

ALASKA RAINFOREST DEFENDERS

Becky Knight, President
Alaska Rainforest Defenders
P.O. Box 6064
Sitka, AK 99835

April 3, 2020

Ted Sandhofer, Responsible Official
Petersburg Ranger District
P.O. Box 1328
Petersburg, Alaska 99833

Submitted electronically at:

<https://cara.ecoystem-management.org/Public//CommentInput?Project=59576>

Ms. Johnson and Mr. Sandhofer:

I submit these comments on behalf of Alaska Rainforest Defenders (“Defenders”) regarding the proposed Wrangell-Petersburg Invasive Plant Management project. Defenders’ members use the Tongass National Forest, including numerous areas in the Petersburg and Wrangell Ranger Districts, for recreation, commercial fisheries, subsistence, wildlife viewing, scientific research, and other activities. Our members would not use areas treated with glyphosate as proposed in this project.

The project would spray herbicides anywhere in a 3.7 million project area, including both wilderness and non-wilderness lands, with no annual treatment limit. The Forest Service would use three herbicides, including a carcinogenic, non-selective herbicide, glyphosate. Forest workers would spray herbicides in riparian areas, estuaries, on waterbodies, and within 1,000 feet of area that provide public water supply, exposing the environment to harmful chemicals and themselves to significant cancer risks.

We have serious concerns about this project - and the project timeline and planned opportunities for public participation. The scoping letter indicates that the Forest Service would abbreviate the NEPA process by combining scoping and a 30-day comment period for a draft EA. The two previous Tongass National Forest weed management NEPA processes have allowed for two public comment periods prior to the release of a draft decision.

This project would spray an identified carcinogenic chemical – glyphosate - around campgrounds, trails, and other community use areas, in federally designated Wilderness and anadromous streams. The abbreviated NEPA process is unconscionable. The proposed procedure eliminates any additional comment period prior to releasing the draft decision. The Forest Service should refrain from

circumventing the NEPA process. In addition to its broad requirement to provide for public input, NEPA requires the agency to make a FONSI available for public comment prior to a final decision when the proposed action is similar to one which normally requires an EIS.¹

I. Introduction

The proposed Wrangell-Petersburg Invasive Plant Management would authorize spraying herbicides over an estimated 5,811 gross acres of designated Wilderness and non-Wilderness lands and federal and non-federal lands. The scoping letter does not identify specific treatment within the 3.7 million acre project area and indicates that the Forest Service neither knows nor intends to disclose the locations of treatment sites or treatment methods until after finalizing a decision on this project. Sites could include rock quarries, trails, roads, campgrounds or other areas used by the public. Treatments could include a combination of manual, mechanical and herbicide treatments. Herbicides include aquatic formulations of glyphosate, imazapyr and aminopyralid, applied by broadcast spray, spot spray and other methods. Spraying would occur directly over water.

We request that you rescope this project and instead plan to prepare an EIS. There are substantial questions about the environmental impacts associated with glyphosate. In 2015, the International Agency for Research on Cancer identified glyphosate as a human carcinogen and likely cause of non-Hodgkins lymphoma. The International Agency for Research on Cancer's monograph also identified carcinogenic impacts on animals and other adverse effects to fish. Other recent studies have identified effects to insects and amphibians. We request that a full DEIS review these effects to humans and other species. Also, glyphosate is a non-selective herbicide and kills native plants that may not be able to recolonize habitat once eradicated due to competitive disadvantages relative to other plant species.

The DEIS should also disclose proposed treatment sites. The scoping letter proposes to prepare a post-decisional annual treatment plan rather than disclose locations, target invasive species and specific herbicide choice and application method. There would be no limits on the acreage affected. This approach violates NEPA's requirement that environmental analyses provide sufficient specificity to insure informed decisionmaking and meaningful public participation.

We also ask that you develop a broader range of alternatives, including alternatives that rely exclusively on mechanical or hand treatment methods. There also needs to be an alternative that address prevention accompanied by analysis of the causes of invasive weed infestations. Finally, we request that you refrain from spraying herbicides in federally designated Wilderness areas and at a minimum provide the public with the opportunity to review any analysis produced that purports to authorize spraying chemicals in these areas.

