

August 5, 2014

Elisabeth A. Shumaker
Clerk of Court

PUBLISH

UNITED STATES COURT OF APPEALS
TENTH CIRCUIT

BIODIVERSITY CONSERVATION
ALLIANCE, f/k/a Biodiversity
Associates; BRIAN BRADEMEYER,

Plaintiffs - Appellants,

v.

No. 13-1352

DANIEL J. JIRON, Regional Forester for
the Rocky Mountain Region of the United
States Forest Service; TOM TIDWELL,
Chief of the United States Forest Service;
CRAIG BOBZIEN, Supervisor for the
Black Hills National Forest,

Defendants - Appellees,

LUCAS LENTSCH, Secretary of the
South Dakota Department of Agriculture;
BLACK HILLS FOREST RESOURCE
ASSOCIATION; BLACK HILLS
MULTIPLE USE COALITION;
LAWRENCE COUNTY; MEADE
COUNTY; PENNINGTON COUNTY,

Intervenors Defendants -
Appellees,

BIODIVERSITY CONSERVATION
ALLIANCE; WESTERN
WATERSHEDS PROJECT; NATIVE
ECOSYSTEMS COUNCIL; PRAIRIE
HILLS AUDUBON SOCIETY,

Petitioners - Appellants,

v.

UNITED STATES FOREST SERVICE,

Respondent – Appellee,

and

STATE OF WYOMING; STATE OF
SOUTH DAKOTA; BLACK HILLS
FOREST RESOURCE ASSOCIATION,

Intervenors Respondents -
Appellees.

No. 13-8053

**CONSOLIDATED APPEALS FROM
THE UNITED STATES DISTRICT COURT FOR THE
DISTRICT OF COLORADO (D.C. NO. 1:99-CV-02173-REB-MJW)
AND
THE UNITED STATES DISTRICT COURT FOR THE
DISTRICT OF WYOMING (D.C. NO. 1:11-CV-00340-SWS)**

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Before **TYMKOVICH, McKAY, and MATHESON**, Circuit Judges.

MATHESON, Circuit Judge.

This appeal consolidates two cases about United States Forest Service (the “Forest Service”) actions in the Black Hills National Forest (“BHNF”), which straddles the Wyoming and South Dakota border.

The Appellants,¹ led by Biodiversity Conservation Alliance, are non-profit entities (collectively, “Biodiversity”) interested in species and habitat protection in the BHNF. The Appellees² are the Forest Service and several of its officials tasked with managing the BHNF. Intervenors-Appellees³ are state and county governments and private groups concerned with how management of the BHNF affects nearby private land, state and county citizens, and visitors.

¹ Biodiversity Conservation Alliance, Western Watersheds Project, Native Ecosystems Council, and Prairie Hills Audubon Society. Brian Brademeyer, a resident of the BHNF, is also a petitioner.

² The U.S. Forest Service; the Chief of the U.S. Forest Service, Tom Tidwell; the Regional Forester for the Rocky Mountain Region, Daniel Jiron; and the Supervisor for the BHNF, Craig Bobizen.

³ The State of Wyoming; the State of South Dakota; the Secretary of the South Dakota Department of Agriculture, Lucas Lentsch; and the South Dakota counties of Meade County, Lawrence County, and Pennington County. Also included are two non-profit groups—the Black Hills Forest Resource Association and the Black Hills Regional Multiple Use Coalition.

Biodiversity sued the Forest Service regarding the BHNF in two separate proceedings. First, in the United States Federal District Court for the District of Wyoming, Biodiversity claimed the Forest Service had failed to comply with various federal statutes and regulations. The court denied Biodiversity’s petition for review.

Second, in the United States Federal District Court for the District of Colorado, Biodiversity moved for relief, arguing the Forest Service had violated a settlement agreement. The court dismissed that motion.

Biodiversity appeals. Exercising jurisdiction under 28 U.S.C. § 1291, we affirm both the Wyoming and Colorado federal district courts.

I. BACKGROUND

We describe relevant statutes and regulations, summarize the factual and procedural history of the two cases, and then turn to our analysis.

A. *Relevant Statutes and Regulations*

Two sources of statutory and regulatory law govern this case: (1) the National Forest Management Act of 1976 (“NFMA”); (2) the National Environmental Protection Act of 1969 (“NEPA”); and both acts’ implementing regulations. We provide a short overview here and more details during our analysis.

1. National Forest Management Act

The Forest Service—a United States Department of Agriculture (“USDA”) agency—manages the national forest system. NFMA requires the Forest Service to manage forests using a two-step process. *See* 16 U.S.C §§ 1600-1614. First, the Forest Service must develop a Land and Resource Management Plan (“forest plan”) for each

national forest unit. Second, it must implement the forest plan through site-specific projects. 16 U.S.C. § 1604(a) & (i); *see also Silvertown Snowmobile Club v. USFS*, 433 F.3d 772, 785 (10th Cir. 2006).

Forest plans must “provide for diversity of plant and animal communities based on the suitability and capability of the specific land area” 16 U.S.C. § 1604(g)(3)(B); *see also Utah Envtl. Cong. v. Russell*, 518 F.3d 817, 821 (10th Cir. 2008). Implementing regulations provide standards and guidelines to create a forest plan and approve any accompanying site-specific projects. *See* 16 U.S.C. § 1604(g); *Utah Envtl. Cong. v. Bosworth*, 443 F.3d 732, 737 (10th Cir. 2006). When we review a challenge to a forest plan or a site-specific project, we must determine whether the plan or the project meets NFMA and NFMA’s implementing regulations. *See Utah Envtl. Cong. v. Troyer*, 479 F.3d 1269, 1272 (10th Cir. 2007).

The NFMA regulations have been amended numerous times. We focus on the 1982 amendment (the “1982 Rule”) and the 2005 amendment (the “2005 Rule”). *See* 47 Fed. Reg. 43,026 (Sept. 30, 1982) (codified at 36 C.F.R. §§ 219.1-219.29 (1982)); 70 Fed. Reg. 1023 (Jan. 5, 2005) (codified at 36 C.F.R. §§ 219.1-219.16 (2005)). Although more recent rules have superseded both of those rules, the 1982 and 2005 versions are pertinent to this case.

a. *The 1982 Rule*

The 1982 Rule required the Forest Service to promote the diversity of species by maintaining “viable populations of existing native and desired” plants and animals. 36

C.F.R. § 219.19 (1982).⁴ This “viability mandate” required that each species’ population and habitat be abundant and well-distributed enough to safeguard its continued existence. *See id.*

The 1982 Rule allowed the Forest Service to comply with the viability mandate by monitoring a selected group of “Management Indicator Species” (“MIS”). *Id.*

§ 219.19(a)(1). MIS are “[p]lant or animal species . . . that are used to monitor the effects of planned management activities on populations of wildlife and fish, including those that are socially or economically important.” Phase II Amendment Glossary, App. at 2338.

Thus, the MIS served as proxies for other species’ health in the forest. *See* 36 C.F.R.

§ 219.19(a)(1) (1982) (“These species shall be selected because their population changes are believed to indicate the effects of management activities.”); *Forest Guardians v.*

USFS, 641 F.3d 423, 427 (10th Cir. 2011) (per curiam) (comparing the MIS to canaries used in coal mines to detect dangerous levels of poisonous gas). In addition to ensuring

sufficient habitat for the MIS, the 1982 Rule required the Forest Service to “gather

quantitative data on actual MIS populations” *See Utah Envtl. Cong. v. Bosworth*, 372 F.3d 1219, 1227 (10th Cir. 2004).

Under the 1982 Rule, the Forest Service measured its success at maintaining “viable populations” of plants and animals in the forest—thereby meeting the NFMA

⁴ Although the 1982 Rule’s viability mandate stated it applied only to “vertebrate species,” *id.* § 219.19, USDA departmental regulations expanded § 219.19’s viability mandate to include invertebrate and plant species. *USDA Fish and Wildlife Policy*, Dep’t Reg. 9500-4, August 22, 1983.

mandate to “provide for diversity”—by monitoring the actual populations of the MIS in the forest.

One of the issues in this case is how to interpret and apply § 219.19’s viability mandate.

b. The 2005 Rule and the 2005 Modification of the 1982 Rule

The Forest Service promulgated several rules that superseded the 1982 Rule. One was the 2005 Rule. *See* 36 C.F.R. §§ 219.1-219.16 (2005); *see also* 70 Fed. Reg. 1023 (Jan. 5, 2005) (promulgating the 2005 Rule). But the 1982 Rule survived under certain circumstances. The 2005 Rule permitted the Forest Service to continue using the 1982 Rule for forest plans, such as the BHNF’s, that were already following the 1982 Rule, but with one narrow modification (the “2005 Modification”): “[T]he [Forest Service] may comply with any obligations relating to [MIS] by considering data and analysis relating to habitat unless the plan specifically requires population monitoring or population surveys for the species.” 36 C.F.R. § 219.14(f) (2005).

One of the issues in this case is what effect the 2005 Modification had on § 219.19’s viability mandate.

2. National Environmental Protection Act

In addition to NFMA, the Forest Service must also comply with NEPA, *see* 42 U.S.C. §§ 4321-4347. NEPA established a national policy to “promote the understanding of the ecological systems and natural resources important to the United States,” and thereby “reduce or eliminate environmental damage.” *Dep’t of Transp. v. Pub. Citizen*, 541 U.S. 752, 756 (2004) (quotations omitted). NEPA does not mandate particular

results or create substantive limits—rather, it “imposes only procedural requirements on federal agencies with a particular focus on requiring agencies to undertake analyses of the environmental impact of their proposals and actions.” *Id.* at 756-57.

Broadly speaking, before taking a “major Federal action significantly affecting the quality of the human environment,” 42 U.S.C. § 4332(2)(C), NEPA requires agencies to prepare an environmental impact statement (“EIS”), which determines how much a proposed agency action will affect the environment, 40 C.F.R. § 1502.1-1502.25. Not all agency actions are subject to this requirement⁵—various regulations “guide federal agencies in determining what actions” must be accompanied by an EIS. *Dep’t of Transp.*, 541 U.S. at 757; *see also* 40 C.F.R. §§ 1500.1 to 1508.08. For example, an agency may instead, in certain circumstances, prepare an environmental assessment (“EA”), 40 C.F.R. § 1508.9, which determines whether a proposed action would require a full EIS, 40 C.F.R. § 1501.4(a) & (b),⁶ or a categorical exclusion (“CE”), which states the

⁵ Compliance with NEPA is required . . . only if the federal government’s involvement in a project constitutes major federal action,” *Ross v. Fed. Highway Admin.*, 162 F.3d 1046, 1051 (10th Cir. 1998) (quotations omitted), meaning one that significantly affects the quality of the human environment, as determined by considering the “context and intensity” of the proposed action. 40 C.F.R. § 1508.27.

