

Questions on H.R. 200

1. How will the Cottonwood decision affect the Forest Service's ability to execute the 10 year "Confronting the Wildfire Crisis" Strategy? How does litigation generally impact the ability of the Forest Service to execute this strategy?

- With the expiration of the initial “safe harbor” provision of the 2018 Omnibus Bill, Forest Service (FS) projects – particularly in the western states within the Ninth Circuit– face greater potential for Cottonwood-related litigation where projects could be stalled or halted altogether. We estimate new listings or critical habitat designations have occurred in 134 of the 250 highest-risk fireheds under the Wildfire Crisis Strategy. Cottonwood type litigation could stall or halt our work to reduce the risk of wildfire to communities, infrastructure, watersheds and other resources in these areas. One component of the dialogue surrounding the enactment of the 2018 Omnibus provision was the desire to see more timely updates of Forest Service plans that address threats to endangered species. While the Forest Service is working diligently to update our Land Management Plans, additional funding and capacity will be required to meet the forest plan completion goals that Congress outlined in the National Forest Management Act of 1976 and that many Forest Service stakeholders also seek, while still supporting other aspects of our multiple use mandate.

2. Why aren't BLM Resource Management Plans (RMPs) subject to the same re-initiation of consultation requirements as forest plans?

- In 2018, Congress through the Omnibus Appropriations Act enacted permanent legislation that excluded any land use plans for Oregon and California Railroad revested lands and Coos Bay Wagon Road reconveyed lands from any requirements for reinitiation of consultation. The Secretaries of the Interior and Commerce subsequently revised the Joint Interagency Consultations regulations in 2019 to extend that relief from reinitiation to all BLM RMPs. However, in contrast to the relief provided for BLM RMPs, the 2018 Act conditioned the relief for Forest Service plans such that, after March 2023, some plans remain subject to reinitiation requirements.
- Based on the Supreme Court’s decision in Norton v. SUWA, the Bureau of Land Management (BLM) and the Forest Service concluded that the agencies were are not required to reinitiate consultation on completed RMPs. See 2008 BLM Manual. Notably, neither agency has regarded the SUWA decision as negating the requirement to, when appropriate, reinitiate consultation as to ongoing projects with actual ground-disturbing effects.

3. In your written testimony, you explained that in the wake of the expiration of the 2018 partial Cottonwood fix, 87 forest plans across the nation could now potentially be subject to litigation.

a. How long will this re-consultation process take on average for an individual plan and cumulatively for all plans?

- These numbers reflect the time we estimate it would take to work through existing backlog of plans and species.

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- Individual
 - Twelve months with concurrent re-consultation efforts on multiple land management plans.
- Cumulative
 - Ten years

b. How much money will this cost the Forest Service, on average for an individual plan and cumulatively for all plans?

- It is difficult to estimate an average cost per land management plan (LMP) as every LMP is unique. Some factors that impact the cost of re-initiating consultation include the age of the plan, the size of the forest, the number of species/taxa in need of re-initiation, and the specific habitat types involved. Significant technical expertise will be needed to complete these consultations and involves engaging personnel such as biologists, planners, GIS specialists, writer/editors, etc.

The Forest Service has some anecdotal data of cost estimates based on the re-initiation of consultation on designated critical habitat for the Canada Lynx and Bull Trout in 2018. These two programmatic species-based consultations spanned multiple national forests and covered approximately 20 LMPs. Each consultation took about one year to complete with an approximate cost of \$250,000 each. These were both highly complex, wide-ranging species.

If required to re-initiate consultation, the Forest Service expects to follow the Canada Lynx and Bull Trout model, consulting on species across their range. To arrive at an overall cost estimate, we make the following assumptions: Of the 110 taxa in need of re-initiation, roughly 20 could be considered “complex” like the lynx or bull trout, with the remaining 90 species expected to take less time and expense to complete. We roughly estimate that these 90 “less complex” consultations could average \$50,000 per species. We are also adding an additional \$1,500,000 each for 9 LMPs where greater complexity potentially exists resulting in an additional cost. The cumulative cost to fully complete the backlog of consultations could exceed \$23,000,000 with an average estimated cost per plan of \$264,367 based on 87 plans currently identified. The length of time needed includes the number of days required for the regulatory agency to return the Biological Opinion.

