

# Petition Letter for Reconsideration of the Fourmile Project

September 19, 2023

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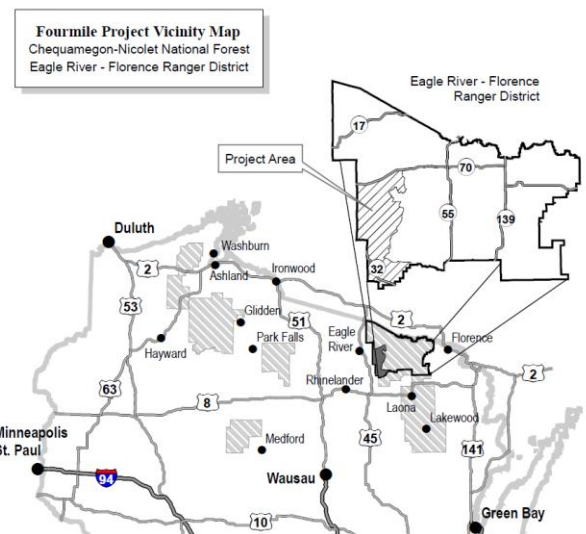
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**RE: Petition for Supplemental Environmental Review,  
Fourmile Vegetation Management Project, Chequamegon-Nicolet National Forest**

Dear Regional Forester Owens, Forest Supervisor Youngblood and District Ranger Kirschbaum:

In recognition of numerous significant federal policy changes, tribal statements and new information since the Decision Notice for the Fourmile Vegetation Project in the Chequamegon Nicolet National Forest (CNNF) of November 13, 2020, we, the undersigned 29 organizations, call on the Forest Service to reconsider the decision and pause logging in the project area until a supplemental environmental impact statement is completed and a new decision can be issued.

The Fourmile project is in northeastern Wisconsin, in the Eagle River – Florence District of the CNNF. Fourmile includes high-value interior hardwood forest providing excellent candidate areas for restoration of large patches of mature and low disturbance interior forest. The project area and surrounding lands encompass some of the highest quality ecological systems and habitat types in the CNNF. The Climate Forests coalition's *Worth More Standing* report from 2022 called out the Fourmile project as one of ten logging projects exemplifying the nationwide targeting of mature and old-growth trees, noting that two-thirds of the stands in the 12,000-acre project are more than 80 years old<sup>1</sup>.



<sup>1</sup> Climate Forests, *Worth More Standing: 10 Climate-Saving Forests Threatened by Federal Logging*, p 6, (2022), [https://www.climate-forests.org/files/ugd/73639b\\_03bdeb627485485392ac3aaf6569f609.pdf](https://www.climate-forests.org/files/ugd/73639b_03bdeb627485485392ac3aaf6569f609.pdf).

Since the Fourmile decision, numerous policy actions by President Biden, the Council on Environmental Quality (CEQ), the Secretary of Agriculture, and the Chief of the US Forest Service, have called into question the CNNF's decision not to analyze climate impacts in the Fourmile environmental review or fully consider biodiversity impacts.

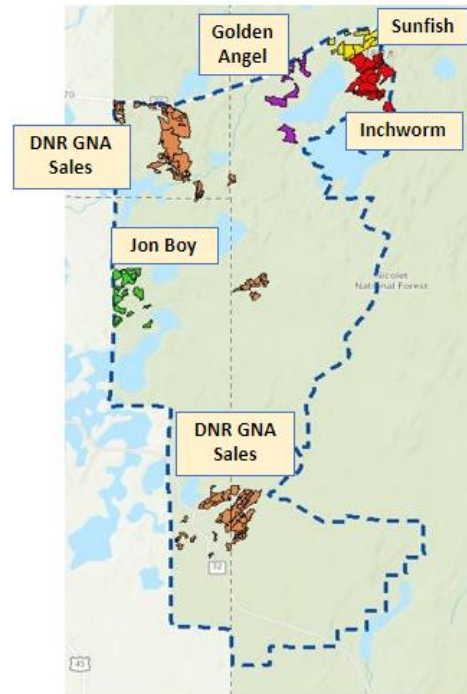
As a result, the CNNF is now carrying out timber sales that contradict federal policy. The Environmental Assessment/Finding of No Significant Impact (EA/FONSI) for the Fourmile project specifically identified older age trees as a problem to be solved with logging, the opposite of the significant new policies favoring preservation of mature and old-growth trees established since the Fourmile decision. This is directly from the "Reasons for the Decision" (our emphasis):

Current condition: most of the main species age class distributions of the Fourmile Project Area are **terribly skewed towards the older age classes**.

Likewise, the EA/FONSI virtually ignores climate impacts, despite clear direction to the contrary from the White House, CEQ, USDA, and USFS headquarters. And the EA/FONSI does not even mention that the Fourmile project is nearly coterminous with a Marten Protection Area designation to protect the American marten, a subject of particular concern to local tribes.

Clearly, the EA/FONSI for the Fourmile project does not meet today's requirements. Since the timber sales pursuant to the Fourmile project Record of Decision have not been completed, however, there is time to fix the problem. The Forest Service can and should pause Fourmile logging, conduct supplemental environmental review to address climate and biodiversity impacts, and reconsider its Fourmile decision. It does not mean an end to all logging, and we recognize there are cases where it can be appropriate, including in the Fourmile project area.

## Fourmile Timber Sales



## Legal Standard

Under the implementing regulations of the National Environmental Policy Act [40 C.F.R. § 1502.9\(d\)](#), federal agencies "shall prepare supplements to either draft or final environmental impact statements if a major Federal action remains to occur" and if "there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." Further, the agency may also prepare supplement environmental reviews when the agency determines that the purposes of the Act would be furthered. All these conditions apply to the Fourmile project.

