quarterly conversations between the regional office and each forest are ensuring buy-in to the "3+1 Model."

- **Willamette National Forest, Natural Resources Staff Officer Monte Kuk of Springfield, Ore.:** The intentional planning look can adjust outputs across the region or the individual forests. "The whole purpose of the '3+1' is to look to make adjustments so that we don't have everything in one year and then have no shelf stock and no planning in place" Kuk said. "... It keeps more stability in our timber programs."
- **Umatilla National Forest, Integrated Vegetation Management Staff Officer Richie Gardner of Pendleton, Ore.:** Value exists to build in planning buffers. "The intent of this is pure—having projects cleared and ready sitting on the shelf to allow you to absorb some disturbance event that shifts some of your resources somewhere else. It creates that added padding or buffer," Gardner said. "So, next year if people have to stop and go work on project X, Y, or Z, then we are ok and already have this buffer built in."
- **Malheur National Forest, Vegetation Management Staff Officer Amanda Lindsay of John Day, Ore.:** A focus on accelerated restoration on the Malheur commits the forest to complex NEPA decisions, which take more time to complete. The Malheur, therefore, intends to act as a "2+1 Model," at least initially. "We appreciate this strategy, helping us get out ahead and have a year of timber prep shelf stock," Lindsay said. "We started accelerated restoration efforts 10 years ago; we've really been running hand-to-mouth on our timber program as quickly as we could get NEPA decisions signed—we were getting sales out to meet an increased target."

Target Volumes

The "3+1 Model" allows flexibility to continue to attain average regional timber volumes, even if one or more national forests encounter lower individual volumes in a given year. Benchmark numbers are to provide a guide, for individual forest units as well as the collective regional targets.

At the regional level, FY 2022 attained 462 million board feet (MMBF); FY 2023 aims for 520 MMBF; by FY 2026, volume targets increase to 600 MMBF. Following FY 2026, minimum regional volume delivery should stabilize at 650 MMBF, with additional volume coming from landscapes that receive Bipartisan Infrastructure Law and Inflation Reduction Law funding.

At the unit level, strategies are being developed to meet out-year expectations. The “3+1 Model” sets benchmark volumes with the intent to give relief from high timber targets over the next few years. “Some forests had timber targets stay the same, some reduced, and others were asked to increase,” Burke said.

- **Willamette National Forest** (historically targeting 75 MMBF): The Willamette aims to net 35 MMBF in FY 2023 with a slow ramp up to 75 MMBF by FY 2026. Rationale: “Reduced amounts are from our normal production levels,” Kuk said, “in recognition that a lot of our staff capacity goes to restoration efforts that take an enormous amount of work after fires.”
- **Malheur National Forest** (historically targeting 75 MMBF): The Malheur aims to net 45 MMBF in FY 2023 with a ramp up to 55 MMBF by FY 2026. Rationale: “If we were to get shelf stock, we need a couple of years to build,” Lindsay said. “We need to get below our average to get ahead.”
- **Umatilla National Forest** (historically targeting 30 MMBF): The Umatilla aims to net 18 MMBF in FY 2023 with a ramp up to 40 MMBF by FY 2026. Rationale: “We feel this is a reasonable number for the amount of restoration work that needs to get done at the pace and scale that we need to be doing it,” Gardner said.

The amount of timber volume a forest can attain may be limited by a specific project’s purpose and need. As Collaborative Forest Landscape Restoration Program (CFLRP) forests, the Malheur and the Umatilla do not generate timber-specific projects simply to increase timber volumes; instead, they incorporate landscape-level restoration actions into broader resource project objectives. Commercial volume, therefore, is a byproduct of the restoration efforts.

“We know we have a lot of restoration work that needs done and that there’s a commercial component to that,” said the Umatilla’s Gardner. “We rely on our industry partners to be able to handle that commercial side of thinning.”

“We are looking at restoration instead of just timber removal,” said the Malheur’s Lindsay. “... Our restoration projects are typically thinning the smaller trees, so we have to cover a lot of acres to meet our (historic) 75 million board feet goal.”

While “3+1 Model” benchmark volumes guide a forest’s timber planned treatments, some products are bonuses falling outside these numerical figures. Not counted within the volumes are an additional 40 MMBF annually of fuelwood, provided primarily for free public use. Since 2021, the Forest Service stopped counting fuelwood within its timber volumes. “It’s still a product. It has a value,” Burke said.

To support struggling communities, access to free fuelwood has been a boon to the public throughout the COVID pandemic and the related economic downturn. “The appearance of a reduction in our annual Forest Service timber sale volume is partially explained by this shift to provide an accessible way for Oregon and Washington residence to heat their homes,” Burke said.