¹ 40 C.F.R. §1501.4(e)(2)(i)

II. The Forest Service should re-scope this project and prepare an EIS

We request that you restart the scoping process and publish a Notice of Intent to prepare a full EIS prior to any further planning on the project. The proposed action allows for unlimited herbicide application throughout two ranger districts, including in federally designated Wilderness areas. The plan to use an EA to analyze herbicide spraying over a large area appears to be unusual.²

NEPA requires federal agencies to analyze the foreseeable environmental impacts, including direct, indirect, and cumulative impacts, of “major Federal actions.”³ If the action *may* cause degradation of some human environmental factor, the agency must prepare an EIS.⁴ In other words, the threshold issue for determining whether or not to prepare an EIS is not whether significant effects will in fact occur. Instead, the trigger is if there are substantial questions about whether a project will have a significant effect on the environment.⁵ NEPA also requires that “public information be of ‘high quality’ because ‘[a]ccurate scientific analysis, expert agency comments, and *public scrutiny* are essential to implementing NEPA.”⁶ Even if the Forest Service prepares an EA, the analysis still must disclose contrary scientific opinion and “explain the differences between the Forest Service’s view of likely impacts and the view of others in the scientific community” – specifically, the Forest Service must disclose that leading international cancer researchers disagree with the agency’s belief that glyphosate has low to negligible toxicity.⁷

The determination of a significant effect on the environment requires consideration of “context and intensity.”⁸ The context is the scope of the agency’s action, including affected interests.⁹ Intensity is the degree to which the agency action affects the locale and interests identified in the context part of the inquiry.¹⁰ Intensity requires evaluation of various factors, including “[t]he degree to which the proposed action affects public health or safety[,]” ... “[u]nique characteristics of the

² *Northwest Coalition for Alternatives to Pesticides (NCAP) et al. v. Lyng*, 844 F.2d 588 (9th Cir. 1988); *Blue Mountains Biodiversity Project v. U.S. Forest Service*, 229 F.Supp.2d 1140 (2002).

³ 42 U.S.C. § 4332(2)(C).

⁴ *Idaho Sporting Congress v. Thomas*, 137 F.3d 1146, 1149 (9th Cir. 1998).

Foundation for N. Am. Wild Sheep v. United States Dep’t of Agric., 681 F.2d 1172, 1178-79 (9th Cir. 1982)(emphasis added); *see also Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1212 (9th Cir. 1998)(the “substantial question standard does not require a showing ‘that significant effects will in fact occur’”).

⁵ *Idaho Sporting Congress v. Thomas*, 137 F.3d 1146, 1150 (9th Cir. 1998).

⁶ *Id.* at 1151 (citation omitted; emphasis in original).

⁷ *See, e.g. League of Wilderness Defenders v. Forsgren*, 184 F.Supp.2d 1058, 1066 (D. Or. 2002).

⁸ 40 C.F.R. § 1508.27.

⁹ *National Parks & Conservation Ass’n v. Babbitt*, 241 F.3d 222, 731 (9th Cir. 2001).

¹⁰ *Id.*

geographic area, such as ... ecologically critical areas[,]” ... “[t]he degree to which the effects on the quality of the human environment are likely to be highly controversial[,]” ... “[t]he degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks[,] ... “[t]he degree to which the action may establish a precedent for future actions with significant effects[,]” ... “[w]hether the action is related to other actions with individually insignificant but cumulatively significant impacts[,]” and [t]he degree to which the action may adversely affect ... significant cultural resources.”¹¹

A. Glyphosate is a controversial carcinogen

The carcinogenic characteristics of at least one chemical as well as other environmental risks implicate significant public health and safety issues that are sufficiently controversial to trigger an EIS. “Agencies must prepare environmental impact statements whenever a federal action is “controversial,” meaning that there is a substantial question as to whether a project “may cause significant degradation of some human environmental factor” or there is a “substantial dispute [about] the size, nature, or effect” of the action.¹²

In 2015, the International Agency for Research on Cancer, the cancer research arm of the World Health Organization, and “gold standard” in the field of cancer research, completed a review of all published, peer-reviewed data regarding glyphosate.¹³ The International Agency for Research on Cancer declared glyphosate as a probable human carcinogen and identified a positive association for non-Hodgkin lymphoma.