⁶ If the EA concludes the action could significantly affect the environment, the agency action must then prepare an EIS; if not, the agency issues a Finding of No Significant Impact (“FONSI”), and no further NEPA analysis is required. *See id.* §§ 1501.4(e), 1508.13; *Dep’t of Transp.*, 541 U.S. at 757–58.

proposed action falls within a category of actions that do not have a significant effect on the environment, 40 C.F.R. § 1508.4. *See Utah Env'tl. Cong. v. Russell*, 518 F.3d at 821.⁷

Because a forest plan governs the majority of the Forest Service's actions in managing a forest, "[t]he creation of a forest plan" and "[a]ny significant amendments" require "the preparation of an EIS." *Silverton Snowmobile Club*, 433 F.3d at 785 (quotations omitted). In this appeal we consider an EIS issued as part of a forest plan revision called the "Phase II Amendment." Especially relevant are two requirements for preparing an EIS: (a) the "no action" alternative and (b) the "hard look."

a. *The "reasonable range" of alternatives requirement and the "no action" alternative requirement*

Under NEPA, an EIS must contain a detailed statement regarding "alternatives to the proposed action." 42 U.S.C. § 4332(2)(C)(iii). The agency must "[r]igorously explore and objectively evaluate all reasonable alternatives" for the proposed action in response to a "specif[ied] underlying purpose and need." 40 C.F.R. §§ 1502.13, 1502.14(a). The range of "reasonable alternatives" must at least include the alternative of taking "no action," 40 C.F.R. § 1502.14(d), which we have described as "the option of

⁷ NEPA regulations also allow an agency to issue a CE when actions are deemed not to "individually or cumulatively have a significant effect on the human environment" 40 C.F.R. § 1508.4. The USDA has categorically excluded various activities, such as issuing budget proposals, enforcing civil and criminal law, and conducting research. *See* 7 C.F.R. § 1b.3(a). Additionally, the Forest Service has categorically excluded activities such as closing a forest area during extreme fire danger, purchasing land, and repairing or maintaining roads. *See* 36 C.F.R. § 220.6(d).

taking no new planning action,” *New Mexico ex rel. Richardson v. Bureau of Land Mgmt.*, 565 F.3d 683, 690 (10th Cir. 2009).

b. *The “hard look” requirement*

An EIS must consider “any adverse environmental effects.” 42 U.S.C.

§ 4332(2)(C)(iii). This review cannot be superficial—agencies must “take a ‘hard look’ at the environmental consequences of proposed actions utilizing public comment and the best available scientific information.” *Colorado Env’tl. Coal. v. Dombeck*, 185 F.3d 1162, 1171 (10th Cir. 1999); *see also Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989). The “hard look” standard ensures the “agency did a careful job at fact gathering and otherwise supporting its position.” *New Mexico ex rel. Richardson*, 565 F.3d at 704 (quotations omitted).

B. *Factual and Procedural History*⁸

The BHNF covers roughly 1.2 million acres of land straddling the Wyoming and South Dakota border. 2005 Final EIS, App. at 1154-55. Often referred to as “an island in the prairie,” the BHNF features an isolated mountain range surrounded by mid-western prairies. 2005 Final EIS, App. at 1164; *see also* 1997 Final EIS, App. at 270. The BHNF includes many plants and animals from four ecological zones: the Rocky Mountains, the

⁸ The court has studied Biodiversity’s appendix and the Forest Service’s supplemental appendix. Biodiversity submitted its appendix in electronic format, which we found helpful.

When an appendix is submitted in electronic format, such as pdf, it can be particularly useful when its internal links or “bookmarks” are clearly labeled, well-organized, and correctly hyperlinked.

northern coniferous forests, the eastern hardwood forests, and the mid-western prairies. 1997 Final EIS, App. at 277; 2005 Final EIS, App. at 1164. As a result, the ecological diversity in the area exceeds many other mountain ranges. *See* 1997 Final EIS, App. at 277.

Biodiversity challenges certain Forest Service actions concerning the BHNF. We provide an overview of the facts and procedural background here, and then add details during our analysis.

1. The 1997 Forest Plan: Promulgation, Challenge, and Forest Service Response

a. Promulgation and Biodiversity's challenge

After NFMA took effect in 1976, the Forest Service created a forest plan to manage the BHNF and used it for roughly a decade. 1997 Final EIS, App. at 257. In 1992, the Forest Service decided to revise the forest plan. 1997 Final EIS, App. at 260. After years of drafting, surveying, and public notice and comment-making, the Forest Service issued its 1997 Record of Decision, Final EIS, and Revised Forest Plan (collectively, “1997 Forest Plan”). The 1982 Rule governed the preparation of the 1997 Forest Plan. *See, e.g.*, 1997 Record of Decision, App. at 292-93, 298-99, 305.⁹

Biodiversity challenged the 1997 Forest Plan in an administrative proceeding, arguing it did not comply with NFMA and NEPA.

⁹ The 1997 Forest Plan does not explicitly state it relied on the 1982 Rule, but because no other rule existed until 2000, we determine the 1997 Plan relied on the 1982 Rule. The parties do not argue otherwise.

b. *Forest Service response: the Chief's 1999 Decision*

In 1999, the Chief of the Forest Service (“Chief”) decided Biodiversity’s administrative appeal (“Chief’s 1999 Decision”). The Chief examined “27 key issues” and determined that, although most of the 1997 Forest Plan complied with NFMA and NEPA, parts of the Plan fell short. Chief’s 1999 Decision, App. at 2462. He identified four “primary deficiencies of concern”: (1) “[v]iability determinations for some species,” (2) “[s]tandards and guidelines to maintain viability of some species,” (3) “[m]anagement indicator species (MIS) requirements,” and (4) “[m]onitoring direction for some sensitive species.” *Id.* Within the general framework of those four primary deficiencies, the Chief then discussed more specific shortcomings, including four under NFMA and one under NEPA.¹⁰

i. NFMA Shortcomings

1) Insufficient northern goshawk protections

The Chief found the 1997 Forest Plan lacked sufficient objectives to protect northern goshawk populations.¹¹ Without adequate objectives, such as designating specific areas where goshawks can live after the fledgling stage, the 1997 Forest Plan did not meet NFMA’s viability mandate because the viability of the northern goshawk could

¹⁰ The Chief identified other deficiencies in the 1997 Forest Plan, but we do not describe them here because they are not at issue in this case. *See, e.g.*, Chief’s 1999 Decision, App. at 2466-67, 2527 (stating the 1997 Forest Plan failed to include an aquatic species as MIS).

¹¹ A northern goshawk is a medium-size bird of prey.

not be assessed. *Id.* at 2507-08.

2) Insufficient snag density

The Chief said the 1997 Forest Plan failed to meet NFMA's requirement to ensure the viability of species because it did not provide enough "snag" habitat. *Id.* at 2503-05.

A "snag" refers to a dead but still-standing tree or portion of a tree. Many species depend on snags for food and shelter. *See* 2005 Revised Forest Plan Glossary, App. at 2306 (defining "Cavity Nesting Species"), 2363 (defining "Snag").

3) Insufficient objectives for Emphasis Species

The Chief found the 1997 Forest Plan failed to state adequate objectives for certain Emphasis Species. The Forest Service uses the term "Emphasis Species" as an umbrella term encompassing various categories of species that receive particular management attention, including MIS,¹² "Threatened and Endangered Species,"¹³ "Sensitive Species,"¹⁴ and "Species of Local Concern."¹⁵ 2005 Final EIS, App. at 1282.

¹² As noted above, under the 1982 Rule the Forest Service must monitor MIS populations to gauge the forest's health. 36 C.F.R. § 219.19(a)(1) (1982).

¹³ These are species protected by the Endangered Species Act of 1973. *See* 16 U.S.C. §§ 1531-1544; 50 C.F.R. §§ 17.11-17.12 (listing species).

¹⁴ Sensitive Species are plant and animal species "for which population viability is a concern, as evidenced by significant current or predicted downward trends" in population or habitat. Phase II Amendment Glossary, App. at 2361; *see also id.* at 1282; Forest Service Manual § 2672.11 (Sensitive Species Evaluation Criteria).

¹⁵ In the Rocky Mountain Region—the administrative region applicable to the BHNF—the Forest Service defines a Species of Local Concern as one that does not meet the criteria for Sensitive Species, but faces decline or is an important component of diversity in a local area. *See* 2005 Final EIS, App. at 1282; Allen et al., Forest Service, Continued . . .

The Chief determined the 1997 Forest Plan did not meet NFMA's viability mandate because it lacked MIS data, did not adequately explain why it selected certain species for inclusion as MIS, and omitted monitoring objectives. Without the foregoing, the Forest Service could not properly monitor MIS populations. Chief's 1999 Decision, App. at 2510-12.

The Chief also found that without adequate Sensitive Species objectives, the 1997 Forest Plan did not meet NFMA's viability mandate to ensure Sensitive Species would not decline beyond unrecoverable levels. *Id.* at 2505-07, 2510-12.

4) Insufficient protections for sensitive plant and animal species

Finally, the Chief found the 1997 Forest Plan inadequately protected sensitive "riparian and aquatic species and their habitats in areas with ongoing livestock grazing." *Id.* at 2463. The Chief was particularly concerned about the viability of two sensitive snail species and adequately protecting Research Natural Areas ("RNAs")¹⁶ and

Cont.

Process for Identifying Wildlife and Plant Species of Local Concern, 1-2 (April 2005), available at http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5151694.pdf.

¹⁶ RNAs are "relatively pristine areas that represent a wide range of natural variability within important natural ecosystems and environments . . . and areas that have special or unique characteristics of scientific importance." 2005 Revised Forest Plan, App. at 2178; see 36 C.F.R. § 251.23 (1982) (regulatory definition); Forest Service Manual § 4063 (providing further guidance); see also 36 C.F.R. § 219.25 (1982) (requiring the Forest Service to identify RNAs during the process of creating or amending a forest plan); 36 C.F.R. § 251.23 (1982) (requiring the Forest Service to preserve RNAs in "virgin or unmodified condition").

Botanical Areas.¹⁷ *See id.* at 2466-67, 2512-16.