These timber sales in mature forests with old-growth characteristics are each "a major Federal action (that remains to occur, contrary to federal policy)" following these significant changes. There are now seven Fourmile timber sales already bid on or published, including three from the Wisconsin Department of Natural Resources (WDNR).

## New Circumstances: Climate Policy, Rules, and Guidance

The first significant new circumstance occurred on Inauguration Day 2020 when President Biden signed Executive Order 13990, *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*,

calling for executive branch agencies “to immediately commence work to confront the climate crisis.”<sup>2</sup> This executive order changed the policy directives under which the Fourmile project was approved: EO 13990:

- Required “accounting for the benefits of reducing climate pollution,” specifically calling on federal agencies to capture the full costs of climate pollution. Any such consideration would need to begin with knowing the climate impacts of project actions.
- Revoked the executive order cited by USFS in the Fourmile record: Executive Order 13783, issued March 28, 2017, by then-President Trump. Because the USFS cited this Trump order as justification not to analyze climate impacts of Fourmile, EO 13990 is a very significant new circumstance.
- Rescinded the draft guidance from the Council on Environmental Quality entitled, “Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions,” 84 Fed. Reg. 30097 (June 26, 2019). That effectively restored the 2016 “Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews.”<sup>3</sup> Formal notice that the 2019 Guidance had been rescinded was published on February 19, 2021. 86 Fed. Reg. 10252 (Feb. 19, 2021).

On January 27, 2021, President Biden followed EO 13990 with Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*<sup>4</sup> to establish government-wide priorities to tackle the climate crisis and reduce the risks of climate change. This executive order significantly changed policy, which should be reflected in changes in practice. The order makes clear that federal agencies, including the US Forest Service, must act with urgency:

There is little time left to avoid setting the world on a dangerous, potentially catastrophic, climate trajectory.

The president sounded a call to action that would be reflected with Fourmile reconsideration (emphasis ours):

We must listen to science — and act. We must strengthen our clean air and water protections. We must hold polluters accountable for their actions. We must deliver environmental justice in communities all across America. The Federal Government must **drive assessment, disclosure, and mitigation of climate pollution and climate-related risks** in every sector of our economy, marshaling the creativity, courage, and capital necessary to make our Nation resilient in the face of this threat. Together, **we must combat the climate crisis with bold, progressive action** that combines the full capacity of the Federal Government with efforts from every corner of our Nation, every level of government, and every sector of our economy.

The order to tackle the climate crisis also called for the United States to lead internationally:

Domestic action must go hand in hand with United States international leadership, aimed at significantly enhancing global action. Together, we must listen to science and meet the moment.

However, the US ability to lead internationally is undermined if we are not willing to take the actions, we urge upon other nations to change practices and protect forests globally. Reconsideration and further

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<sup>2</sup> The White House, Executive Order on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis (2021), <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-protecting-public-health-and-environment-and-restoring-science-to-tackle-climate-crisis/> (accessed Aug. 10, 2023).

<sup>3</sup> The White House, Memorandum for Heads of Federal Departments and Agencies (2016), [https://ceq.doe.gov/docs/ceq-regulations-and-guidance/nepa\\_final\\_ghg\\_guidance.pdf](https://ceq.doe.gov/docs/ceq-regulations-and-guidance/nepa_final_ghg_guidance.pdf).

<sup>4</sup> The White House, Executive Order on Tackling the Climate Crisis at Home and Abroad, (2021), <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/> (accessed Aug. 10, 2023).

environmental review of projects such as Fourmile send a positive message to other countries.

By relying on policies from the previous Administration and refusing to take sweeping policy changes into account in its Fourmile actions, the USFS evaded these policies, especially “mitigation of climate pollution and climate-related risks.” Given the state of the climate crisis, the Forest Service can act with the urgency President Biden calls for, by reconsidering the Fourmile decision.

The change in Administration policy on climate has, of course, been reflected in new Administration policy on reviewing climate impacts in NEPA documents. On January 9, 2023, the Council on Environmental Quality (CEQ) issued interim National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change to go beyond the 2016 Guidance, “so that agencies may make use of it immediately while CEQ seeks public comment on the guidance.”<sup>5</sup> The comment period for the new guidance closed several months ago, and the final guidance should issue shortly.

Then, on July 31, 2023, CEQ published a Notice of Proposed Rulemaking (NPRM) for its new “National Environmental Policy Act Implementing Regulations Revisions Phase 2,” 88 Fed. Reg. 49924 (July 31, 2023), which again reinforced the requirement that environmental review documents contain a robust analysis of climate effects.

Clearly, the few sentences about climate in the Fourmile EA do not reflect current rules, current guidance, or current policy.

## ***New Circumstances: New Mature and Old-Growth Forest Policy***

US forest policy decisively changed when President Biden issued Executive Order 14072 *Strengthening the Nation’s Forests, Communities, and Local Economies*<sup>6</sup> on Earth Day, April 22, 2022. This order set policies in place and ordered specific action on mature and old-growth forests, such as an inventory of mature and old-growth forests on federal lands.

It is the policy of my Administration, in consultation with State, local, Tribal, and territorial governments, as well as the private sector, nonprofit organizations, labor unions, and the scientific community, to pursue science-based, sustainable forest and land management; **conserve America’s mature and old-growth forests on Federal lands**; invest in forest health and restoration; support indigenous traditional ecological knowledge and cultural and subsistence practices; honor Tribal treaty rights; and deploy climate-smart forestry practices and other nature-based solutions to improve the resilience of our lands, waters, wildlife, and communities in the face of increasing disturbances and chronic stress arising from climate impacts.