The maker of glyphosate based herbicides, Monsanto, has known about its carcinogenic properties for decades but withheld evidence from the public.¹⁴ NEPA does not permit the Forest Service to rely on other agency analyses identifying glyphosate as safe, particularly findings influenced by Monsanto. Also, agencies planning projects which could cause human exposure to herbicides must conduct a worst-case analysis.¹⁵

A growing number of countries, as well as dozens of cities in the United States, have restricted or outright banned products containing glyphosate.¹⁶ Thousands of

¹¹ 40 C.F.R. § 1508.27(b). The action appears to establish a precedent by authorizing large scale herbicide treatments under an EA with no site-specific analysis. The action threatens cultural resources because herbicides enter the food chain, affecting subsistence. The Forest Service should hold subsistence hearings and initiate consultation with the Organized Village of Kake and other affected Alaska Natives.

¹² *National Parks & Conservation Ass’n*, 241 F.3d at 736; 40 C.F.R. §1508.27(b)(4).

¹³ International Agency for Research on Cancer, World Health Organization. 2017. IARC Monographs on the evaluation of carcinogenic risks to humans. Some organophosphate insecticides and herbicides Volume 112. Lyon, France. Available at: <https://publications.iarc.fr/549>

¹⁴ <https://www.baumhedlundlaw.com/toxic-tort-law/monsanto-roundup-lawsuit/>

¹⁵ *Id.*

¹⁶ [Which Countries and U.S. States are Banning Roundup?](http://www.carlsonattorneys.com/which-countries-and-u-s-states-are-banning-roundup/) (carlsonattorneys.com)

Americans have contracted non-Hodgkin's lymphoma because of exposure to glyphosate.¹⁷ Most of the studies of occupational exposure to glyphosate include agricultural workers involved in farming or forestry such as potential victims of this proposal. Exposure of the general population occurs mainly through diet which is a significant concern in Southeast Alaska due to the significant proportion of wild food harvests by community residents. Courts have disagreed with the Forest Service's characterization of glyphosate as safe and instead agreed with International Agency for Research on Cancer's findings and required Monsanto to pay out millions of dollars in damages to victims of exposure to glyphosate.¹⁸

B. Glyphosate spraying entails other unknown and cumulative risks to numerous forest values

The International Agency for Research on Cancer's monograph explains that "[g]lyphosate is a broad-spectrum, post-emergent, non-selective, systemic herbicide, which effectively kills or suppresses all plant types, including grasses, perennials, vines, shrubs and trees." The International Agency for Research on Cancer's 2015 monograph found that glyphosate:

- penetrates soil, air, surface waters, groundwater and food
- breaks down in soil but does not break down in water
- enters surface waters not just through direct application but also through atmospheric deposition and run-off
- is detectable in tested fruits and vegetables
- has immunosuppressive effects on studies fish species, meaning that it reduces their ability to fight infections and diseases
- is carcinogenic for animals.

Other summary reviews of scientific studies show that:¹⁹

- Glyphosate taken in by plants moves to the part of the plant used for food, such as wild blueberries.
- Juvenile fish are up to four times more susceptible to toxicity associated with glyphosate. Vegetation killed by glyphosate also increases stream temperature, which results in a corresponding increase in toxicity to fish such as juvenile salmon sensitive to temperature.
- Glyphosate use exacerbates the displacement effect of clearcutting on birds and small mammals.
- Furthermore, the agency needs to re-evaluate the effectiveness of herbicide treatments. According to researchers, "[g]iven the paucity of published information and regular use of non-selective herbicides, there is a critical

¹⁷ <https://www.baumhedlundlaw.com/toxic-tort-law/monsanto-roundup-lawsuit/>

¹⁸ *Id.*

¹⁹ We can provide a reference list or documents supporting these findings.

need for land management agencies to assess non-target effects of the herbicide treatments they are implementing.”²⁰

The prevalent use of glyphosate also raises substantial questions about environmental effects because of its non-selective nature and danger of suppressing non-target native plants. The non-selectivity in turn creates the possibility that non-native plants will quickly recolonize a treated area due to a competitive advantage over native plants killed by glyphosate. Glyphosate effectiveness studies have focused on its effects on the target species over a short period of time, rather than impacts on native plants. The Forest Service also needs to gather additional scientific data regarding impact of the other herbicides, including a discussion of the selectivity of aminopyralid and imazapyr. There were very few studies available regarding those herbicides earlier this decade.