The Chief said the Forest Service needed to re-evaluate whether “adequate measures are in place” to protect such species and areas from the deleterious effects of livestock grazing. *Id.* at 2466. He noted, however, “[w]here existing measures are determined to be adequate, no further actions are required relative to ongoing grazing activities.” *Id.*

For sensitive plants, the Chief said the 1997 Forest Plan did not adequately evaluate the viability of sensitive plant species, properly disclose the indirect and cumulative effects of livestock on sensitive plants, or create adequate methods to mitigate sensitive plant damage from forest management activities such as livestock grazing, noxious weed control, and sedimentation prevention. *Id.* at 2512-2516.

ii. NEPA Shortcoming

The Chief found the 1997 Forest Plan did not comply with NEPA’s requirement to take a “hard look” because it made assumptions about ecological impacts and did not

¹⁷ Botanical Areas are places of scientific interest that “exhibit plant communities, associations, and/or individual species of particular interest” and may provide protection for “sensitive species.” 2005 Revised Forest Plan, App. at 2183; *see also* Forest Service Manual § 2372.05(3) (defining “Botanical Area” as “a unit of land that contains plant specimens, plant groups, or plant communities that are significant because of their form, color, occurrence, habitat, location, life history, arrangement, ecology, rarity, or other features”). The Forest Service typically designates an area of interest as a Botanical Area until a full RNA assessment can be conducted. 1997 Record of Decision, App. at 325-26.

properly collect measurements, such as species monitoring and grazing impacts.¹⁸ *Id.* at 2508-10, 2537.

c. *Re-evaluation of the 1997 Forest Plan and the Chief's interim management instructions*

The Chief affirmed the 1997 Forest Plan only in part and issued instructions to re-evaluate and remedy the deficiencies he identified. *Id.* at 2462, 2521.

The Chief's interim management instructions for the re-evaluation of the 1997 Forest Plan directed the Forest Service to: (1) designate new acreage and protections for northern goshawk habitat, *id.* at 2464-65, 2523-24; (2) create a minimum density of snags in various areas of the BHNF, *id.* at 2465-66, 2525-26; (3) conduct further analysis and data collection on all MIS in the BHNF, *id.* at 2466, 2527; (4) further survey Sensitive Species' populations and habitats, *id.* at 2464, 2522-23; and (5) create and implement measures to protect sensitive plants and animals in areas where there was ongoing livestock grazing, *id.* at 2528.¹⁹

¹⁸ The Chief, however, found the 1997 Forest Plan complied with other aspects of NEPA, such as the "range of reasonable alternatives" requirement. *See* Chief's 1999 Decision, App. at 2541-48.

¹⁹ This included instructions to establish "[s]pecific conservation measures" that "minimize[] risks to sensitive species viability," "monitor one or more measures of stream habitat integrity," create additional protections for "sensitive plants in designated Botanical Areas," and "[e]nsure that all known colonies of sensitive snail species . . . are protected from adverse effects of livestock use and other management activities." *Id.* at 2528.

2. Settlement Agreement

When the Chief issued his 1999 Decision, the Forest Service had already spent two years implementing the 1997 Forest Plan in various site-specific projects, some of which Biodiversity administratively challenged—such as a timber sale project in the Beaver Park area of the BHNF. After the Forest Service denied Biodiversity’s Beaver Park administrative challenge, Biodiversity challenged the project’s validity in the Colorado federal district court. Biodiversity argued the Forest Service could not allow the Beaver Park timber sale to proceed because the sale had been authorized under the flawed 1997 Forest Plan.

In 2000, Biodiversity and the Forest Service agreed to settle the Beaver Park timber sale litigation. The district court included the settlement agreement (the “Settlement Agreement”) in its dismissal order. Settlement Agreement, App. at 415, 444-47. The Settlement Agreement required the Forest Service to remedy the deficiencies in the 1997 Forest Plan in two phases.

During Phase I, the Forest Service would amend the 1997 Forest Plan to incorporate the Chief’s interim management instructions, pending more thorough analysis and re-evaluation of the Plan. *Id.* at 435-36.

During Phase II, the Forest Service would engage in a public notice and comment-making process to amend the 1997 Forest Plan “to ensure compliance with requirements of NFMA, its implementing regulations and agency policy, and all inadequacies identified in the Chief’s [1999 Decision] Phase II shall address all of the issues identified in . . . this settlement agreement, including northern goshawk, Management

Indicator Species, and Research Natural Areas.” *Id.* at 436. The Phase II Amendment would replace the Phase I Amendment.

The Colorado federal district court retained jurisdiction to enforce the Settlement Agreement. *Id.* at 442. The Settlement Agreement stated it “shall expire . . . upon promulgation of the Phase II forest plan amendment, and upon the completion of any additional analysis required by this agreement” *Id.* at 443.

3. Implementation of the Chief’s 1999 Decision and 2000 Settlement Agreement

a. Phase I Amendment

The Forest Service promulgated the Phase I Amendment in May 2001. It incorporated the interim management instructions identified in the Chief’s 1999 Decision and added protections for snags and Sensitive Species. Phase I Amendment Decision Notice and FONSI, App. at 346-48. Biodiversity does not challenge the Phase I Amendment.

b. Phase II Amendment

During the next four years—2001 to 2005—the Forest Service conducted a more thorough analysis of the BHNF to prepare the Phase II Amendment. Also, between 2000 and 2005, several large forest fires burned over 150,000 acres of the BHNF, and between 1997 and 2005, a mountain pine beetle infestation spread from 5,200 to over 100,000 affected acres. 2005 Record of Decision, App. at 1122. As a result, the scope of “the Phase II Amendment was expanded from the original purpose of species viability and RNAs to include fire and insect issues.” *Id.* at 1122.

The Forest Service summarized its Phase II analysis in a Final EIS under NEPA. *Id.* at 1132. The scope of the Phase II Amendment was to: (1) “[c]ompl[y] with the Chief’s October 1999 [Administrative] Appeal Decision” and correct various deficiencies in the 1997 Forest Plan by ensuring the viability of species, following MIS requirements, and creating monitoring objectives for Sensitive Species; (2) “fulfill[] components of the 2000 Settlement Agreement to complete an analysis of candidate RNAs . . . and evaluate the viability of MIS and northern goshawk”; and (3) “modify[] management direction for fire hazard and insect risk to address both species viability and diversity and effects on resources, human safety, and property” *Id.* at 1156.

The Forest Service considered six alternatives to meet those purposes: (1) re-implement the 1997 Forest Plan, *id.* at 1133; (2) take “no action” and simply “continue to implement the direction included in the Phase I Amendment,” *id.*; (3) provide for diversity by emphasizing ideal habitat, *id.*; (4) focus on creating a dense, mature forest *id.*; (5) allow timber harvest to equal annual timber growth, *id.* at 1134;²⁰ or (6) emphasize “fire and insect hazard reduction,” target “conditions and conservation strategies for species viability,” and establish objectives for ideal habitat (similar to Alternative 3), *id.* See also *id.* at 1201-06.

²⁰ Alternative 5 was dropped from consideration because it “required broad-scale change in management areas beyond the scope” of the Phase II Amendment and “would have extended the decision to a complete revision of the 1997 [Forest] Plan.” 2005 Record of Decision, App. at 1134.

The Forest Service examined the pros and cons of each alternative, analyzing how each would affect the various forest ecosystems, *id.* at 1208-1281; the Emphasis Species, Threatened and Endangered Species, Sensitive Species, and MIS, *id.* at 1282-1504; Botanical Areas and RNAs, *id.* at 1520-40; fire hazards and the insect infestations, *id.* at 1541-75; and livestock grazing, *id.* at 1591-96.

The Forest Service ultimately chose Alternative 6—which became the Phase II Amendment—as the “environmentally preferred alternative.” *Id.* at 1136; *see also id.* at 1122. The Forest Service noted that Alternative 6 would “reduce the incidence of high intensity wildfires and . . . reduce the likelihood that endemic insect populations will grow to epidemic levels.” *Id.* at 1123. This alternative would not eliminate the risks of fire and insect infestation, but it would “minimize negative watershed and wildlife impacts and . . . reduce fire suppression costs.” *Id.*

The Forest Service acknowledged Alternative 6 would adversely affect some forest species and explained that “[w]e cannot separate species viability from the effects of fire and insects in the” forest plan. *Id.* The Forest Service was willing to “accept[] small short-term negative effects on fish, wildlife, and plant populations caused by vegetation treatments that reduce forest density” because it believed “these treatments protect and provide habitat needed for long-term viability by reducing susceptibility to damaging fires and insect epidemics.” *Id.* at 1128.

In October 2005, the Forest Service adopted and issued Alternative 6 as the Phase II Amendment, consisting of a 2005 Record of Decision, a 2005 Final EIS, and a 2005 Revised Forest Plan.

4. Biodiversity's Challenges to the Phase II Amendment

a. *Administrative challenges*

In 2006, Biodiversity challenged the Phase II Amendment, arguing it fails to comply with NFMA, the 1982 Rule, NEPA, the Chief's 1999 Decision, and the Settlement Agreement.²¹ In November 2006, the Chief upheld the Phase II Amendment ("Chief's 2006 Decision"). Chief's 2006 Decision, App. at 2698.

In separate administrative cases, Biodiversity also challenged nine site-specific projects that the Forest Service had implemented under the Phase II Amendment.²² Biodiversity argued the projects violate NFMA, the 1982 Rule, NEPA, the Chief's 1999 Decision, and the Settlement Agreement. The Chief denied all nine challenges, including

²¹ See Western Watershed's Notice of Administrative Appeal, App. at 2581; Prairie Hills Audubon Society's Notice of Administrative Appeal, App. at 2600; Biodiversity Conservation Alliance et al.'s Notice of Administrative Appeal, App. at 2612.