4. Does the Forest Service typically have to revise forest plans as a result of re-consultation triggered by Cottonwood-related lawsuits or challenges?

- No, typically forest plan revisions do not occur following re-consultation. The Forest Service re-consulted on plans for the two species involved in the Cottonwood and related litigation – and while those efforts required considerable staff time and effort, neither ultimately resulted in revisions to the underlying land management plan or any other changes to management, because we were already addressing the needs of those two species.

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5. Please provide the following information, broken down by Forest Service region:

a. The number of active lawsuits or notices of intent to file a lawsuit currently pending against the Forest Service.

- The Forest Service currently has approximately 157 active lawsuits challenging plans and projects, with some involving ESA issues.

The Forest Service does not track or maintain a list of all NOIs received by the agency.

b. The number of active lawsuits or notices of intent to file a lawsuit currently pending against the Forest Service against forest management projects.

- The Forest Service currently has approximately 39 active lawsuits challenging vegetation, timber, or salvage projects, and it has 27 active lawsuits challenging Forest Plans.

Region	Active Lawsuits Challenging Vegetation, Timber or Salvage Projects
1	25
2	0
3	0
4	0
5	3
6	6
8	1
9	3
10	1

Region	Active Lawsuits Challenging Forest Plans
1	9
2	4
3	1
4	5
5	0
6	5
8	2
9	0
10	1

- The Forest Service does not track or maintain a list of all NOIs received by the agency.

c. The number of lawsuits filed against the Forest Service annually from 2002-2022.

- The below table shows the approximate number of lawsuits filed annually by Region from calendar year 2003 through 2022.

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Years	Regions									Totals Per Year
	1	2	3	4	5	6	8	9	10	
2003	13	7	3	3	13	14	6	6	3	68
2004	18	8	11	10	11	29	7	4	3	101
2005	9	4	12	9	14	11	3	2	5	69
2006	10	9	5	4	6	12	3	4	0	53
2007	9	3	7	11	5	8	4	5	1	53
2008	14	7	7	8	9	8	5	5	3	66
2009	12	6	8	12	20	8	1	4	2	73
2010	8	1	4	6	6	11	1	4	1	42
2011	9	8	4	8	9	8	4	0	0	50
2012	17	4	7	4	6	9	13	2	0	62
2013	17	1	4	6	8	8	3	0	0	47
2014	6	4	5	7	8	4	0	1	3	38
2015	8	4	3	5	7	5	1	3	1	37
2016	13	1	5	6	6	4	2	3	1	41
2017	21	5	3	5	3	4	3	5	1	50
2018	10	0	4	20	9	3	7	1	1	55
2019	15	7	1	7	20	4	1	0	1	56
2020	14	4	7	8	1	7	1	2	0	44
2021	11	4	4	3	4	12	2	1	3	44
2022	8	5	8	6	5	5	1	2	2	42
Totals Per Region	242	92	112	148	170	174	68	54	31	

d. The number of lawsuits filed against the Forest Service challenging forest management projects annually from 2002-2022.

- The below table shows the approximate number of lawsuits filed annually per Region challenging forest management projects from calendar year 2003 through calendar year 2022.

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Years	Forest Plan Challenges Per Region									Totals Per Year
	1	2	3	4	5	6	8	9	10	
2003	2				1					3
2004										0
2005	2				3					5
2006								1		1
2007			1							1
2008					2					2
2009										0
2010										0
2011						1				1
2012					1					1
2013										0
2014										0
2015	1									1
2016				1						1
2017				3						3
2018										0
2019	4			1						5
2020	1					3			1	5
2021	2	3		2		1				8
2022	2					1	1			4
Totals Per Region	14	3	1	7	7	6	1	1	1	41