C. Chemical spraying in Wilderness with no limit requires an EIS

The analysis should provide a thorough discussion describing the agency’s rationale for herbicide use in project area Wilderness areas. The Wilderness Act provides that:

Except as otherwise provided in this chapter, each agency administering any area designated as wilderness shall be responsible for preserving the wilderness character of the area and shall so administer such area for such other purposes for which it may have been established as also to preserve its wilderness character. Except as otherwise provided in this chapter, wilderness areas shall be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use.²¹

The weed management plan for northern Tongass ranger districts identified Wilderness areas as ecologically critical areas and admitted that broadcast spraying would have “major” effects on Wilderness character. This project approves use of herbicides that can remain in Wilderness waters and soils for extended periods of time and kill native plants, impairing Wilderness character. Because there are no timber extraction activities in Wilderness area, we would expect that invasive species infestations would be comparatively low relative to timber management areas, and limited to disturbed areas or the fringes of Wilderness areas. The scoping letter even admits that most of the infestations occur in the vicinity of road-based human disturbances. Why spray chemicals in Wilderness areas set aside for pristine, natural qualities?

The scoping letter states that the agency completed a “Minimum Requirements Decision Guide” authorizing herbicide application in Wilderness areas. The Forest Service should include that document in the environmental analysis or at a minimum post it on the project page. NEPA requires more than the mere “inclusion of various references and reports in the administrative record” in light of “NEPA’s two

²⁰ Wagner, V., P.M. Antunes, M. Irvine & C.R. Nelson. 2017. Herbicide usage for invasive non-native plant management in wildland areas of North America. *Journal of Applied Ecology* 54, 198-204. Available at: <https://besjournals.onlinelibrary.wiley.com/doi/full/10.1111/1365-2664.12711>

²¹ 16 U.S.C. § 1133(b).

primary goals: insuring the agency has fully contemplated the environmental effects of its action; and insuring the public has sufficient information to challenge the agency.”²²

III. The environmental analysis must provide site-specific information

Also, the scoping letter provides no site-specific information and indicates that the EA also will not disclose herbicide treatment sites with any specificity. The project’s approach to herbicide spraying across a large area without disclosing locations or specific treatments is troubling and violates NEPA. This approach resembles recent “Landscape Level Analysis” strategies for timber projects. Alaska District Court federal Judge Gleason rejected this approach in March 2020 in *SEACC et al. v. U.S. Forest Service* as a violation of NEPA. Any further analysis should provide greater detail about when and where the public could face exposure to herbicides.

The strategy for this project would defer site-specific determinations about herbicide applications or other treatments for future determination. The EIS for this project must include some type of determination, or estimate of where and when these activities will occur rather than reserving siting decisions for the future.²³ As a federal judge recently reminded the Tongass National Forest, NEPA’s requirement that environmental analyses provide sufficient specificity to insure informed decisionmaking and meaningful public participation requires more detail than proposed in the scoping letter.²⁴

This concern is not mere “flyspecking.” The broad-scale map suggests treatment could occur in the vicinity of community use areas, in watersheds or in areas used for subsistence purposes, including gathering berries or other activities that involve contact with plants. The site-specific information is necessary to assess both ecological and human safety impacts. Without this information, the public will also be unable to review the project as it relates to other impacts such as timber sales that are the likely current and future cause of many infestations. Site-specific information that allows the public to identify where specific activities occur in relation to recognized public values is necessary even if you produce an EA.