²² In this appeal, Biodiversity only briefly mentions these nine site-specific projects. Its arguments mainly urge the invalidity of the Phase II Amendment. Biodiversity appears to contend that if the Phase II Amendment is invalid, any site-specific projects implemented under it must also be invalid. See Notice of Appeal of Dean Timber Sale, App. at 3751; Notice of Appeal of Moskee Timber Sale, App. at 4174, Notice of Appeal of Citadel Timber Sale, App. at 3398, Notice of Appeal of Telegraph Timber Sale, App. at 6260, Biodiversity et al.'s Notice of Appeal of Rattlesnake Project, App. at 5786, Prairie Hills Audubon Society's Notice of Appeal of Rattlesnake Project, App. at 5811, Notice of Appeal of North Zone Range 05 Allotments, App. at 4978, Notice of Appeal of North Zone Range 08 Allotments, App. at 5334, Notice of Appeal of Bearlodge Allotments, App. at 3155, Notice of Appeal of Mystic Allotments, App. at 4603.

the first site-specific challenge to the Dean Project in August 2006.²³ Dean Timber Sale Decision, App. at 3883, 3886. In January 2011, the Chief denied the last site-specific challenge to the Mystic Range Project.²⁴ Mystic Allotment Decision, App. at 4629-30.

b. *Wyoming litigation*

In October 2011, Biodiversity petitioned for review of agency action in the Wyoming federal district court under the Administrative Procedure Act, 5 U.S.C. § 706(2)(A) & (D). Pet. for Review, App. at 25, 31. Biodiversity argued the Forest Service's actions promulgating the Phase II Amendment and implementing the accompanying nine site-specific projects were arbitrary, capricious, an abuse of discretion, and otherwise not in accordance with NFMA, the 1982 Rule, NEPA, the Chief's 1999 Decision, and the 2000 Settlement Agreement. Biodiversity's petition

²³ The Dean Project authorized timber harvest in the Redwater Creek watershed area in the Bearlodge District of the BHNF. The project's stated purpose was to "reduce the risk of uncharacteristically intense wildfire behavior and mountain pine beetle infestation and to improve terrestrial and aquatic habitats." Dean Timber Sale Decision, App. at 3886. Biodiversity alleged the Dean Project fell "incredibly short" of protecting "imperiled wildlife, fish, and plants" because it was implemented under the allegedly flawed Phase II Amendment. Notice of Appeal of Dean Timber Sale, App. at 3751.

The Chief denied the administrative appeal, reasoning that nothing in the appeal caused him to believe the Dean Project violated any "law, regulation, or policy." Dean Timber Sale Decision, App. at 3884.

²⁴ The Mystic Range Project authorized continued grazing in the Norbeck Wildlife Preserve for three to five years. Mystic Allotment Decision, App. at 4642. Biodiversity alleged the Forest Service had failed to comply with all of NEPA's procedural requirements before authorizing the grazing. Biodiversity also argued the grazing adversely affected sensitive plants in violation of NFMA. Notice of Appeal of Mystic Allotments, App. at 4606.

The Chief denied the administrative appeal, reasoning that he found "no violation of law, regulation, or policy." Mystic Allotment Decision, App. at 4643.

mentioned the nine site-specific projects but did not craft individualized arguments against them. *See* Pet. for Review, App. at 26-27, 30-31.

In November 2012, the district court upheld the Forest Service's actions. It denied a motion for reconsideration in April 2013. Biodiversity timely appealed (Case No. 13-8053).

c. Colorado litigation

In the meantime, the Beaver Park litigation that Biodiversity filed in 1999 in the Colorado federal district court lay dormant. After its defeat in Wyoming, Biodiversity attempted in May 2013 to reopen the Colorado case by moving to enforce the Settlement Agreement and compel the Forest Service to prepare a Phase II Amendment that would comply with NFMA, the 1982 Rule, the Chief's 1999 Decision, and the Settlement Agreement.

Relying on laches, the district court denied the motion, reasoning that Biodiversity had waited too long to enforce its rights under the Settlement Agreement. Biodiversity timely appealed (Case No. 13-1352).

d. Appeals consolidated

Biodiversity moved to consolidate the two appeals. The Forest Service did not object. We granted the motion because the cases "involve a common nucleus of facts and similarity of legal issues" Order at 2, *Biodiversity v. USFS*, Nos. 13-1352 & 13-8053, (10th Cir. Sep. 3, 2013), ECF No. 10104703.

II. DISCUSSION—WYOMING APPEAL

Because NFMA and NEPA do not provide a private right of action, we review Biodiversity’s challenges to the Phase II Amendment and the nine site-specific projects as final agency actions under the Administrative Procedure Act (“APA”). *Utah Envtl. Cong. v. Bosworth*, 443 F.3d 732, 739 (10th Cir. 2006).²⁵

We first address Biodiversity’s standing and our standard of review. We then address Biodiversity’s arguments challenging the Forest Service’s actions under NFMA and NEPA.

²⁵ Biodiversity brings its APA challenges under NFMA, NEPA, and their implementing regulations. Pet. for Review, App. at 30-31. It also claims the Forest Service’s Phase II Amendment does not comply with the Chief’s 1999 Decision and the Settlement Agreement. *Id.* at 31.

The APA provides the framework for judicial review of agency action. See 5 U.S.C. § 702 (enabling a person “adversely affected or aggrieved by agency action within the meaning of a relevant statute” to obtain judicial review). The court may grant relief only when a petitioner shows its claims “fall within the zone of interests protected by the statute forming the basis of [its] claims.” *State of Utah v. Babbitt*, 137 F.3d 1193, 1203 (10th Cir. 1998) (quotations omitted); see also *City of Albuquerque v. U.S. Dep’t of Interior*, 379 F.3d 901, 915 (10th Cir. 2004) (noting that statutes, regulations, and certain executive orders may be a basis for an APA claim); *Am. Fed. of Gov’t Emps., AFL-CIO v. Rumsfeld*, 321 F.3d 139, 144-45 (D.C. Cir. 2003) (concluding petitioners could not bring a challenge based on certain agency instructions, directions, and regulations because they did not fall within the meaning of a relevant statute).

Biodiversity has not shown that either the Chief’s 1999 Decision or the Settlement Agreement are a “relevant statute” or otherwise fall within the “zone of interests protected by the statute[s] forming the basis” of its claims. It therefore cannot rely on them as a legal basis to establish an APA violation. We will, however, consider the Chief’s 1999 Decision and the Settlement Agreement as factors in our APA analysis.

A. *Standing*

We agree with the district court that the uncontested declarations submitted by individual members of each of the Biodiversity plaintiffs²⁶ were sufficient to establish Article III standing. They stated aesthetic and recreational injuries caused by the Forest Service's Phase II Amendment and redressable through this lawsuit. *See Friends of the Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc.*, 528 U.S. 167, 180 (2000) (“[T]o satisfy Article III’s standing requirements, a plaintiff must show (1) it has suffered an ‘injury in fact’ that is (a) concrete and particularized and (b) actual or imminent, not conjectural or hypothetical; (2) the injury is fairly traceable to the challenged action of the defendant; and (3) it is likely, as opposed to merely speculative, that the injury will be redressed by a favorable decision.”) (citing *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992)).

B. *Standard of Review*

The standard of review for Biodiversity’s NFMA and NEPA claims is the same because we consider them both under the APA. We review de novo a district court’s decision in an APA case. *Utah Envtl. Cong. v. Bosworth*, 443 F.3d at 739.

Under the APA, any “person suffering legal wrong because of agency action, or adversely affected or aggrieved by agency action within the meaning of a relevant statute,

²⁶ The Appellants each filed declarations from one or more of their members in support of standing. *See* Decl. of Mr. Brademeyer, App. at 36; Decl. of Mr. Clauson, App. at 44; Decl. of Ms. Hilding, App. at 50; Decl. of Mr. Kessler, App. at 59; Decl. of Mr. Molvar, App. at 64; Decl. of Mr. Ratner, App. at 69.

is entitled to judicial review thereof.” 5 U.S.C. § 702. The reviewing court shall set aside the agency action under § 706(2) if it is:

(A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law; (B) contrary to constitutional right, power, privilege, or immunity; (C) in excess of statutory jurisdiction, authority, or limitations, or short of statutory right; (D) without observance of procedure required by law; (E) unsupported by substantial evidence . . . ; or (F) unwarranted by the facts to the extent [they] are subject to trial de novo by the reviewing court.

Id. § 706(2); *see also Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 414 (1971).

In this appeal, Biodiversity relies on § 706(2)(A), arguing the agency’s action was arbitrary and capricious.²⁷ *See* Aplt. Br. at 19. Under § 706(2)(A), an agency’s action is “arbitrary and capricious ‘if the agency . . . entirely failed to consider an important aspect

²⁷ Section 706(2)(A)’s “arbitrary or capricious” standard “is the ‘default’ standard in the federal system and applies whenever the statute does not compel some other standard.” Charles H. Koch, Jr. & Richard Murphy, 3 *Admin. L. & Prac.* § 9:25[1] (3d ed.); *see also Hydro Res., Inc. v. E.P.A.*, 608 F.3d 1131, 1145 (10th Cir. 2010) (stating that when the relevant statute does not mandate a particular standard of review, the APA “provides the default” under § 706(2)(A)); *Olenhouse v. Commodity Credit Corp.*, 42 F.3d 1560, 1575 n.25 (10th Cir. 1994) (“The ‘arbitrary or capricious’ standard of § 706(2)(A) is . . . a catch-all, picking up administrative misconduct not covered by the more specific paragraphs.”).

In the district court, Biodiversity brought its claims under “§ 706(2)(A) and (D).” Pet. for Review, App. at 31. The district court used only the “arbitrary and capricious” standard under § 706(2)(A). *See, e.g.*, Order Upholding Agency Action, App. at 92. Biodiversity did not challenge this aspect of the district court’s order. *See generally* Biodiversity’s Mot. for Reconsideration, *Biodiversity v. USFS*, No. 1:11-cv-00340-SWS (D. Wyo. Dec. 7, 2012), ECF No. 84; Reply in Supp. of Mot. for Reconsideration, *Biodiversity v. USFS*, No. 1:11-cv-00340-SWS (D. Wyo. Jan. 16, 2013), ECF No. 90. On appeal, Biodiversity cites § 706(2)(A) and discusses the arbitrary and capricious standard, *see, e.g.*, Aplt. Br. at 19, but does not cite § 706(2)(D) or discuss its failure to observe procedure. As a result, we limit our APA review to § 706(2)(A).

of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.” *Utah Envtl. Cong. v. Bosworth*, 443 F.3d at 739 (quoting *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983)). Likewise, an agency’s decision is arbitrary and capricious if the agency failed to base its decision on “consideration of the relevant factors,” or if “there has been a clear error of judgment” on the agency’s part. *Id.*

“When courts consider such challenges, an agency’s decision is entitled to a presumption of regularity, and the challenger bears the burden of persuasion.” *San Juan Citizens Alliance v. Stiles*, 654 F.3d 1038, 1045 (10th Cir. 2011) (citations omitted). Our deferential review “is especially strong where the challenged decisions involve technical or scientific matters within the agency’s area of expertise.” *Utah Envtl. Cong. v. Russell*, 518 F.3d 817, 824 (10th Cir. 2008) (citing *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 378 (1989)); *see also San Juan Citizens*, 654 F.3d at 1045 (“[W]hen specialists express conflicting views, an agency must have discretion to rely on the reasonable opinion of its own qualified experts, even if, as an original matter, a court might find contrary views more persuasive.” (quotations omitted)).