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Years	Vegetation, Timber, Salvage Challenges Per Region									Totals Per Year
	1	2	3	4	5	6	8	9	10	
2003	7	3	1	3	6	8	3	5	2	38
2004	11	2	2	2	5	19	3	4	2	50
2005	4		1	2	8	5	1	1	1	23
2006	5	1			1	5			2	9
2007	6	2		3	3	3	2	3	1	23
2008	8			2	4	1		2	3	12
2009	7	2	1		5	1			1	17
2010	4				3	6			1	14
2011	3	1			4	1				6
2012	9			1	2	3				15
2013	7			1	7	2				17
2014	4				5	1			2	8
2015	3	1		1	3				1	6
2016	8				6	4				18
2017	5				1	1			1	8
2018	5		1		3	2	1		1	13
2019	5	1		1	8		1		1	17
2020	7			1	1	2		1		12
2021	6			1	2	8		1		18
2022	2					2				4
Total Per Region	86	10	5	15	71	66	8	12	17	290

e. The number of active lawsuits or notices of intent to file a lawsuit related to Cottonwood currently pending against the Forest Service.

- Currently there are:
 - 8 new information NOIs related to Forest Plans
 - 7 critical habitat NOIs related to Forest Plans
- Under the statute, there is no “expiration date” for a notice of intent to sue, so technically any notice of intent to sue the agency has received that hasn’t resulted in a lawsuit being filed would be a “pending” notice of intent to sue. What isn’t tracked is whether the Forests resolved any alleged violations.
 - Currently there are:
 - 33 new information NOIs related to projects
 - 12 new information NOIs related to Forest Plans

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- 14 have both project specific and programmatic-level claims
 - 8 critical habitat NOIs related to projects
 - 7 critical habitat NOIs related to Forest Plans
 - 2 have both project specific and programmatic-level claims.
- f. The number of forest management projects being challenged by Cottonwood related lawsuits or notices of intent to sue.
- Currently there are:
 - 8 new information NOIs related to Forest Plans
 - 7 critical habitat NOIs related to Forest Plans
- g. The amount of board feet of timber being challenged by active lawsuits or notices of intent to sue.
- The Forest Service does not have this data readily available but would be happy to follow up with you in a briefing to discuss your question further.
- h. The amount of board feet of timber being challenged by Cottonwood-related lawsuits or notices of intent to sue.
- The Forest Service does not have this data readily available but would be happy to follow up with you in a briefing to discuss your question further.
- i. The amount of acres being challenged by active lawsuits or notices of intent to sue.
- The Forest Service does not have this data readily available but would be happy to follow up with you in a briefing to discuss your question further.
- j. The number of acres of designated critical habitat areas that have burned in wildfires since 2015.
- The Forest Service does not have this data readily available but would be happy to follow up with you in a briefing to discuss your question further.
- k. The number of acres of Canada Lynx critical habitat that have burned since 2015.
- Approximately 1 million acres of the 26.6 million acres of Canada Lynx Critical Habitat were found within burned area perimeters between 2015 and 2021. It should be noted that not all these lands were managed by the Forest Service but include lands managed by Department of the Interior and states.
- l. The number of acres that have burned as a result of wildfire within the Ninth Circuit since 2015.
- Based on annual state summaries (2015 to 2022) from the National Interagency Fire Center, a total of approximately 16,446,000 acres were burned on lands managed by the Forest Service within the 9th Circuit.
- m. The number of acres that have burned as a result of wildfire within the Tenth Circuit since 2015.
- Based on annual state summaries (2015 to 2022) from National Interagency Fire Center, a total of approximately 2,916,000 acres were burned on lands managed by the Forest Service within the 10th Circuit.

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6. On average, what is the percentage of court cases does the Forest Service prevail in or move forward with substantially similar actions?

- The Forest Service does not have this data readily available but would be happy to follow up with you in a briefing to discuss your question further.

7. Of the forest management projects litigated under Cottonwood, how many did the Forest Service prevail in or move forward with substantially the same actions following required consultation?

- Since the passage of the 2018 Omnibus Bill the Forest Service has not been litigated at the plan level due to failure to re-consult due to new listings or designation under ESA.
- Regarding challenges that pre-dated the 2018 Omnibus, please see the answer to 5(e) for those considered to be still active.
- Case decisions are rarely straightforward and may involve partial win/partial loss/settlement on various claims. It would take time to research the outcome of each case and the management actions that followed. We would be happy to follow up with a briefing to discuss this question.