The executive order elaborated on the directive to “conserve America’s mature and old-growth forests on Federal lands:”

Sec. 2. Restoring and Conserving the Nation’s Forests, Including Mature and Old-Growth Forests. My Administration will manage forests on Federal lands, **which include many mature and old-growth forests, to promote their continued health and resilience; retain and enhance carbon storage; conserve biodiversity**; mitigate the risk of wildfires; enhance climate resilience; enable

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<sup>5</sup> National Environmental Policy Act, [Guidance on Consideration of Greenhouse Gases](https://ceq.doe.gov/guidance/ceq_guidance_nepa-ghg.html), [https://ceq.doe.gov/guidance/ceq\\_guidance\\_nepa-ghg.html](https://ceq.doe.gov/guidance/ceq_guidance_nepa-ghg.html), (accessed August 25, 2023)

<sup>6</sup> The White House, Executive Order on Strengthening the Nation’s Forests, Communities, and Local Economies (2022), <https://www.whitehouse.gov/briefing-room/presidential-actions/2022/04/22/executive-order-on-strengthening-the-nations-forests-communities-and-local-economies/> (accessed Aug. 10, 2023).

subsistence and cultural uses; provide outdoor recreational opportunities; and promote sustainable local economic development.

USDA and USFS responded by tying the mandate to address climate policy to protect mature and old-growth forests. On June 23, 2022, USDA Secretary Tom Vilsack issued memorandum 1077-04, *Climate Resilience and Carbon Stewardship of America's National Forests and Grasslands*<sup>7</sup>. The memorandum recognized the value for climate mitigation from mature and old-growth forests and provided further direction to USDA agencies on implementing presidential orders and memos discussed above.

America's forests—from mature and old-growth stands to working forests—already capture more than 10 percent of our nation's carbon emissions each year, and they have the potential to do more.

The USDA recognized the climate mitigation value of mature and old-growth forests:

In particular, many old-growth and mature forests have a combination of higher carbon density and biodiversity that contributes to both carbon storage and climate resilience.

Secretary Vilsack's memorandum advances the orders from President Biden and significantly changes the circumstances from the policy regime in place at the time the Fourmile decision was made. It calls on the Forest Service to inventory, retain and protect old-growth and mature forest stands that the memo describes as "climate mitigation powerhouses."

In July 2022 the USDA released its department-wide *Action Plan for Climate Adaptation and Resilience*<sup>8</sup>. The plan is a forward-looking document emphasizing preparing decision support tools, improved community engagement, and a focus on climate adaptation. The action plan recognizes the carbon capture and storage potential of mature and old-growth forests and the need to improve forestation as well as the great value of mature and old-growth forests for carbon storage.

Old-growth and mature forests, and other forests with similar characteristics, are an ecologically and culturally important part of the National Forest System. They reside within a continuum of forest age classes and vegetation types that provides for a wide diversity of ecosystem values. Many forests with old-growth characteristics have a combination of higher carbon density and biodiversity that contributes to both carbon storage and climate resilience.

A year following the April 22, 2022, Executive Order 14072, the Forest Service released the preliminary inventory of mature and old-growth forests in a report titled *Mature and Old-Growth Forests: Definition, Identification, and Initial Inventory on Lands Managed by the Forest Service and Bureau of Land Management*. The report estimated a total of 92 million acres of mature and old-growth forests on US Forest Service lands<sup>9</sup>.

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<sup>7</sup> U.S. Department of Agriculture, Forest Service, [Climate Resilience and Carbon Stewardship to America's National Forests and Grasslands](https://www.usda.gov/directives/sm-1077-004), pp 1-3 (2022), <https://www.usda.gov/directives/sm-1077-004>

<sup>8</sup> [USDA Forest Service Climate Adaptation Plan](https://www.usda.gov/sites/default/files/documents/4_NRE_FS_ClimateAdaptationPlan_2022.pdf), *US Forest Service U.S. Department of Agriculture*, July 2022. [https://www.usda.gov/sites/default/files/documents/4\\_NRE\\_FS\\_ClimateAdaptationPlan\\_2022.pdf](https://www.usda.gov/sites/default/files/documents/4_NRE_FS_ClimateAdaptationPlan_2022.pdf).

<sup>9</sup> U.S. Forest Service, [Mature and Old-Growth Forests: Definition, Identification, and Initial Inventory on Lands Managed by the Forest Service and Bureau of Land Management, Fulfillment of Executive Order 14072, Section 2\(b\)](https://www.fs.usda.gov/sites/default/files/mature-and-old-growth-forests-tech.pdf) (2023), Table 1, <https://www.fs.usda.gov/sites/default/files/mature-and-old-growth-forests-tech.pdf>

The USFS provided a Climate Risk Viewer<sup>10</sup> for mature and old growth forests that clearly shows the region containing the Fourmile project area has among the highest amount of mature forest in the USFS Eastern Region. The Forest Service own data shows Fourmile logging is at odds with federal policy to conserve mature and old-growth forests.