Sometimes, as here, a plaintiff will also challenge the agency’s interpretation of the applicable regulations. We must determine which interpretation to judge the agency’s action against. In making this determination, we give “substantial deference” to the agency’s interpretation of its own regulations. *Utah Envtl. Cong. v. Troyer*, 479 F.3d 1269, 1281 (10th Cir. 2007) (“We may reject the agency’s interpretation only when it is

unreasonable, plainly erroneous, or inconsistent with the regulation’s plain meaning.” (quotations omitted)).

Although deferential, our inquiry must “be searching and careful.” *Ecology Ctr., Inc. v. USFS*, 451 F.3d 1183, 1188 (10th Cir. 2006) (quotations omitted). We will not, for example, accept appellate counsel’s post-hoc rationalizations for agency action—we must uphold the agency’s action “if at all, on the basis articulated by the agency itself.” *Colo. Wild, Heartwood v. USFS*, 435 F.3d 1204, 1213 (10th Cir. 2006) (quoting *Motor Vehicle Mfrs.*, 463 U.S. at 50).

C. *NFMA Issues*

To address Biodiversity’s claim that the Phase II Amendment violates NFMA, we first determine (1) which regulations apply to the Phase II Amendment. We then analyze (2) whether the Phase II Amendment fails to: (a) comply with the viability mandate of the 1982 Rule; (b) adequately protect RNAs and Botanical Areas; or (c) conduct a proper suitability and capability analysis for MIS and livestock grazing.

1. **Regulations Applicable to the Phase II Amendment**

NFMA regulations govern preparation of forest plans. 16 U.S.C. § 1604(a) & (g); *Silverton Snowmobile Club v. USFS*, 433 F.3d 772, 785 (10th Cir. 2006). Forest plans and their amendments typically must comply with the regulation in place at the time the plan or amendment is final. *Ecology Ctr.*, 451 F.3d at 1191. Because the Forest Service issued the Phase II Amendment after the 2005 Rule was in place, it would normally need to comply with that rule. But a transition provision in the 2005 Rule allowed the Forest Service to amend the 1997 Forest Plan based on the superseded 1982 Rule. *See* 36

C.F.R. § 219.14(b) & (e) (2005); *see also Forest Guardians v. USFS*, 495 F.3d 1162, 1168 (10th Cir. 2007) (“Forest plans may require particular standards to be followed regardless of later changes in the regulations.” (quotations omitted)).

The Phase II Amendment repeatedly states it is based on the 1982 Rule and the 2005 Modification codified in § 219.14(f). *See, e.g.*, 2005 Record of Decision, App. at 1141 (“The Phase II Amendment is done under the provisions of the former 1982 NFMA planning rule as modified by 36 CFR 219.14 (f).”); *see also id.* at 1122 (same); 2005 Final EIS, App. at 1150, 1441 (same); 2005 Revised Forest Plan, App. at 2039, 2102 (same). The Forest Chief recognized this in his 2006 decision denying Biodiversity’s challenge to the Phase II Amendment. *See* Chief’s 2006 Decision, App. at 2698-99 & n.1. So does Biodiversity. Aplt. Br. at 29; 33, 35; Aplt. Reply Br. at 1-5.

Although the Forest Service describes the rules applicable to the Phase II Amendment differently in its brief, *see* Aplee. Br. at 22-24, 29, we do not see how the agency can vary from what is clearly stated in the Phase II Amendment itself. We therefore evaluate the Phase II Amendment using the 1982 Rule as modified by the 2005 Modification. The parties debate how these rules should be interpreted and applied, in particular what the regulations require the Forest Service to do to ensure species viability.

2. Biodiversity’s NFMA Challenges to the Phase II Amendment

a. Species viability mandate

Biodiversity argues the Phase II Amendment fails to comply with the 1982 Rule’s “viability mandate” in § 219.19.

The 1982 Rule required the Forest Service to “maintain viable populations” of plants and animals in the BHNF. 36 C.F.R § 219.19 (1982). Section 219.19 provided, in relevant part: “to insure that viable populations will be maintained, habitat must be provided to support, at least, a minimum number of reproductive individuals and that habitat must be well distributed so that those individuals can interact with others in the planning area.” 36 C.F.R. § 219.19 (1982). Section 219.19 also specifically required the Forest Service to collect population data on MIS. *See id.* § 219.19(a), (a)(1), (a)(2), and (a)(6). We have recognized § 219.19 used MIS to “measure the impact of habitat changes on the Forest’s diversity.” *Utah Envtl. Cong. v. Bosworth*, 372 F.3d 1219, 1226 (10th Cir. 2004) (quotations omitted). MIS therefore served under § 219.19 as “a bellwether for other species” *Forest Guardians v. USFS*, 641 F.3d 423, 427 (10th Cir. 2011) (per curiam) (quotations omitted). Section 219.14(f) of the 2005 Rule—the 2005 Modification—allowed the Forest Service to “comply with any obligations relating to [MIS] by considering data and analysis relating to habitat” 36 C.F.R. § 219.14(f) (2005).

Biodiversity claims the Forest Service violated § 219.19’s “viability mandate” in failing to: (i) conduct adequate viability analyses to ensure the viability of species; and (ii) provide sufficient habitat and protections in the Phase II Amendment to ensure the viability of northern goshawk, snag-dependent species, and sensitive plants.

i. Viable species mandate under the applicable regulations

Biodiversity claims the Phase II Amendment fails to comply with § 219.19’s viability mandate and the 2005 Modification because the Forest Service did not collect or

consider enough population data or create adequate population objectives to ensure the viability of species. As stated above, under the APA, Biodiversity must show the Forest Service acted arbitrarily and capriciously under the applicable regulations.

1) Interpretation of regulations

Biodiversity and the Forest Service disagree about how to interpret the applicable regulations regarding species viability. We must assess this interpretation issue before we proceed to consider the merits of Biodiversity's APA challenge.

Using familiar rules of construction, *see Jicarilla Apache Tribe v. Andrus*, 687 F.2d 1324, 1332 (10th Cir. 1982) ("Regulations are generally subject to the same rules of construction as statutes."), we first "determine whether the language at issue has a plain and unambiguous meaning with regard to the particular dispute in the case," *Robinson v. Shell Oil Co.*, 519 U.S. 337, 340 (1997). If the meaning is plain, it controls. *Id.* If the meaning is ambiguous, we defer "to an agency's interpretation of its own ambiguous regulation, even when that interpretation is advanced in a legal brief," *Christopher v. SmithKline Beecham Corp.*, 132 S. Ct. 2156, 2166 (2012) (citing *Auer v. Robbins*, 519 U.S. 452 (1997)), unless the agency's interpretation is "plainly erroneous or inconsistent with the regulation," *id.* (quotations omitted); *see also Utah Envtl. Cong. v. Troyer*, 479 F.3d 1269, 1281 (10th Cir. 2007) (stating we reject *Auer* deference when the agency's interpretation is "unreasonable"). In other words, we "accord *Auer* deference to the [agency's] interpretation" when we determine it "is a reasonable interpretation of its own regulation." *Decker v. Nw. Envtl. Def. Ctr.*, 133 S. Ct. 1326, 1331, 1337 (2013). "[A]n

agency's interpretation need not be the only possible reading of a regulation—or even the best one—to prevail.” *Id.* at 1337.

Biodiversity contends § 219.19's “plain language” defines viable species in terms of “minimum *number* of individuals.” Aplt. Br. at 30-31 (emphasis in original). But beyond that, Biodiversity fails to explain whether its interpretation of the species viability mandate to collect or consider population data or create population objectives is based on the plain meaning of § 219.19 or a reasonable reading of the regulation's ambiguous terms, nor does Biodiversity address whether § 219.14(f) has a plain meaning. The Forest Service likewise does not clearly specify whether its interpretation is based on the regulations' plain meaning. If we find the regulations' language is not plain and the Forest Service's interpretation of the ambiguous regulations is reasonable, we must defer to that interpretation.

To determine which interpretation of the regulations applies to Biodiversity's APA challenge, we a) address whether the plain meaning of the regulations requires the Forest Service to collect or consider population data or create population objectives to comply with the viability mandate. We conclude the regulations are ambiguous on this score. We then b) examine whether the Forest Service's interpretation is reasonable. We conclude that it is and therefore entitled to *Auer* deference. Biodiversity's interpretation does not convince us otherwise.

a) Whether the regulations have a plain meaning or are ambiguous

The parties have framed the issue as whether § 219.19 of the 1982 Rule and § 219.14(f) of the 2005 Rule imposed a duty on the Forest Service to collect or consider population data or create population objectives to ensure the viability of species. We must determine (1) whether § 219.19's viability mandate plainly states that population data must be collected or considered or that population objectives must be created, and for which species, and (2) whether § 219.14(f) unambiguously states how it affects the MIS obligations created by § 219.19.

First, as to § 219.19, we find it does not clearly state whether and to what extent the viability mandate requires more than providing and managing habitat to ensure species viability. It states, in relevant part:

Fish and wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area. For planning purposes, a viable population shall be regarded as one which has the estimated numbers and distribution of reproductive individuals to insure its continued existence is well distributed in the planning area. In order to insure that viable populations will be maintained, habitat must be provided to support, at least, a minimum number of reproductive individuals and that habitat must be well distributed so that those individuals can interact with others in the planning area.

36 C.F.R. § 219.19 (1982).

The 1982 Rule mandates that “habitat shall be managed to maintain viable populations of existing native and desired” plants and animals. *Id.* It defines “viable population” as “one which has the estimated numbers and distribution of reproductive individuals to insure its continued existence is well distributed in the planning area.” *Id.*

And it requires “habitat must be provided to support, at least, a minimum number of reproductive individuals and that habitat must be well distributed” to ensure a viable population. *Id.*²⁸

Although § 219.19 states the Forest Service must provide and manage habitat to ensure viable species, the text does not clearly state whether and to what extent collecting or considering population data was necessary. The regulation speaks of the habitat responsibility using terms such as “estimated numbers,” “distribution of reproductive individuals,” and “minimum number.” *Id.* Although that language may reasonably be read as having imposed a population data requirement, these references do not plainly direct the Forest Service to collect or consider population data or create population objectives. For example, § 219.19’s requirement that “habitat shall be managed to maintain viable populations,” does not prescribe how to achieve “viable populations”—whether through habitat management, population data, or both. And even if we were to read § 219.19 to include a population data requirement, the regulation says nothing about what and how much data must be collected, how such data must be analyzed, and which species must be included.