8. How many forest management projects have been litigated or had a notice of intent to sue filed on NFS land in the Ninth Circuit since the Cottonwood decision in 2015?

- Clarification is needed for this question to ensure we understand its intent. We are unsure if the question is asking us to determine how many suits/NOIs have occurred within the 11 states/territories that makeup the jurisdiction of the Ninth Circuit Court, or asking us to determine the number of cases that have been appealed to the Ninth Circuit Court? It would take considerable time to research a response. We would be happy to follow up with you in a briefing to discuss your question.

9. How many forest management projects have been litigated or had a notice of intent to sue filed on NFS land in the Tenth Circuit since the Cottonwood decision in 2015?

- Clarification is needed for this question, along the same lines as for the question above. The 10th Circuit has six states under its jurisdiction. It would take considerable time to research a response. We would be happy to follow up with you in a briefing to discuss your question.

10. In your testimony you explain that land management plans provide general management direction for an entire national forest or grassland. These guidelines are then integrated into projects, which you emphasize "normally requires a second decision and ESA consultation to dictate what on-the-ground actions can be taken." Can you share all the different types of on-the-ground projects that normally require ESA consultation?

- A land management plan (LMP) contains plan components which serve as the framework to which all future projects must adhere and be consistent. An LMP generally does not authorize any activity or commit the Forest Service to any particular action. On-the-ground projects that would require their own ESA consultation are activities such as, but not limited to: pipeline construction; timber harvest; solar or wind projects; habitat or stream restoration; etc. Upon a new listing or designation, the Forest Service reviews all ongoing project activities and no further consultation is required where the Forest Service makes a "no effect" determination, but

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the Forest Service will informally or formally consult if it concludes the project may affect the newly listed species or newly designated critical habitat.

11. In response to questions submitted for the record from an October 21, 2021 Senate Committee on Energy and Natural Resources hearing, you stated that: "In response to the Cottonwood ruling, the Forest Service reconsulted on critical habitat for the Canada Lynx. Forest Service personnel spent an estimated 400 person days valued at approximately \$250,000 over 12 months to complete this re-consultation. "

a. Can you provide an estimate of the total cost and number of person days that are being used by the Forest Service every year to complete all of the required ESA consultation across the agency? Of those consultations, how many are related to the Cottonwood decision?

- Per recent estimates, the Forest Service spends approximately \$16 million a year on ESA related consultations, which includes relevant staff salaries. Because of the 2018 Omnibus "safe harbor" provision, the Forest Service has not been required to re-consult at the plan level because of the Cottonwood decision for the last five years, and it has not been necessary to expend funds based on Cottonwood consultation. However, we estimate that we will spend roughly \$5,000,000 on re-consultation of land management plans based on current accounting.

b. How much money and person days are being spent by the Forest Service annually on NEPA compliance?

- The Forest Service spends approximately \$262¹ million per year on NEPA related analysis.

12. In response to questions submitted for the record from an October 21, 2021 Senate Committee on Energy and natural Resources hearing, you stated that: "The Forest Service has analyzed various approaches to address the upcoming potential consultation workload after March 23, 2023. Our initial analysis estimates that the workload may take 10 years to accomplish and will require multiple millions of dollars per year. For example, for forests just in the Ninth Circuit, the initial required consultations would occur on 187 taxa across 36 national forests."

a. Since your response on October 21, 2021, has the Forest Service completed an updated assessment on the taxa and number of national forests where new consultation would be required after March 23, 2023?

- Yes.

b. Approximately how many taxa covering what number of national forests would require new consultation after March 23, 2023?

- The 2021 response only included species and forests within the 9th Circuit. If that ruling were to be applied nationally, the number of land management plans in all areas of the United States that are > 15 years of age is approximately 87 Forests; but, as additional LMPs continue to age, this figure is expected to grow. Across all these legacy forest plans, it is

¹ The estimate is based on the 2007 Forest Service Feasibility Study, adjusted to current dollars (2023) and number of decisions per year.