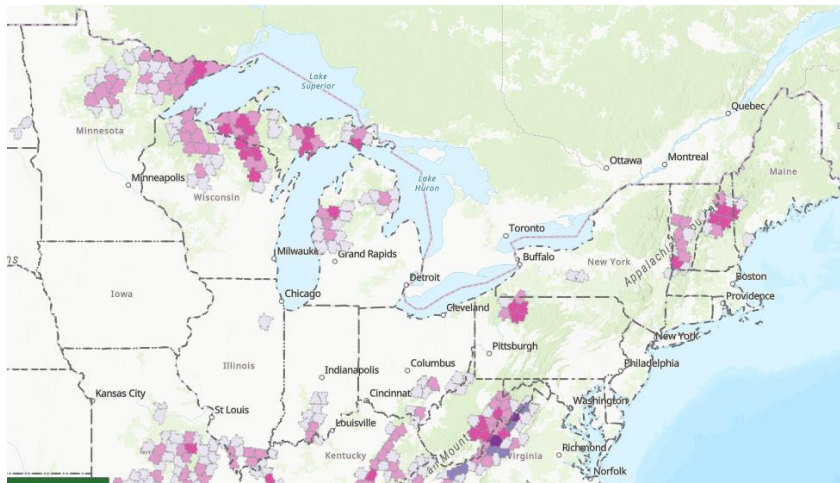


Figure 1 USFS Eastern Region, from USDA Climate Risk Viewer

## **New Circumstances: Tribal Consultation and Biodiversity**

In Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*<sup>11</sup> and elsewhere, President Biden calls for protecting biodiversity. In multiple executive orders and memoranda, he also calls for “Tribal Consultation and Strengthening Nation-to-Nation Relationships,”<sup>12</sup> which would likely be improved with deeper environmental review addressing tribal concerns.

In their August 30, 2022 response to the request for information for mature and old-growth forests as part of the response to the Strengthening Forests executive order, the Great Lakes Indian Fish & Wildlife Commission (GLIFWC) suggests a pause in Fourmile logging to conserve old-growth and the American marten. The American marten is Wisconsin’s only mammal that is state-listed as an endangered species. The marten an Ojibwe clan animal. From “GLIFWC Response to Federal Old-Growth and Mature Forests RFI” (our emphasis):

As an initial matter, it may be appropriate to **pause current planned logging operations in areas that may contain old-growth** until the inventory contemplated by the President’s Executive Order can be completed. We understand that **one such area may be Fourmile Vegetation Project** within the Chequamegon-Nicolet National Forest, Eagle River-Florence Ranger District, but certainly there are others. The **Four Mile area is one of two small areas in Wisconsin in which the American marten lives**. Waabesheshi (marten in Ojibwe) is a tribal clan animal that is classified as Endangered in Wisconsin and relies on forests with old growth characteristics.

<sup>10</sup> [United States Forest Service – Climate Risk Viewer \(Beta 0.2.0\) – Mature and Old-Grow](https://experience.arcgis.com/experience/37cb7e33db6949c79f1f87f87968e51a), USDA Forest Service; U.S. Department of Agriculture (Aug. 10, 2023).

<sup>11</sup> The White House, Executive Order on Tackling the Climate Crisis at Home and Abroad (2021), <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/> (accessed Aug. 10, 2023).

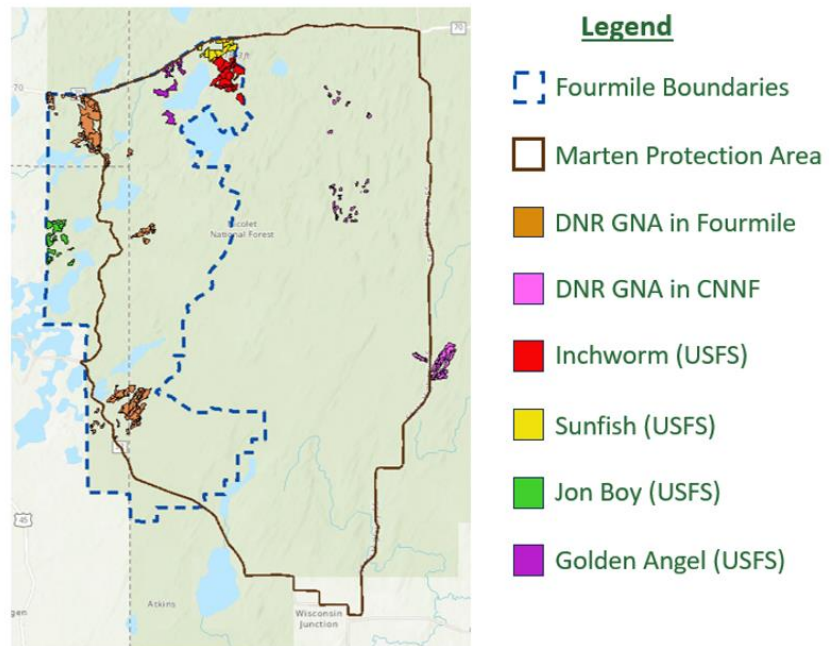
<sup>12</sup> The White House, Memorandum on Tribal Consultation and Strengthening Nation-to-Nation Relationships (2021), <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/26/memorandum-on-tribal-consultation-and-strengthening-nation-to-nation-relationships/> (accessed Aug. 10, 2023).

The GLIFWC statement, itself, is a significant new circumstance addressing new policy for climate, biodiversity, and tribal relations.

The Fourmile area intersects with a Marten Protection Area designated by the Wisconsin Department of Natural Resources (WDNR) for the protection of the American Marten, as well as the marten reintroduction zone on the Nicolet side of the CNNF.

The Fourmile record does not even mention the Marten Protection Area. By their own estimates, over 41% of suitable marten habitat in the project area will be logged during project implementation. Of the aspen/mixed aspen stands that are suitable for marten in the project area, 86% will be logged within the 10-year cycle while 376 of 529 acres of suitable birch stands in the project area would be logged. These aspen/mixed aspen and birch stands will be unsuitable for marten for 50 years, according to their own Biological Evaluation<sup>13</sup>.