We conclude § 219.19 is ambiguous as to whether and to what extent the Forest Service must collect and consider population data or create population objectives to ensure the viability of species.

²⁸ The 2005 Modification was directed at MIS and did not affect this general species mandate.

Second, the effect of § 219.14(f) of the 2005 Modification also is not plain.

Regarding MIS, § 219.19 of the 1982 Rule states, in relevant part:

(a) Each alternative shall establish objectives for the maintenance and improvement of habitat for management indicator species selected under paragraph (g)(1) of this section, to the degree consistent with overall multiple use objectives of the alternative. To meet this goal, management planning for the fish and wildlife resource shall meet the requirements set forth in paragraphs (a)(1) through (a)(7) of this section.

(a)(1) In order to estimate the effects of each alternative on fish and wildlife populations, certain vertebrate and/or invertebrate species present in the area shall be identified and selected as management indicator species and the reasons for their selection will be stated. These species shall be selected because their population changes are believed to indicate the effects of management activities. . . .

(a)(2) Planning alternatives shall be stated and evaluated in terms of both amount and quality of habitat and of animal population trends of the management indicator species.

[* * *]

(a)(6) Population trends of the management indicator species will be monitored and relationships to habitat changes determined. . . .

36 C.F.R. § 219.19 (1982). Thus, § 219.19 requires the Forest Service to select MIS, “monitor[]” the MIS “[p]opulation trends,” and “evaluate[]” the population data “to estimate the effects” of forest management on the other species in the forest. 36 C.F.R. § 219.19(a), (a)(1), (a)(2), & (a)(6) (1982). Accordingly, we have held that for MIS, § 219.19 of the 1982 Rule requires the Forest Service to “monitor” population data. See *Utah Envtl. Cong. v. Bosworth*, 372 F.3d 1219, 1226 (10th Cir. 2004) (“Plainly the regulations require that the Forest Service monitor population trends of the MIS in order

to evaluate the effects of forest management activities on the MIS and the viability of desired fish and wildlife populations in the forest more generally.”).

The 2005 Modification, however, created new options for the Forest Service as to MIS. It states:

Management indicator species. For units with plans developed, amended, or revised using the provisions of the planning rule in effect prior to November 9, 2000 [i.e., the 1982 Rule], the Responsible Official may comply with any obligations relating to [MIS] by considering data and analysis relating to habitat unless the plan specifically requires population monitoring or population surveys for the species. Site-specific monitoring or surveying of a proposed project or activity area is not required, but may be conducted at the discretion of the Responsible Official.

36 C.F.R. § 219.14(f) (2005); *see also* 70 Fed. Reg. 1023, 1052 (Jan. 5, 2005)

(promulgating the 2005 Rule and explaining “§ 219.14(f) provides that MIS obligations may be met by considering data and analysis relating to habitat”).

The 2005 Modification authorizes the Forest Service to “comply with any obligations” relating to MIS by “considering data and analysis relating to habitat.” 36 C.F.R. § 219.14(f) (2005). The phrase “any obligations” connotes a broad scope, including possibly every MIS obligation imposed by § 219.19. But even the word “any” may not be plain depending on the regulatory context. *See Christopher v. SmithKline Beecham Corp.*, 132 S. Ct. 2156, 2170 (2012) (“We have recognized that the modifier ‘any’ can mean different things depending upon the setting” (quotations omitted)).²⁹

²⁹ *See also Utility Air Regulatory Grp. v. EPA*, 134 S. Ct. 2427, 2451 (2014) (Breyer, J., concurring in part and dissenting in part) (“I agree with the Court that the word ‘any,’ when used in a statute, does not normally mean ‘any in the universe.’ . . . The pursuit of [the] underlying purpose may sometimes require us to ‘abandon’ a ‘literal

Continued . . .

And as noted above, § 219.19 is ambiguous as to what “obligations” it creates for MIS beyond monitoring. In the NFMA and 1982 Rule context, “any obligations relating to [MIS]” could refer only to MIS monitoring obligations contained in § 219.19(a), (a)(1), (a)(2), & (a)(6), or could include additional obligations arising from the species viability mandate.

Section 219.14(f) is not clear as to whether it completely obviates all possible MIS obligations imposed in § 219.19—including obligations due to the general species viability mandate—or only MIS monitoring obligations.

* * *

Accordingly, as to whether and what extent § 219.19 required the Forest Service to collect and consider population data or create population objectives to meet the species viability mandate, and the extent to which § 219.14(f) supplanted the Forest Service’s MIS responsibilities in § 219.19, we conclude the regulations do not convey a plain meaning and therefore are ambiguous.

b) Whether the Forest Service’s interpretation is reasonable

Because the regulations’ meaning is not plain as to a population data requirement, we defer to the Forest Service’s interpretation if it is reasonable or unless it is plainly erroneous or inconsistent with the regulation. *See Auer*, 519 U. S. at 461. We first
i) examine the Forest Service’s interpretation and conclude it is reasonable. We then

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interpretation’ of a word like ‘any.’ The law has long recognized that terms such as ‘any’ admit of unwritten limitations and exceptions.” (citations omitted)).

ii) consider Biodiversity’s position, concluding that although Biodiversity advances a competing interpretation, it has not convinced us the Forest Service’s interpretation should not be entitled to *Auer* deference. We accordingly iii) defer to the Forest Service’s interpretation of the regulations concerning a population data requirement.

i) The Forest Service’s interpretation

The Forest Service’s interpretation of § 219.19’s viability mandate and the 2005 Modification distinguishes MIS and non-MIS.

Regarding MIS, the Forest Service acknowledges that before the 2005 Rule, § 219.19 of the 1982 Rule required it to “monitor the population trends” of MIS. *Aplee*. Br. at 24 (quotations omitted). But the Forest Service contends that § 219.14(f) of the 2005 Rule—the 2005 Modification—made compliance ““with any obligations relating to management indicator species”” in the 1982 Rule optional so long as it ““consider[ed] data and analysis relating to habitat”” *Aplee*. Br. at 23 (quoting 36 C.F.R. § 219.14(f) (2005)). The Forest Service contends its reliance on the 2005 Modification obviates “any” requirement in the 1982 Rule to use MIS population data to ensure species viability in the Phase II Amendment. *See id.* at 25.

Regarding non-MIS, the Forest Service indicates in its brief that the 2005 Modification relieved it of whatever population data gathering obligations arose under the 1982 Rule. *See Aplee*. Br. at 29 (“Because the Forest Service properly relied on the 2005 [R]ule in developing the Phase II [Amendment], Biodiversity’s argument concerning the need for population data under the 1982 Rule fails.”). The Forest Service clarified its position at oral argument:

It's one thing to look at application of the '82 Rules as interpreted by this court with reference to monitoring to MIS and to talk about population data because they are selected species. But more broadly, as the district court noted there is no decision by this court or any other court that says for non-MIS species you've got to maintain population data. . . . The Forest Service has never believed it had that obligation [to collect non-MIS data]. . . . That obligation doesn't exist.

Oral Arg. at 15:29-15:53, 16:27-16:30, 16:47-16:50. In response to the court's question, "beyond MIS, is the Forest Service obligated to count any species?," *id.* at 18:28-18:34, counsel for the Forest Service replied, "I would say there is no general obligation to do so," *id.* at 18:37-18:45.

The Forest Chief took this position in his 2006 Decision denying Biodiversity's administrative appeal. *See* Chief's 2006 Decision, App. at 2708-10 (rejecting Biodiversity's argument that the 1982 Rule obligated the Forest Service to collect and consider population data, or estimate the minimum number of individuals to maintain a viable population, in part, because "[t]here is no policy or regulatory requirement for the [BH]NF to propose or establish minimum viable population numbers for any of the species that occur within the planning area"). At least two circuits agree with the Forest Service regarding the non-MIS. *See Sierra Club v. Martin*, 168 F.3d 1, 7 (11th Cir. 1999) (rejecting an argument which interpreted § 219.19 to require collecting data on all species because it would make nonsensical the regulation's requirement to collect data on MIS); *Inland Empire Pub. Lands Council v. USFS*, 88 F.3d 754, 758, 761-62 & n.8 (9th Cir. 1996) (concluding the Forest Service' habitat analysis of seven non-MIS Sensitive Species did not violate § 219.19's viability mandate).

In sum, the Forest Service interprets the regulations narrowly to mean that § 219.19 of the 1982 Rule obligated the Forest Service to ensure the viability of species but imposed no duty to use population data other than the MIS monitoring obligations, and the 2005 Modification relieved the Forest Service of “any” MIS monitoring obligation.

ii) Biodiversity’s position

Biodiversity attempts to challenge the Forest Service’s interpretation of the regulations by positing its own competing interpretation.

We are bound to defer to the Forest Service’s interpretation, however, unless it is “unreasonable, plainly erroneous, or inconsistent with the regulation’s plain meaning.” *Troyer*, 479 F.3d at 1281 (quotations omitted). Indeed, “[a]n agency’s interpretation need not be the only possible reading of a regulation—or even the best one—to prevail.” *Decker*, 133 S. Ct. at 1337. Accordingly, Biodiversity cannot succeed in challenging the Forest Service’s interpretation merely by proposing another interpretation, no matter how reasonable. It must instead convince us that the Forest Service’s interpretation is unreasonable or plainly erroneous—which Biodiversity does not even attempt to do.

In any case, Biodiversity has not advanced a persuasive alternative interpretation to the Forest Service’s. Biodiversity observes the 1982 Rule required the Forest Service to “ensure viable populations of all native species under § 219.19,” *Aplt. Br.* at 25, and “define[d] viability in terms of a minimum *number* of individuals,” *id.* at 31 (emphasis in original). “As such, numerical data is relevant and applicable to viability determinations” *Id.* at 31. Biodiversity further contends the 2005 Modification—

§ 219.14(f)—addressed “MIS monitoring compliance, not viability determinations” Aplt. Br. at 33. Biodiversity stresses the difference between MIS monitoring and maintaining viable species and argues the Forest Service conflates the two. *See* Aplt. Reply Br. at 2-3. Although the 2005 Modification “eliminated the 1982 [R]ule’s requirement to monitor MIS population trends, it did not eliminate the definition of a viable population,” *id.* at 6, nor did it “eliminate the relevance, importance and applicability of population figures and estimates for species viability determinations and maintenance,” *id.* at 7.