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likely that closer to 500 Endangered Species Act protected taxa (and their critical habitats) occur on Forest Service lands.

Questions on H.R. 1473

1. Has the Forest Service conducted an estimate of how much money Mexican drug cartels are making annually as a result of illegal cannabis growth on federal forest lands?
 - The Forest Service has not conducted a formal profitability analysis of annual gains of drug trafficking organizations (DTOs) from illegal cannabis cultivation on National Forest System (NFS) lands.² However, preliminary data from 2019 to 2022 have demonstrated that each cultivation site on NFS lands has an average of about 4,500 cannabis plants. Output, such as the amount of flowering product per plant, has increased due to recent horticultural advances, and the cost per pound of these products has fluctuated. With a conservative estimate of only one pound of product per plant, with plant values ranging from \$188 to \$300, a DTO's estimated gross revenue per cultivation site ranges from \$845,000 to \$1.4 million. Considering a cultivation site costs only \$15,000 to \$30,000 to establish, a DTO's net revenue is estimated at about \$800,000 to \$1.3 million per cultivation site. Therefore, with an estimated footprint of 70 cultivation sites on NFS lands, the minimum overall net revenue from illegal cannabis cultivation on NFS lands may range from \$56 to \$91 million annually.
2. What is the effect of illegal marijuana cultivation on threatened and endangered species and critical habitat?
 - Illegal cannabis cultivation and its direct or indirect impacts on wildlife on NFS lands have been well-documented in scientific literature and reflected in regulatory actions.³ In 2020, the U.S.

² It is estimated that, on average, $\frac{1}{4}$ to $\frac{3}{4}$ pounds of flower product is produced per plant, and both the black market and state-regulated market price per pound is \$750 to \$1,200. (DEA drug threat assessments and ONDCP Annual Reports). Average plant counts were derived from plant count numbers from sites between 2019 to 2022 on NFS lands in several regions. Costs per site used the answer to question 3 of 70 sites established each year. The establishment costs per site are only for infrastructure (pipe, tarps, camping, and tilling equipment) and crop support (pesticide and fertilizer costs). This estimate does not take into account labor and food costs for establishment of a site.

³ Supporting References:

USFWS Fisher Listing DEPARTMENT OF THE INTERIOR Fish and Wildlife Service 50 CFR Part 17 [Docket No. FWS–R8–ES–2018–0105; FF09E21000 FXES11110900000 201]

USFWS CA Spotted Owl DEPARTMENT OF THE INTERIOR Fish and Wildlife Service 50 CFR Part 17 [Docket No. FWS–R8–ES–2022–0166; FF09E21000 FXES1111090FEDR 234]

Gabriel, M. W., Woods, L. W., Poppenga, R., Sweitzer, R. A., Thompson, C., Matthews, S. M., Higley, J. M., Keller, S. M., Purcell, K., Barrett, R. H. and Wengert, G. M., 2012. Anticoagulant rodenticides on our public and community lands: spatial distribution of exposure and poisoning of a rare forest carnivore. *PLoS one*, 7(7), p. e40163.

Gabriel, M. W., Woods, L. W., Wengert, G. M., Stephenson, N., Higley, J. M., Thompson, C., Matthews, S. M., Sweitzer, R. A., Purcell, K., Barrett, R. H. and Keller, S. M., 2015. Patterns of natural and human-caused mortality factors of a rare forest carnivore, the fisher (*Pekania pennanti*) in California. *PLoS One*, 10(11), p. e0140640.

Herring, G., Eagles-Smith, C. A., Wolstenholme, R., Welch, A., West, C. and Rattner, B. A., 2022. Collateral damage: Anticoagulant rodenticides pose threats to California condors. *Environmental Pollution*, 311, p. 119925.

Franklin, A. B., Carlson, P. C., Rex, A., Rockweit, J. T., Garza, D., Culhane, E., Volker, S. F., Dusek, R.J., Shearn-Bochsler, V. I., Gabriel, M. W. and Horak, K. E., 2018. Grass is not always greener: rodenticide exposure of a threatened species near marijuana growing operations. *BMC research notes*, 11, pp. 1-7.