**Fourmile Timber Sales and Marten Protection Area**



### ***New Evidence: Limited Need for Fourmile Timber***

According to USFS timber sale data, 85% of current Fourmile timber sales are expected to serve pulp markets.

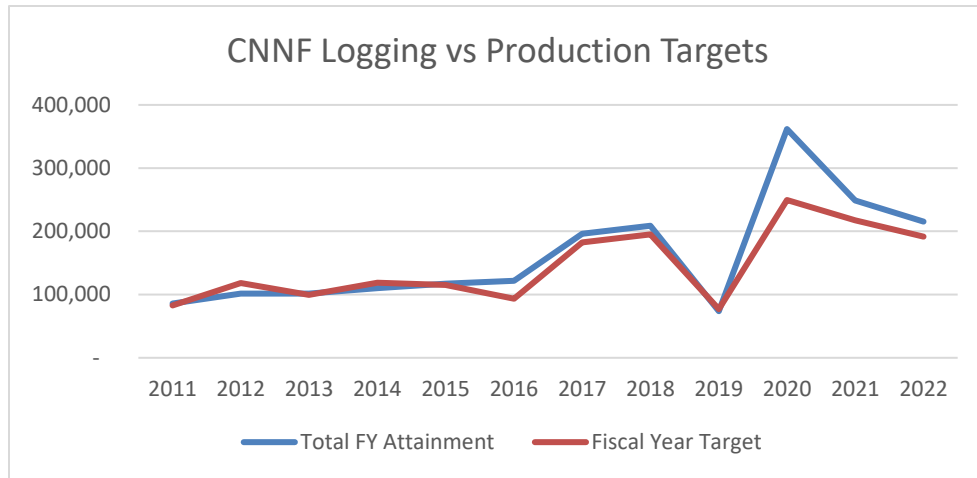
<b>Timber Sale</b>	<b>Total Volume CCF</b>	<b>Percent Pulp</b>	<b>Percent of 2022 Production Target</b>
Golden Angel	3,100	71%	1.6%
Inchworm	5,800	86%	3.0%
Jon Boy	3,550	87%	1.9%
Sunfish	3,535	93%	1.8%
<b>Grand Total</b>	<b>15,985</b>	<b>85%</b>	<b>8.3%</b>
<b>FY2022 Timber Production Target (CCF)</b>	<b>191,590</b>		

The reconsideration decision addresses whether to prioritize confronting climate change and protecting biodiversity, or to harvest mature forests to serve pulp markets. In Fourmile decision-making, to date, the USFS has prioritized serving timber markets over other forest uses. These include decisions to put timber sales out for bid even after significant policy changes.

Post-pandemic, the CNNF is being logged well above agency targets, further indicating the lack of pressing need to log mature forests to meet agency performance goals. It does not appear that a decision to pause logging Fourmile tracts would incur hardship on markets or USFS performance goals. The pressing need to

<sup>13</sup> *Biological Evaluation Resource Report, Fourmile Management Project*, Eagle River-Florence RD, Chequamegon-Nicolet National Forest, March, 2020

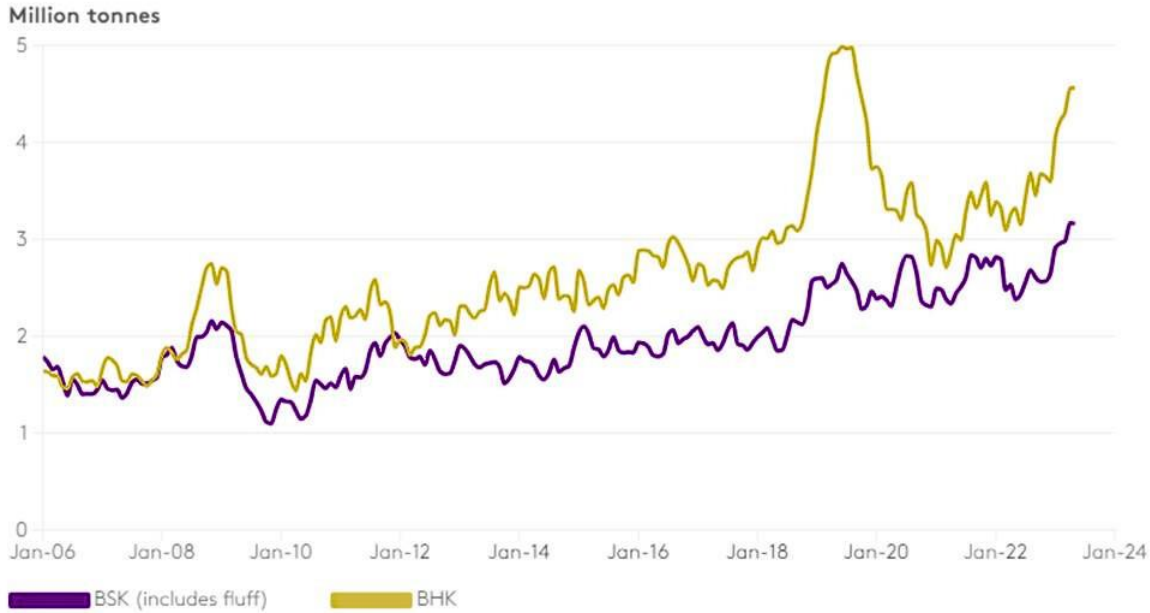
log these forests is neither explained nor evident. Can the Forest Service find other stands to log to serve the pulp industry?



Like all markets, pulp markets have fluctuated during and after the COVID-19 pandemic and may fluctuate again. But the current market is reported by industry sources to have record inventory volumes and tumbling prices.