Forest timber programs also provide add-on services, including donating restoration and cultural logs to tribal communities. “Some of the donations are very impressive,” the Willamette’s Kuk said. “This is something we’ve tried to do with our changed condition with the fires.”

Industry Dialogue

While internal dialogue continues to stabilize the Forest Service’s timber program, external dialogue with the forest products industry is equally important. “The ‘3+1 Model’ is a good way to approach industry and say this is what you can expect from Region 6,” Burke said.

The Forest Service recognizes that the industry is not supportive of a temporary scaling back of timber volume, as it seeks to ensure enough fiber product to keep people employed and its mills open.

“The industry says the ‘3+1’ strategy is great, but do we have to do it right now?” Umatilla’s Gardiner said. “If industry is able to weather the storm for the next couple of years and all the forests are delivering, this will allow us to do it. Then the industry is fully onboard. It is our intention to make sure we get there.”

The Umatilla National Forest focuses its ability to provide clearer sale expectations throughout the year. “We have received criticism in the past that 80 percent of your commercial volume gets offered in the fourth quarter every year,” Gardner said. “It would be nice if it were spread out throughout the year, and that this strategy is aimed at doing that.”

Conversations between the Malheur National Forest and the forest products industry have been transparent, recognizing the change in operations for communities. Meetings with the industry, including the American Forest Resource Council, have shared how the “3+1 Model” is meant to help forests get ahead.

“We went from 75 million board feet to a 30 million board feet target, and the industry was concerned about that because this is their livelihood—they depend on these sales,” said the Malheur’s Lindsay. “We explained how this ‘3+1 Model’ program would help us be more efficient with our program. We explained that the Malheur would be up to 55 million board feet and how we intend to get that.”

For the Malheur, its timber volume benchmark has permanently reduced from its historic levels. “We explained that we can’t product the 75 million board feet the way things stand now but that we would produce the 55 million board feet now and into the future,” Lindsay added.

The Malheur’s timber program within eastern Oregon has been intertwined with community outcomes. When Grant County’s last remaining sawmill announced it would be closing a decade ago, the Malheur strategized how to move into accelerated restoration that has saved jobs. “As a large-scale response to help, we ramped up our response to timber cutting and, the mill has stayed open,” Lindsay said. “We’ve also had a lot of investment in Grant County since then as well. Two more mills have opened up—a post-and-pull mill and a stud mill.”

Today, the Malheur continues to respond to community requests, to strengthen its local industry. Concern exists that timber volume is packaged in large mega sales, for example, while smaller loggers have smaller needs. As a result, the Malheur is building its small sales program to generate timber for

small deck and post-and-pole sales since. "This allows some of the smaller loggers to have sales that are a manageable size for them," Lindsay said.

Moving Forward Together

With a need to see acres treated and volume produced, all hands are on deck to do what is needed to move the machine forward.

Staffing, within the Forest Service and even within the industry, has been the underlying challenge with unfilled vacancies, hiring difficulties, and high turnover. For these reasons, the Forest Service intends to use partners, collaboratives, and the Good Neighbor Authority—through the authorizing states to undertake management work on federal lands—to overcome gaps and accomplish work.

"We're investing in these other entities because we can't just hire green jerseys right off the bat, but we have partners who are able to hire more efficiently and who can implement through contracting to get to the acres treated," Burke said.

Even with outside partner assistance, a timber management program demands a sufficient number of Forest Service employees to plan operations. Preparing the "+1" element, within the Forest Service strategy can necessitate a full field season of pre-sale employees. The "+1" requires crews lay out and GPS units, mark trees, and pull information into a sale package, with maps, to contract.

Forest Service staffing becomes taxed when the standard process breaks down. A time-consuming delay involves re-packaging failed contracts, not viewed as lucrative by industry. "Due to markets, we've had to re-package sales and have had to then re-package again. This can double or triple our workload on an individual sale to get it sold," said Lindsay, who has 11 permanent pre-sale employees on the Malheur staff. "To be able to sell a sale the first time, we have to have bidders."

The regional office intends to support individual forests when these red flags arise, whether litigation response or contracting assistance, for example. The goal is to keep the process going.

"We've been contracting out some of that timber sale prep work with the Bipartisan Infrastructure Law funds," the Umatilla's Gardner said. "... the direct effect of those funds is to get that work out the door."

By working smarter not harder, the Forest Service's timber program is confident the "3+1 Model" will to do the job. "I'm very supportive of the process for looking out forward and having a defined plan and keeping the region as a whole more in line and the forest on a pace to produce consistent outputs," Kuk said, "essentially that sounds very logical and wise."