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Department of the Interior, U.S. Fish and Wildlife Service (FWS) listed the Southern Sierra Nevada distinct population segment (DPS) of fisher, a mid-sized forest carnivore related to the wolverine, as endangered under the Endangered Species Act due in part to high rates of exposure from toxicants associated with illegal cannabis cultivation. This population primarily occupies NFS lands. FWS also stated that toxicants from sites were one of the threats that had the greatest potential to become a significant driver for the future of this population. Congruently, in February 2023, FWS proposed to list the Sierra Nevada DPS of the California Spotted Owl as threatened from similar pesticide threats associated with illegal cannabis cultivation. The FWS also highlighted that under the Section 4(d) rule included as part of the proposed listing, actions such as the clean-up of illegal cannabis cultivation sites will benefit the conservation of this species.

Peer-reviewed scientific literature has demonstrated the direct and indirect impacts of illegal cannabis cultivation on NFS lands, including poisoning and exposure to pesticides, to threatened and endangered species such as the endangered Southern Sierra Nevada Fisher in the Southern Sierra Mountains (Gabriel, *et al.*, 2012, 2015), the California Condor (Herring 2022), and the Northern Spotted Owl (Franklin, *et al.*, 2018). In addition, reduced survival rates of the endangered population of female Southern Sierra Nevada DPS of fishers were associated with exposure to pesticides at illegal cannabis cultivation sites in their critical habitat (Thompson, *et al.*, 2014). Documentation of wildlife deaths at illegal cannabis cultivation sites on NFS lands includes listed Sierra Nevada Bighorn Sheep, as well as non-listed species such as golden eagles, black bears, deer, elk, turkey, and quail (Thompson, *et al.*, 2017). Recently, a study highlighted that the presence of illegal pesticides in surface waters in streams below illegal cannabis cultivation sites on NFS lands could pose risks to herpetofauna or listed salmon (Medel, *et al.*, 2022).

Illegal cannabis cultivators have caused several wildfires on NFS lands, which burned over 265,000 acres, including over 23,000 acres of critical habitat (Gabriel 2021). This critical habitat supports the listed Arroyo Toad, the California Red-Legged Frog, and the Northern Spotted Owl. The 2020 California Dolan fire alone in the Los Padres National Forest, which was started by an illegal cannabis cultivator, burned close to 125,000 acres of NFS lands and killed 11 California Condors.

Most empirical scientific data on wildlife impacts from illegal cannabis cultivation on NFS lands originate from the western United States. Data from other NFS lands throughout the country are unavailable. However, many illegal cannabis cultivation sites on NFS lands in other parts of the

Thompson, C., Sweitzer, R., Gabriel, M., Purcell, K., Barrett, R. and Poppenga, R., 2014. Impacts of rodenticide and insecticide toxicants from marijuana cultivation sites on fisher survival rates in the Sierra National Forest, California. *Conservation Letters*, 7(2), pp. 91-102.

Thompson, C. M., Gabriel, M. W. and Purcell, K. L., 2017. An ever-changing ecological battlefield: marijuana cultivation and toxicant use in western forests. *The Wildlife Professional*, 3, pp. 42-46.

Medel, I. D., Gabriel, M. W., Wengert, G. M., Filigenzi, M. S. and Clifford, D. L., 2022. Passive monitoring of soluble pesticides linked to cannabis cultivation: a multi-scale analysis. *Water Quality Research Journal*, 57(4), pp. 233-246.

Gabriel, M. W. 2021, Wildfire Ignitions, Costs to Wildlife, and Workplace Safety Issues from Illegal Cannabis Cultivation, National Presentation for Forest Service Research and Development SCIENCEx webinar series.

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United States pose threats to listed and non-listed species and their habitat that are similar to those posed by sites in the western United States. Therefore, we suspect similar adverse impacts on wildlife and its habitat where they overlap with illegal cannabis cultivation throughout the NFS.

3. In your testimony, you stated there have been 4,000 illegal grow sites of marijuana identified on NFS lands. Does the Forest Service have an estimate of how many new sites are established each year? Approximately how many sites are going undetected annually?