### Pulp producer inventories are on the rise again since the start of 2023

World 20 producer inventory volumes for BHK and BSK



14

<sup>14</sup> Patrick Cavanagh, [Global market pulp outlook: Key pulp price drivers to watch in 2023 and 2024](https://www.fastmarkets.com/insights/global-market-pulp-outlook-six-pulp-price-drivers-2023), Fastmarkets (July 20, 2023), <https://www.fastmarkets.com/insights/global-market-pulp-outlook-six-pulp-price-drivers-2023>



## ***New Science: Climate and Mature and Old-Growth Forests***

One week after inauguration, January 27, 2021, President Biden issued the policy-setting memorandum *Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking* calling for “the highest level of integrity in all aspects of executive branch involvement with scientific and technological processes.” It further states “When scientific or technological information is considered in policy decisions, it should be subjected to well-established scientific processes.”<sup>15</sup> The memorandum speaks to the need for high integrity in using science in policy-setting and the harm caused by low-integrity use of science.

The Fourmile environmental review did not meet that standard, because it included only a limited and very selective use of climate science, and does not reflect the more modern research, which concludes that logging, and, in particular, logging mature trees is most likely to decrease a forest’s carbon sink and its carbon sequestration capacity. The review also ignores CNNF-specific research showing that ongoing logging activities have been *decreasing* CNNF’s carbon sequestration capacity, and that allowing more trees to reach older-age classes carries the greatest potential for increasing the forest’s carbon stock.

The limited extent of the climate impact review for Fourmile can be found in Comment Period Responses, page 103, about the need to include climate change in the Environmental Assessment. The response claimed: “In short, the proposed vegetation management actions are not expected to result in an overall net increase in greenhouse gas emissions and the CNNF will continue to act as an overall carbon sink.”<sup>16</sup> Yet no actual analysis was conducted.

The response repeatedly cited outdated science that was more favorable to logging and disregarded more modern findings (which were then available) showing that the wrong logging choices can harm climate mitigation.

For example, in 2019, the Fourmile response repeatedly cited the 2007 Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (AR4). In the process, they omitted the then-most current and best available science from the IPCC Fifth Assessment Report (AR5), released in 2014. They also skipped over the IPCC Special Report on 1.5 in 2018. By not using the most current reports, the review disregarded 12 years of updated climate science regarding forests, climate change, and carbon sinks.

Within these 12 years, several distinctions and new climate science were outlined in both IPCC AR5 and the Special Report on 1.5. This includes:

- Forestry and Other Land Uses (FOLU), as a sector, decreased its emissions largely as a result of decreasing deforestation rates and increasing afforestation (IPCC 2014, WGIII pg. 815).
- The demand for wood products should be supplied through restoration of degraded lands, not through harvesting timber from an existing primary forest with a large carbon sink potential (IPCC 2014, WGIII pg. 128).
- “The only major sector that does not display these globally rising trends is AFOLU as a growing number of countries adopt policies that lead to better protection of forests, improved yields in agriculture reduce pressure to convert natural forests to cropland, and other trends allow for a ‘great restoration’ of previously degraded lands.” (IPCC 2014, WGIII pg. 128).

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<sup>15</sup> The White House, Memorandum on Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking (2021), <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/memorandum-on-restoring-trust-in-government-through-scientific-integrity-and-evidence-based-policymaking/> (accessed Aug. 10, 2023).

<sup>16</sup> Appendix C - 30 Day Comments and Responses, Public Scoping Responses Received During the 30-Day Notice and Comment Period, Fourmile Project, Eagle River-Florence RD, Chequamegon-Nicolet National Forest, March, 2020, 103.

- To reach the goal of limiting global warming to 1.5 degrees C, modelled pathways show the need to preserve forests for their important carbon sink and storage ability (IPCC 2018, Summary for Policymakers pg. 16).

Further, the IPCC AR5 report acknowledged the shortcomings of the older report cited in the environmental review. In AR5 they created a separate chapter for the agriculture, forestry and other land uses (AFOLU) sector, which the Fourmile review ignored. (IPCC 2014, WGIII pg. 818). By using the outdated IPCC AR4 report, the USFS omitted the shortcomings acknowledged by authors.

The environmental review omitted other considerations in the same report related to deforestation and uncertainty of science at the time. These ignored reports show a significant difference in climate science and mitigation strategies in terms of timber, logging, and forests. Importantly, *the sentence the USFS cited in their response is no longer in these updated reports.*

The IPCC AR5 report emphasized the need for protection of forests, decreasing deforestation, conserving diverse ecosystems, and restoring previously degraded lands. This includes the need to slow deforestation and the demonstrated success from forest protection.

In 2021, the IPCC released their Sixth Assessment Report (AR6) showing further evidence and confidence that, “land-use change [as a source of GHG emissions] is driven amongst others by agriculture, forestry (logging and fuelwood harvesting), infrastructural development and urbanisation (IPBES 2019a).” (IPCC 2021, pg. 827). This report is a significant new circumstance that shows the best available science for climate, biodiversity, and forestry.

The CNNF cited a 2006 study by White, Gower, and Ahl<sup>17</sup> to argue, “even with current harvest levels, the CNNF is acting as an overall carbon sink. This means that more carbon (or carbon dioxide) is stored than is emitted on the CNNF.” However, this study is based on research done between 2001 through 2003 within CNNF, skipping sixteen years of science in an active field. USFS used this 2006 report ***despite there being other, more recent peer-reviewed studies*** on CNNF with different results. Specifically, a 2012 paper by one of the same authors from the 2006 study contradicted the conclusions published in Fourmile review. It shows that while the forest system as a whole is still a sink, increased harvest of biomass decreases the overall forest carbon balance (Peckham and Gower 2012)<sup>18</sup>.