IV. The Forest Service needs to expand the Range of Alternatives

The stated project purpose seeks to maintain, improve or restore the natural range of habitat conditions in the project area. The relevant Forest Plan goal is to “reduce, minimize or eliminate the potential for introduction, establishment, spread and impact of invasive species.” The applicable standard and guideline directs the agency to treat priority species infestations and reduce population sizes and/or limit the spread of priority invasive species. The range of alternatives presented to achieve these goals is inadequate.

²² *League of Wilderness Defenders*, 184 F.Supp.2d at 1068 (citing *Idaho Sporting Congress*, 137 F.3d at 1150).

²³ See, e.g. *SEACC et al. v. U.S. Forest Service*. Case No. 1:19-cv-00006-SLG. (D. Alaska 2020).

²⁴ *SEACC et al. v. U.S. Forest Service*. Case No. 1:19-cv-00006-SLG. (D. Alaska 2020).

NEPA imposes an obligation to “[r]igorously explore and objectively evaluate all reasonable alternatives.”²⁵ An agency must “consider such alternatives to the proposed action as may partially or completely meet the proposal’s goal,” meaning that it is reasonable to consider alternatives that meet other objectives.²⁶ A “reasonable” range of alternatives includes alternatives “that are practical or feasible” and not just those alternatives preferred by the agency.²⁷ The key criterion for determining whether a range of alternatives is reasonable is whether the “selection and discussion of alternatives fosters informed decisionmaking and informed public participation.”²⁸ The exploration of alternatives to an agency’s preferred course of action is critical, because “[w]ithout substantive, comparative environmental impact information regarding other possible courses of action, the ability of an EIS to inform agency deliberation and facilitate public involvement would be greatly degraded.”²⁹

The scoping letter identifies only two alternatives. The no-action alternative would allow for existing treatments pursuant to a 2013 decision, which has an annual acreage cap and authorizes the use of herbicides. The proposed action states that “herbicide is the preferred treatment tool” with exceptions for manual or mechanical methods due to specific conditions and public concern – manual methods such as hand pulling, hand tools and barriers (tarps) typically used to treat small infestations, and mowers treat larger, more homogenous infestations.

The Forest Service needs to evaluate a non-herbicide treatment alternative. The Petersburg and Wrangell Ranger Districts included a no-herbicide alternative in 2013 in response to public concerns about glyphosate (and before it was a known carcinogen). The need to consider non-chemical treatments in weed treatment projects has been a NEPA requirement for years out of the agency’s own recognition that herbicide treatments “may have greater potential to pose risks to human health and the environment than other alternatives.”³⁰

NEPA also requires that the agency also develop an alternative addressing how to prevent the spread and reintroduction of invasive plants. In general, prevention and detection are the most effective forms of controlling the spread of invasive plants,

²⁵ 40 C.F.R. § 1502.14(a); see also *Barnes v. U.S. Dep’t. of Transp.*, 655 F.3d 1124, 1131 (9th Cir. 2011)(“Congress created NEPA to protect the environment by requiring that federal agencies carefully weigh environmental considerations and consider potential alternatives to the proposed action before the government launches any major federal action”).

²⁶ *City of New York v. U.S. Dep’t of Transp.*, 715 F.2d 732, 742-742 (2nd Cir. 1981).

²⁷ Council on Environmental Quality (CEQ), Forty Most Asked Questions, Questions 2A and 2B; 40 C.F.R. §§ 1502.14, 1506.2(d); available at <http://ceq.hss.doe.gov/nepa/regs/40/40p3.htm>.