- See the response to question 2. From 2019 to 2021, on average, Forest Service law enforcement personnel detected approximately 70 active illegal cannabis cultivation sites on NFS lands each year. In the Pacific Southwest Region alone, which comprises California, an annual average of 45 illegal cannabis cultivation sites on NFS lands were detected during that period.⁴

From 2019 to 2022, under pilot projects utilizing new detection methodologies, the Forest Service surveyed approximately 1 percent of NFS lands in California. Under these projects, the Forest Service detected approximately 61 illegal cannabis cultivation sites on NFS lands that were previously unknown to any law enforcement agency. Adding this number to the annual number of sites on NFS lands in California identified through traditional detection methods, the agency estimates that at least 50 percent of all illegal cannabis cultivation sites are not detected by traditional detection methods. Unfortunately, the requisite aviation assets or new site detection technology that would allow the new detection methodologies to be equally distributed throughout the NFS are not available at current resource levels. Therefore, the agency believes that its annual average estimates of illegal cannabis cultivation sites on NFS lands are very conservative.

4. Please provide the following information for illegal [cannabis] cultivation sites addressed by the Forest Service staff and partners each year over the 2000-2022 period:

a. The number of illegal cannabis cultivation sites detected.

- The Forest Service has limited national data for the specified period. The available data range from 2011 to 2022 and indicate that at least 5,801 illegal cannabis cultivation sites on NFS lands have been detected during this period.

b. The national forests where illegal cannabis cultivation sites were detected.

- A total of 57 national forests have reported illegal cannabis cultivation during the specified period, including the Rogue River Siskiyou, Fremont-Winema, Umpqua, Willamette, Deschutes, Siuslaw, Mt. Hood, Gifford Pinchot, Okanogan-Wenatchee, Colville, Mt Baker, Umatilla, Wallowa-Whitman, Modoc, Lassen, Klamath, Mendocino,

⁴ Supporting Data: R5 annual average is 45 sites per year between this period. It is estimated that an average of only 5 sites per year occur in R2, R3, R4, R6, and R8. This would be a total of 45 plus 25 = 70 sites. USFS-LEI new imagery and modeling technology, where new sites were detected after traditional methods surveying less than 1% of all NFS lands. New technology highlights the likely conservative numbers of all sites on the NFS landscape.

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Six Rivers, Shasta-Trinity, Plumas, Stanislaus, Sierra, Sequoia, Inyo, San Bernadino, Angeles, Cleveland, Los Padres, Tahoe, El Dorado, Humboldt-Toiyabe, Dixie, Fishlake, Uinta-Wasatch-Cache, Manti-La Sal, Boise, Payette, Sawtooth, Caribou-Targhee, Pike San Isabel, Arapahoe-Roosevelt, GMUG, White River, Routt, San Juan, Black hills, Carson, Santa Fe, Cibola, Gila, Lincoln, Kaibab, Coconino, Prescott, Apache-Sitgreaves, Tonto, and Coronado National Forests.

c. The states where illegal cannabis cultivation sites on NFS lands were detected.

- We found a total of 15 states with reported illegal cannabis cultivation on NFS lands during the specified period, including the States or Commonwealths of California, Oregon, Washington, Nevada, Idaho, Utah, Kentucky, Texas, Florida, Georgia, North Carolina, Colorado, South Dakota, New Mexico, and Arizona.

d. The pounds of trash removed from illegal cannabis [cultivation] sites on NFS lands.

- Data for these efforts are sparse. A total of at least 381,510 pounds or 191 tons of trash has been removed from 374 illegal cannabis cultivation sites on NFS lands during the specified period.

e. The miles of plastic irrigation line removed from illegal cannabis [cultivation] sites on NFS lands.

- Data for these efforts are sparse. At least 2.5 million feet, or 479 miles, of plastic irrigation line have been removed from NFS lands during the specified period.

f. The number of containers of banned and illegal pesticides removed from illegal cannabis [cultivation] sites on NFS lands.