A 2009 paper focusing on CNNF showed that disturbances such as harvesting can reduce the carbon storage potential of mature and old-growth forests and that it can take hundreds of years for ecosystems to recover to their original carbon storage after a major disturbance (Tang et al. 2009)<sup>19</sup>. It further finds that ecosystems lose soil carbon if old-growth forests are harvested or converted to young forests.

The Fourmile review omitted conclusions from a 2014 Forest Service study of CNNF and northern Wisconsin forests by the USFS Northern Research Station, by Birdsey et al.<sup>20</sup> environmental review

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<sup>17</sup> Molly K. White, Stith T. Gower, Douglas E. Ahl, Life cycle inventories of roundwood production in northern Wisconsin: Inputs into an industrial forest carbon budget, 219, FOREST ECOLOGY AND MANAGEMENT, 13, (Nov. 2005) [https://www.sciencedirect.com/science/article/abs/pii/S0378112705005049?casa\\_token=keioWPbdasAAAAA:y-gtIqk4J6gM3c6KjZ4N14KtRpV-ALePosY2AHfl3H\\_ULaM23wGKR98qNRQFOrb48TQVbhRg#aep-section-id27](https://www.sciencedirect.com/science/article/abs/pii/S0378112705005049?casa_token=keioWPbdasAAAAA:y-gtIqk4J6gM3c6KjZ4N14KtRpV-ALePosY2AHfl3H_ULaM23wGKR98qNRQFOrb48TQVbhRg#aep-section-id27)

<sup>18</sup> Scott D. Peckham, Stith T. Gower, Simulating the effects of harvest and biofuel production on the forest system carbon balance of the Midwest, USA, 5, GCB BIOENERGY, 431 (Dec. 31, 2012) <https://onlinelibrary.wiley.com/doi/full/10.1111/gcbb.12033#gcbb12033-bib-0002>

<sup>19</sup> Jianwu Tang, Paul V. Bolstad, Jonathan G. Martin, Soil carbon fluxes and stocks in a Great Lakes forest chronosequence, 15, GLOBAL CHANGE BIOLOGY, 145 (Jan. 8, 2009) <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1365-2486.2008.01741.x>

<sup>20</sup> Richard Birdsey, et al, Past and Prospective Carbon Stocks in Forests of Northern Wisconsin: a Report from the Chequamegon-Nicolet National Forest Climate Change Response Framework, U.S. Department of Agriculture, Forest Service (2014), pp 1-2,25, [https://www.fs.usda.gov/nrs/pubs/gtr/gtr\\_nrs127.pdf](https://www.fs.usda.gov/nrs/pubs/gtr/gtr_nrs127.pdf)

mentioned the Birdsey et al. study, but it ignored the report's important findings on reduced carbon sequestration due to logging mature trees and stands:

- “Likely causes for the declining sequestration rate are **continuing high rates of harvesting for wood products, which result in large areas of forest recovering from intensive disturbance**”
- “For all forest types in northern Wisconsin, **there is potential to increase (carbon) stocking by allowing more of the forest area to reach older age classes.**”
- “Increasing the interval between harvests...can increase overall carbon storage. **The no-management scenario had significantly higher mean carbon stocks than all other scenarios.**”

## ***New Circumstances: Precedent***

There is, of course, ample precedent for the Forest Service to supplement environmental review documents in response to new evidence, new science, *and* new policy. Just a few months ago, the McKenzie River Ranger District of the Willamette National Forest reopened the “Flat Country” vegetation management project and environmental review based on the same forest and climate policy changes outlined in this letter—on Executive Orders 13990, 14008, and 14072, as well as USDA secretarial memorandum 1077-04 on climate resilience and carbon stewardship of America’s national forests and grasslands.

As in this case, the Flat Country environmental review contained no analysis of atmospheric carbon pollution impacts from project logging plans, opting instead for short and generic discussions about climate change and forests. As in this case, the Flat Country Record of Decision was handed down just before the new Administration took office (January 19, 2021). Both projects defined mature trees as a problem to be solved with logging, without any specific accounting for the effects of carbon stores and annual carbon sequestration capacity. And both projects involved negative effects on threatened or endangered species.

Even more recently, the U.S. District Court for the District of Montana vacated the Black Ram vegetation management project in the Three Rivers Ranger District of the Kootenai National Forest in the northwest corner of Montana. *Center for Biological Diversity v. U.S. Forest Service*, 2023 WL 5310633 (D. Mont. Aug. 17, 2023). Again, as in this case, the environmental review for the project discussed carbon impacts generally and concluded that they would be minor. But the Court found that that was not adequate. *Id.* at \*8-10. As the court put it, using “cookie-cutter and boilerplate” generic language about forest carbon impacts is not “the high quality and accurate information which NEPA requires.” *Id.* at 10.

Likewise, blanket claims that the short-term loss of carbon from logging would be outweighed by the net increase of carbon sequestration resulting from a healthier forest have to be “backed up by a scientific explanation.” *Id.* The Montana court adopted the holding of the Ninth Circuit in *350 Mont. v. Haaland*, 50 F.4th 1254 (9th Cir. 2022), that “[w]ithout some articulated criteria for significance in terms of contribution to global warming that is grounded in the record and available scientific evidence,” an agency’s conclusion that a project’s carbon impacts will be “minor” is insufficient. *Id.* at 1266. Agencies are required to determine “the extent to which this particular project’s [carbon emissions] will add to the severe impacts of climate change.” *Id.*

It may be tempting to simply dismiss all post-2020 or even post-2007 developments in law, policy, or science as irrelevant to the Fourmile project or any of the timber sales it may authorize. USFS’s role and responsibility is not limited to assessing whether a project meets the requirements of the most recent Forest Plan, which, in CNNF’s case, dates back to 2004. That is not sufficient. USFS has a continuing obligation to measure its decisions against new evidence and changed circumstances and, of course, forest managers have an obligation to implement policy changes from the White House and headquarters in Washington as best they can.