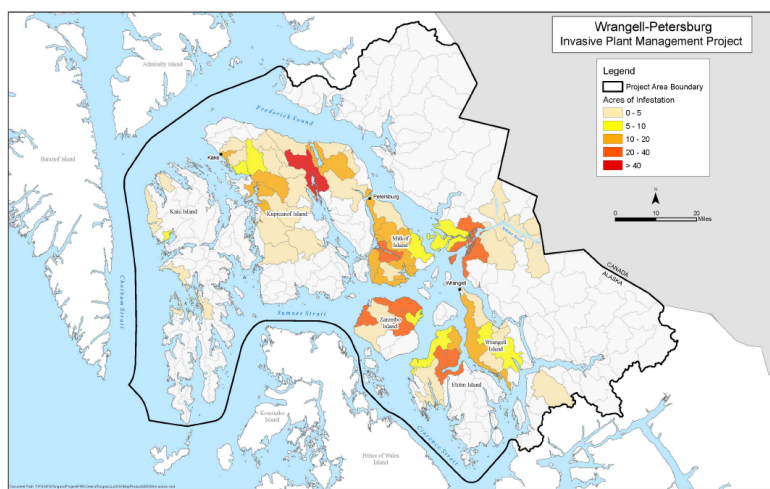
²⁸ *Westlands Water Dist. V. U.S. Dep’t of Interior*, 376 F.3d 853, 872 (9th Cir. 2004)(citations omitted).

²⁹ *New Mexico ex rel. Richardson*, 565 F.3d 683, 708 (10th Cir. 2009)(citations omitted).

³⁰ *Blue Mountains Biodiversity Project v. U.S. Forest Service*, 229 F.Supp.2d 1140 (2002)

meaning that herbicides should usually be a last resort.³¹ The need to include an alternative identifying preventative measures that eliminate a major source of the problem is compelling and reasonable because it would also meet applicable Forest Plan goals and guidelines for this project: “reduce, minimize or eliminate the *potential for introduction, establishment, [and] spread* ... of invasive species and “*limit*” the spread of priority invasive species. Given these goals, the Forest Service cannot dismiss a prevention alternative simply because it does not control existing weeds.³²

A prevention alternative is essential to the analysis both because it is necessary to meet NEPA’s hard look requirement and because prevention is a key component of the project’s goal. As explained by federal courts reviewing herbicide treatments, “weed control – an explicit part of the [agency]’s purpose – is impossible without acknowledging significant sources of weed introduction.”³³



Many of the areas where there are large invasive species infestations correspond with the intensity of timber extraction activities across the landscape. This means that whatever mitigation measures or contract provisions applied to timber operators are ineffective, unenforced or both. The prevention alternative should include: (1) evaluation of a Forest Plan Amendment that reduces the amount of land deemed suitable for timber production in the Petersburg and Wrangell Ranger

Districts; (2) more stringent and enforceable provisions for timber operators or (3) timber contract modifications that impose post-project treatment costs on timber sale purchasers as well as assumption of liability for exposed forestry workers or members of the public exposed to glyphosate so that taxpayers do not have to incur the additional cost of tort liabilities.

V. Conclusion: Cancel action

Defenders also notes that Monsanto (now Bayer) is working on a replacement chemical for glyphosate. The Forest Service should defer any glyphosate use pending the potential availability of less harmful herbicides, and ideally new species specific

³¹ Wagner, V., P.M. Antunes, M. Irvine & C.R. Nelson. 2017. Herbicide usage for invasive non-native plant management in wildland areas of North America. *Journal of Applied Ecology* 54, 198-204.

³² *Blue Mountains Biodiversity Project v. U.S. Forest Service*, 229 F.Supp.2d 1140 (2002)

³³ *Blue Mountains Biodiversity Project v. U.S. Forest Service*, 229 F.Supp.2d 1140 (2002)(rejecting the Forest Service’s argument that preventing the spread of noxious weeds was outside the project scope or best deferred until some other time).

herbicides that may be safer and more effective than those used for this project. Also, municipalities and some other land managing agencies that have not banned glyphosate outright have regulated it as a measure of “last resort” – after all other options have failed. The Forest Service could consider such an approach. Finally, the DEIS should discuss displacement effects. Many Petersburg and Wrangell residents stop using local areas sprayed with glyphosate and the project as proposed could impact numerous community use areas. This avoidance behavior has been documented in other areas. We understand the Forest Service denies its carcinogenic characteristics, but many community residents are aware of the Monsanto lawsuits, and even know individuals who have contracted non-Hodgkins lymphoma after exposure to glyphosate. The agency should develop multiple means of warning the public if you proceed with this action.

Defenders requests that you change course on this project.

A handwritten signature in cursive script that reads "Becky Knight".

Becky Knight, President