Biodiversity therefore generally argues the Forest Service must do more than habitat analysis to ensure species viability. But beyond that, Biodiversity’s interpretation of the regulations is difficult to decipher. Biodiversity’s various arguments can be read to suggest a population data requirement applied to: (1) all species;³⁰ (2) some species beyond Emphasis Species;³¹ (3) species “requiring special attention;”³² (4) all Emphasis

³⁰ *See* Aplt. Br. at 25 (“all native species”); Oral Arg. at 7:30-7:39, 7:52-8:01 (“I also want to emphasize that species viability applies to all native species, not just management indicator species. . . . By undertaking those viability determinations [in the Final EIS] beyond management indicator species, the Forest Service recognized that viability covers all native species.”); *but see* Oral Arg. at 8:32-8:40 (acknowledging “[Biodiversity] do[es] not necessarily suggest that the Forest Service needs to go out and count every single *individual*.” (emphasis added)); Oral Arg. at 28:48-29:02 (“I want to clarify, in [Biodiversity]’s briefing, we have not suggested that every single *species* that exists on the forest needs to be analyzed in terms of population estimates in relation to the definition of a viable species population.” (emphasis added)).

³¹ *See* Aplt. Reply Br. at 13 (criticizing the Phase II Amendment’s “viability determinations,” which included both Emphasis and non-Emphasis Species, such as local game animals and migratory birds); Aplt. Reply Br. at 17 (discussing the Phase II Amendment’s shortcomings, stating “[t]he agency’s viability determinations are void of

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Species;³³ (5) some Emphasis Species;³⁴ (6) some or all Sensitive Species;³⁵ (7) perhaps Species of Local Concern;³⁶ (8) and MIS to the extent § 219.19 imposed population data

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any connection to minimum numbers of reproductive individuals necessary to ensure the continued existence of species on the [BHNF].”); Oral Arg. 6:59-7:06 (“The Forest Service did not properly consider population estimates and figures when it was reaching its species viability determinations.”); Oral Arg. at 8:32-9:06 (acknowledging “[Biodiversity] do[es] not necessarily suggest that the Forest Service needs to go out and count every single individual, but if there is population data available, or if they need population data,” the Forest Service must “consider that data” as part of any viability analysis).

As discussed above, “Emphasis Species” is an umbrella term encompassing various sub-categories, including MIS, Threatened and Endangered Species, Sensitive Species, and Species of Local Concern. *See supra* notes 12-15 and accompanying text.

³² *See* Aplt. Br. at 29 (“[T]he agency’s duty to ensure viable, or self-sustaining populations applies to those species requiring special attention.” (quotations omitted)). Biodiversity does not define “special attention.”

³³ *See* Aplt. Br. at 29 (stating the “emphasis species” referenced by Biodiversity in its brief—nine MIS and the eight non-MIS—“fall within the purview of the 1982 rule’s viability requirement”); Aplt. Br. at 31 (describing the eight non-MIS as “emphasis species”); Oral Arg. at 8:59-9:07 (stating the viability mandate carries obligations “for each emphasis species that is analyzed for species viability”); Oral Arg. at 29:03-29:13 (arguing § 219.19’s viability mandate “applies with special force to emphasis species”).

³⁴ *See* Aplt. Reply Br. at 15-16 (discussing only MIS and Sensitive Species); Oral Arg. at 29:13-29:18 (“[T]he species that I have discussed are management indicator species and sensitive species . . .”).

³⁵ *See* Aplt. Br. at 29 (citing *Ecology Ctr., Inc. v. USFS*, 451 F.3d 1183, 1186 (10th Cir. 2006) (“The duty to ensure viable populations ‘applies with special force to sensitive species.’” (quoting *Inland Empire Pub. Lands v. USFS*, 88 F.3d 754, 759 (9th Cir. 1996)))); Oral Arg. at 29:03-29:13 (misquoting *Ecology Center*).

³⁶ *Compare* Aplt. Br. at 31 (criticizing the viability analyses of eight non-MIS, including six Sensitive Species and two Species of Local Concern—pygmy nuthatch and flying squirrel), *with* Aplt. Reply Br. at 15-16 (discussing only the six Sensitive Species and omitting any discussion regarding the two Species of Local Concern).

duties beyond MIS monitoring.³⁷ Compounding this problem is Biodiversity's failure to specify what population data must be collected, how it must be analyzed, and whether it must be collected at all when the Forest Service's habitat analysis for a particular species may be adequate to ensure species viability.³⁸ We will not attempt to bring cohesion to Biodiversity's interpretation(s). *Perry v. Woodward*, 199 F.3d 1126, 1141 n.13 (10th Cir. 1999) (declining to address an alternative argument because defendants "have not adequately developed the argument," and "[t]his court . . . will not craft a party's arguments for him").

iii) Conclusion

Having reviewed the parties' interpretations of the regulations, we conclude the Forest Service's interpretation is narrow but not unreasonable. It allows the agency flexibility to use population data, as it has done,³⁹ in meeting the species viability

³⁷ See Aplt Br. at 32 (arguing the Phase II Amendment failed to create "quantified population objectives for MIS" (quotations omitted)); *id.* at 34 (arguing the 2005 Modification did not obviate the need to "state population data and objectives" for MIS); Aplt. Reply Br. at 6 ("Yet, while Section 219.14(f) of the 2005 rule eliminated the 1982 rule's requirement to monitor MIS population trends, it did not eliminate the definition of a viable population."); Aplt. Reply Br. at 15 (criticizing the nine MIS viability analyses as insufficiently gathering or analyzing population data).

³⁸ The Forest Service conducted habitat analyses for many non-MIS species, including the eight non-MIS identified by Biodiversity. See 2005 Final EIS, App. at 1397-1401 (pygmy nuthatch); *id.* at 1415-18 (northern flying squirrel); *id.* at 1887-94 (northern leopard frog); *id.* at 1895-97 (redbelly snake); *id.* at 1928-33 (Lewis's woodpecker); *id.* at 1940-52 (northern goshawk); *id.* at 1960-68 (American marten); *id.* at 1972-1974 (fringed myotis).

³⁹ As to MIS, the Forest Service examined population estimates, densities, and trends. See 2005 Final EIS, App. at 1432-37 (estimate, density, and trend of mountain

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requirement, and finds support in Ninth and Eleventh Circuit precedent. Biodiversity has not persuaded us otherwise, presenting its interpretation in various permutations, leaving us to guess what it is and without any basis to conclude the Forest Service’s interpretation is plainly erroneous, inconsistent with the regulations, or otherwise unreasonable.

For the foregoing reasons, we must defer in these circumstances to the Forest Service’s interpretation of § 219.19 of the 1982 Rule and § 219.14(f) of the 2005 Rule and proceed to our analysis of Biodiversity’s challenge to the Phase II Amendment’s compliance with the species viability mandate.

2) Whether the Phase II Amendment fails to meet the species viability mandate under the Forest Service’s interpretation in violation of the APA

In light of the preceding analysis, to succeed on its APA claim Biodiversity must show the Forest Service failed to comply with its own interpretation of § 219.19’s

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sucker); *id.* at 1446 (estimate, density, and trend of black-backed woodpecker); *id.* at 1455 (density and trend of brown creeper); *id.* at 1465 (density and trend of golden-crowned kinglet); *id.* at 1471 (density of grasshopper sparrow); *id.* at 1475 (density of ruffed grouse); *id.* at 1482 (density of song sparrow); *id.* at 1491 (estimate of beaver); *id.* at 1498 (estimate and trend of white-tailed deer).

And as to non-MIS, the Forest Service included population data in its analyses for the Lewis’s woodpecker, northern goshawk, and American marten—either explicitly or incorporating it by reference. *See* 2005 Final EIS, App. at 1928-29 (stating three Lewis’s woodpeckers were “observed in 2001, four in 2002, and nine in 2003,” and incorporating by reference documents containing Lewis’s woodpeckers population data); *id.* at 1940 (citing 2003 data identifying 25 active goshawk territories and incorporating by reference documents from 1997 indicating 30 nesting pairs of northern goshawks); *id.* at 1960 (stating an estimated 124 American martens reside in high quality habitat, additional individuals reside in lower quality habitat, and “the marten population trend is relatively stable in the [BHNF],” and incorporating by reference other documents containing American marten population data).

viability mandate and the 2005 Modification in violation of the APA. Biodiversity fails to do so.

Biodiversity contends the Phase II Amendment fails to ensure “species viability as required by § 219.19.” Aplt Br. at 30. Referring to nine MIS and eight non-MIS Emphasis Species as examples, it argues the Forest Service did not properly use population data for those species. Aplt Br. at 30-35; Aplt. Reply Br. at 11-17.⁴⁰

As to non-MIS, § 219.19 imposed no obligation to use population data under the Forest Service’s interpretation.

As to MIS, the Forest Service conducted habitat viability analyses.⁴¹ Biodiversity faults the Forest Service for failing to use population data for MIS. But under the Forest

⁴⁰ Biodiversity identified nine MIS: black-backed woodpecker, brown creeper, golden-crowned kinglet, grasshopper sparrow, ruffed grouse, song sparrow, beaver, white-tailed deer, and mountain sucker. Aplt. Br. at 32-34; Aplt. Reply Br. at 8, 15; *see also* 2005 Revised Forest Plan, App. at 2102 (listing MIS).

Biodiversity also identified eight non-MIS Emphasis Species: northern leopard frog, redbelly snake, Lewis’s woodpecker, northern goshawk, American marten, fringed myotis, pygmy nuthatch, and northern flying squirrel. Aplt. Br. at 31; *see also* 2005 Final EIS, App. at 1359-60 (listing the first six as “Sensitive Species”); 2005 Final EIS, App. at 1382, 1397, 1403, 1415 (organizing the discussion of the pygmy nuthatch under the heading “Species of Local Concern—Birds,” and the flying squirrel under “Species of Local Concern—Mammals”).

Contrary to Biodiversity’s characterization that the Phase II Amendment “pointedly avoid[s] the use of population figures to determine species viability,” Aplt. Reply Br. at 14, the record shows the Forest Service included population data for all nine MIS and three of the non-MIS. *See supra* note 39.

⁴¹ *See* 2005 Final EIS, App. at 1437-38 (mountain sucker); *id.* at 1448-50 (black-backed woodpecker); *id.* at 1458-61 (brown creeper); *id.* at 1466-67 (golden-crowned kinglet); *id.* at 1472 (grasshopper sparrow); *id.* at 1477 (ruffed grouse); *id.* at 1484 (song sparrow); *id.* at 1493-94 (beaver); *id.* at 1500-02 (white-tailed deer).