In circumstances like these, where the need for the timber is marginal, but the changes in policy and science are significant, it is incumbent on those who manage our National Forests to hold decisions that are still

being implemented up to scrutiny and, if further review is needed, to halt those projects until that review is completed.

## **Conclusion**

The timber sales and subsequent logging are major federal actions that will have impacts on our climate and biodiversity not considered in Fourmile project planning. Before proceeding, the Forest Service has an obligation to prepare a supplemental environmental impact statement to measure Fourmile actions against the new policies enacted for climate action, biodiversity, and improved tribal consultation and to make a new decision on the Fourmile project.

With a reconsideration and supplemental review under current policy, the Fourmile project could no longer be considered “grandfathered.” The use of outdated climate science was a form of grandfathering in the scientific sense and could, also, be replaced based on modern science.

The reconsideration and review require a pause in logging, but there is no apparent emergency for serving pulp markets. Instead, as President Biden said, the urgency is in confronting climate change. By reconsidering and protecting mature and old growth forests, you would be respecting the instructions from the President to act boldly to confront climate change.

Once these trees are logged, we lose the option to protect these mature forests and lose their carbon stores for decades or centuries, even as the perils of climate change become more obvious and pressing. You can act now to correct course and we hope you will choose to reconsider and protect mature and old-growth trees in the Fourmile project area.

We hope to discuss these matters further with you. In the scoping comment we previously submitted for the Kidrick project, we outlined in greater detail how CNNF can better address climate, mature and old growth forests, and the developing science, and we believe those recommendations would apply to a further review of the Fourmile project as well. To follow up you may contact Andy Olsen, ELPC Senior Policy Advocate at 608-334-1456 or [A Olsen@elpc.org](mailto:A Olsen@elpc.org).

Respectfully submitted,

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Environmental Law & Policy Center

### Cosigners:

350 Milwaukee  
Black Hills Sierra Group  
Center for Biological Diversity  
Climate Reality Project, Portland OR Chapter  
Earth Ethics, Inc.  
Environment America / Wisconsin Environment  
EPIC- Environmental Protection Information  
Center  
Forest Keeper  
Gallatin Wildlife Association  
Green Cove Defense Committee  
Massachusetts Forest Watch  
Midwest Environmental Advocates  
Milwaukee RON group  
NAOMI Environmental Task Force

Natural Resources Defense Council  
Northeastern Wisconsin Audubon Society  
Northwest Montana Great Old Broads for  
Wilderness  
Old-Growth Forest Network  
Oregon Wild  
Sierra Club  
Sierra Club - Wisconsin Chapter  
Sierra Club Hoosier Chapter  
Standing Trees  
The Forest Advocate  
Umpqua Natural Leadership Science Hub  
Wild Heritage  
Wisconsin Mining Impact Coalition  
Yaak Valley Forest Council

## Timeline of Forest-Climate Science Cited or Skipped

Science	Year	Study	Comments
Cited	2006	<i>Life cycle inventories of roundwood production in northern Wisconsin: Inputs into an industrial forest carbon budget</i>	Cited in 2019 Fourmile Review. Based on research in 2001-2003, it stated the CNNF is a carbon sink given current harvest levels.
	2007	IPCC Fourth Assessment Report	Cited in 2019 Fourmile Review.
	2014	Birdsey, et al, <i>Past and prospective carbon stocks in forests of northern Wisconsin: a report from the CNNF Climate Change Response Framework</i>	Selectively cited in Fourmile review, main conclusions omitted.  Ignored conclusions that declining carbon sequestration is due to high harvesting rates and no-management scenarios had significantly higher carbon stocks.
	2017	Executive Order 13783 (Promoting Energy Independence and Economic Growth)	Cited as the reason USFS is not “required to address the effects of individual projects on climate change, such as a logging sale.”
Skipped	2009	<a href="#">Tang et al.</a> <i>Soil carbon fluxes and stocks in a Great Lakes forest chronosequence</i>	Measured carbon storage potential of old-growth forests in the soil and found logging reduces storage. It further found that it may take hundreds of years for ecosystems to recover to their original carbon storage after a major disturbance, such as harvest. It also finds ecosystems will lose soil carbon if old-growth forests are harvested or converted to young forests.
	2012	<a href="#">Peckham and Gower.</a> <i>Simulating the effects of harvest and biofuel production on the forest system carbon balance of the Midwest, USA</i>	This paper shows that while the forest system as a whole is still a sink, increased harvest of biomass decreases the overall forest carbon balance.
	2014	IPCC Fifth Assessment Report	States that demand for wood products should be supplied through restoration of degraded lands, not through harvesting primary forests.
	2018	IPCC Special Report on 1.5	States importance of preserving forests due to their carbon sink <b>and</b> storage.
	2020	Wisconsin’s Draft Forest Action Plan 2020 (“Wisconsin Plan”)	Shows that WI increasingly lacks older, mature forests. There are 1.9 million and 2.5 million acres of 0- to 20-year-old and 21- to 40-year-old forests respectively, while there are fewer than 0.1 million acres of 150+ year-old forests. Forests 100+ years old have had a 24% decline from 1983 to 2017.