- Data for these efforts are sparse. At least 228 containers of banned and illegal pesticides were removed from illegal cannabis cultivation sites on NFS lands during the specified period.

g. The gallons of water diverted to support illegal cannabis cultivation sites on NFS lands.

- On average, an estimated 5.5 million gallons of surface water are diverted to each illegal cannabis cultivation site on NFS lands. In fiscal year 2022, through Forest Service reclamation efforts, the agency stopped 307.1 million gallons of surface water diversions supporting 56 illegal cannabis cultivation sites on NFS lands.

h. The value of marijuana seized from illegal cannabis cultivation sites on NFS lands.

- The Forest Service has limited national data for the period. The available data range from 2011 to 2022 and indicate that \$2.5 to \$4 billion dollars of marijuana was seized from illegal cannabis cultivation sites on NFS lands during this period.

i. The number of illegally cultivated cannabis plants removed from NFS lands.

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- The Forest Service has limited national data for the specified period. The available data range from 2011 to 2022 and indicate that at least 13,219,377 plants were eradicated from NFS lands during this period.
- j. The total amount of money spent addressing illegal cannabis cultivation sites on NFS lands.
- From 2019 to 2021, the Forest Service’s costs for addressing illegal cannabis cultivation sites on NFS lands are estimated to be at least \$13 million annually. These costs are multifaceted and include traditional and new detection methods for detecting sites, personnel and aviation required for eradication, personnel required for investigation and case development, annual training and occupational health monitoring for assigned personnel, monitoring and documenting environmental and human health threats, and collection and disposal of hazardous and non-hazardous material.
- k. The number of arrests made in connection with illegal cannabis cultivation on NFS lands.
- The Forest Service has limited national data for the specified period. The available data range from 2011 to 2022 and indicate that a total of 1,169 arrests were made in connection with illegal cannabis cultivation on NFS lands during this period.

Questions on H.R. 1586

1. If the use of fire retardant had not been available in the 2022, 2021, and 2020 fire seasons, what does the Forest Service estimate the difference would have been in each of those years in the following categories:

a. Lives lost (including those engaged in wildfire suppression and members of the public).

See response in “c” below.

b. Acreage burned (both federal and non-federal).

See response in “c” below.

c. Structures destroyed and damaged.

- (a-c) It is difficult to quantify what different outcomes may have occurred without retardant as part of the wildland firefighting response; particularly as it relates to lives lost and structures damaged or destroyed. Protection of life (firefighter and public) and property are always the top priorities on any fire, so strategies would remain focused near communities. Fire retardant does moderate fire behavior, which creates a safer environment for firefighters.

Retardant was particularly helpful to slow fire growth on numerous fires so the agency can say with a high level of certainty that more acres would have burned but cannot estimate how many more acres would have burned or how wildfire would have spread on federal and non-federal lands.

Using fire retardant dropped by aircraft is part of the Forest Service's integrated firefighting strategy and is an essential tool that the Forest Service uses in various situations in support of ground resources. Aerial drops of fire retardant are used in initial attack to keep fires small such that ground forces can put out the fire. When fires grow larger and require extended attack; in general, the risks to life and property also increase.

Fire retardant is used to aid firefighters on the ground to help contain wildfires. Fire retardant slows the rate of fire spread by cooling and coating fuels, depleting the fire of oxygen, and slowing the rate of fuel combustion as the retardant's inorganic salts change how fuels burn. Retardant has a durable capability and continues to be effective when dry to slow or reduce fire behavior so that firefighters can more directly engage a wildfire to work on containment strategies.

We note that in the lawsuit *FSEEE v. Forest Service*, 22-cv-168 (D. Mont.) the Court ruled the Forest Service could continue to drop fire retardant in accordance with the Record of Decision in the EIS the Forest Service completed for fire retardant, and declined the request for relief by plaintiff to enjoin the dropping of fire retardant until the Forest Service received a NPDES permit. 60 days has passed since the ruling, and the plaintiff did not file a notice of appeal within those 60 days, so the District Court decision is now final. The Forest Service is free to drop fire retardant in compliance with the ROD and there is no danger the Forest Service will not be able to drop fire retardant for wildfires.