Service’s interpretation of the 2005 Modification, the Phase II Amendment may comply with “any” MIS monitoring obligations imposed under § 219.19 by using habitat data and analysis in lieu of population data. *See* 36 C.F.R. § 219.14(f) (2005).

Biodiversity fails to show how the Phase II Amendment is deficient under the Forest Service’s interpretation of § 219.19’s viability mandate and the 2005 Modification. We therefore reject its APA claim that the Phase II Amendment violates the species viability mandate.⁴²

⁴² In its opening brief, Biodiversity mentions in a footnote that a federal district court held the 2005 Rule unlawful in 2007. *Aplt. Br.* at 29 n.2 (citing *Citizens for Better Forestry v. USDA*, 482 F. Supp. 1059, 1100-01 (N.D. Cal. 2007)). The brief refers to the 2005 Rule as “now-invalidated.” *Id.* at 33. In its reply brief, Biodiversity states, “[c]ontrary to the Intervenor’s assertion otherwise, [Biodiversity] does not contend in this appeal that the invalidation of the 2005 rule . . . rendered Phase II unlawful.” *Aplt. Reply Br.* at 10.

This statement indicates Biodiversity does not fault the Forest Service for relying on § 219.14(f) of the 2005 Rule in preparing the Phase II Amendment. We therefore understand this statement as Biodiversity’s accepting § 219.14(f) was valid for purposes of the Phase II Amendment, and our analysis proceeds on that basis.

We note, however, in the same passage in its reply brief, Biodiversity further states that “[t]he Forest Service’s response brief correctly notes that in the lower court, [Biodiversity] argued the invalidation of the 2005 rule further called into question the lawfulness of the Phase II Amendment.” *Aplt. Reply Br.* at 10. If Biodiversity actually wished to make such an argument, it would need to explain why it would be unreasonable for the Forest Service, in adopting the Phase II Amendment in 2005, to rely on § 219.14(f) before any court had held the 2005 rule invalid.

But Biodiversity then suggests it does not wish to make such an argument:

Before this Court, however, [Biodiversity] asserts that regardless of whether the 2005 rule was in effect at the time the Forest Service adopted Phase II, the agency still had an obligation to maintain viable populations of species in compliance with the 1982 rule’s provisions it purported to follow. Section 219.14(f) of the 2005 rule did not alter that requirement or the plain language of the 1982 rule explaining what constitutes a viable population.

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ii. Viable species mandate—habitat and protections

Apart from challenging Forest Service’s species viability analyses generally, Biodiversity also argues the Phase II Amendment violates § 219.19’s viability mandate by failing to provide adequate: (1) habitat or protection for the northern goshawk; (2) habitat for snag-dependent species; and (3) protection for sensitive plants.⁴³ These three challenges contest whether the Phase II Amendment provides adequate habitat or protections to ensure the species’ viability.

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Reply Br. at 10-11.

Our analysis is premised on § 219.14(f) having been in effect when the Forest Service adopted the Phase II Amendment. If, based on this last quoted statement from its reply brief, Biodiversity could somehow fall back on the argument that § 219.14(f) was not in effect in 2005, the Forest Service has explained that a transition rule adopted in 2000 would have been in effect. Aplee. Br at 27-28; *see also* 36 C.F.R. § 219.35 (2001) (allowing the Forest Service to “consider the best available science in implementing, and, if appropriate, amending the current plan”); 36 C.F.R. § 219.35 App. B (2004) (interpreting the 2000 transition rule); *Utah Env’tl. Cong. v. Bosworth*, 443 F.3d 732, 749 (10th Cir. 2006) (concluding the Forest Service was not required to collect MIS population data under the 2000 transition provision and its “best available science” standard).

The Forest Service interprets the 2000 transition rule as consistent with its interpretation of § 219.19 of the 1982 Rule together with § 219.14(f) of the 2005 Rule. *See* Aplee. Br. at 27-28. We again find the agency’s interpretation reasonable and entitled to deference under *Auer*. Biodiversity argues against application of the 2000 transition rule only briefly. It has not developed that argument or shown that the Forest Service violated the APA through non-compliance with the 2000 transition rule. *See* Aplt. Br. at 35 (arguing only briefly); Aplt. Reply Br. at 8-9 (same).

⁴³ Biodiversity also claims the Forest Service’s failure to provide habitat or protections for these three categories violates the Chief’s 1999 Decision and the Settlement Agreement.

As noted above, neither document may be an independent basis for an APA violation. We consider them as factors in determining whether the Forest Service acted arbitrarily or capriciously when it promulgated the Phase II Amendment.

1) Northern goshawk

Biodiversity contends that, instead of designating specific post-fledging areas for the northern goshawk,⁴⁴ the Phase II Amendment lists only general forest-wide goals to create goshawk-friendly habitat. Aplt. Br. at 35-37, 40. Citing to various scientific studies, *id.* at 36 (citing Goshawk Conservation Assessment, App. at 697), Biodiversity argues the Phase II Amendment fails to provide sufficient dense canopy or large trees for goshawks.⁴⁵ *Id.* at 35-40. Biodiversity further argues the Forest Service failed to impose restrictions on harvesting large trees in densely canopied areas, making the development of mature, dense stands of trees “less likely.” *Id.* at 38.

The Forest Service acknowledges it shifted from designating specific areas for goshawks under the Phase I Amendment to using forest-wide goals to create goshawk-

⁴⁴ A “post-fledgling area” is “the area used by the [goshawk] family group from the time the young fledge until they are no longer dependent on the adults for food.” Northern Goshawk (*Accipiter gentiles atricapillus*): A Technical Conservation Assessment, App. at 697 (citations omitted) (“Goshawk Conservation Assessment”). As goshawk fledglings mature, they range “farther from the nest over time.” *Id.* Thus, post-fledgling areas “may be important to fledglings by providing prey items on which to develop hunting skills, as well as cover from predators and prey.” *Id.* A post-fledgling area is typically smaller than the foraging area used by the goshawk family group. *See id.* at 691, 695.

⁴⁵ Relying on various scientific studies—including the extensive Goshawk Conservation Assessment conducted by the Forest Service—Biodiversity contends goshawks prefer large trees (at least 16 inches in diameter) with relatively dense canopies (at least 50% closed) for nesting and post-fledgling areas. Aplt. Br. at 37-38 (arguing these conditions “might provide the highest quality habitat for goshawks”). Biodiversity argues the Forest Service did not conduct a proper goshawk viability analysis because it included areas without the qualities “preferred by goshawks.” *See* 2005 Final EIS, App. at 1941-42 (analyzing the goshawk’s viability by examining habitat, including trees as small as 9 inches in diameter and canopy densities as low as 40% closed).

friendly conditions under the Phase II Amendment. It did so based on new scientific information about the goshawk. Aplee. Br. at 30-31. During the Phase II Amendment process, the Forest Service performed a conservation assessment of the northern goshawk that synthesized information from over 470 goshawk conservation studies, including some of the same studies cited by Biodiversity. See Goshawk Conservation Assessment, App. at 635; Aplee. Br. at 32. The Forest Service also reviewed other scientific literature about goshawks and their habitat, see 2003 Survey Results for Small Forest Owls, the Northern Goshawk, and Other Raptors of Interest in the Black Hills, South Dakota, App. at 1049; 2005 Final EIS, App. at 1940-43, and conducted on-site surveys of goshawk habitats. See 2005 Final EIS, App. at 1940-41. Finally, it performed a biological evaluation of the goshawk and how the Phase II Amendment might adversely affect the species. See 2005 Final EIS, App. at 1943-52. The Forest Service concluded a forest-wide habitat approach would promote goshawk viability. See Aplee. Br. at 31-32.

Biodiversity's argument that the Phase II Amendment does not ensure the viability of the goshawk invites us to compare its scientific analysis with the Forest Service's. On that score, "[w]e grant considerable discretion and deference to federal agencies on matters that require a high level of technical or scientific expertise." *Forest Guardians v. USFS*, 641 F.3d 423, 442 (10th Cir. 2011) (per curiam) (citing *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 377 (1989)). Biodiversity thinks the Forest Service should have designated post-fledgling areas. The Forest Service decided on a forest-wide habitat approach. Both rely on science, and "it is not our role to weigh competing scientific analyses." *Forest Guardians*, 641 F.3d at 442 (quotations omitted). Biodiversity has not

shown why the Forest Service's approach is unreasonable. We therefore defer to the Forest Service and decline to find it violated the APA when it developed the forest-wide approach in the Phase II Amendment to create a goshawk-friendly habitat.

2) Snag-dependent species

Biodiversity argues the Phase II Amendment fails to ensure the viability of species that depend on "snags" in violation of § 219.19 of the 1982 Rule.

A "snag" is a dead standing tree. *See* Phase II Amendment Glossary, App. at 2363. Many species depend on snags for shelter, food, or both—such as the Lewis's woodpecker, the black-backed woodpecker, the pygmy nuthatch (a bird species), and the fringed myotis (a bat species). When snags are scarce, snag-dependent species struggle to survive. Botanists measure the number of snags per acre, or "snag density," and the diameter of the snag's trunk, or "snag size." *See* 2005 Final EIS, App. at 1214-15; Phase II Amendment Glossary, App. Br. at 2317. The Forest Service seeks to manage snag density and size in the BHNF to ensure the viability of snag-dependent species.

The 1997 Forest Plan contained snag density and size standards, but the Chief's 1999 Decision found them "inadequate to assure viability for the [BHNF]'s snag-dependent [species]." Chief's 1999 Decision, App. at 2505. The Chief prescribed detailed snag standards and directed the Forest Service to adopt them. Chief's 1999 Decision, App. at 2465-66, 2503-05. The Phase I Amendment did so.

After the BHNF suffered a significant increase in forest fires and mountain pine beetle infestation, the Forest Service altered its approach to snags in the Phase II Amendment. *See* 2005 Revised Forest Plan, App. at 2036, 2090-91. For example, the

Phase II Amendment aims for an average of 3 snags per acre that are greater than 9 inches in diameter, 25 percent of which are greater than 14 inches in diameter. 2005 Revised Forest Plan, App. at 2036.⁴⁶ If an area does not meet that objective, the Forest Service must keep all snags. *See id.* at 2090. The Forest Service must also keep all snags greater than 20 inches in diameter, unless they are a safety hazard. *Id.* at 2090. The Forest Service adopted the Phase II Amendment's snag standards and objectives to meet three important goals: (1) "provide for species viability," (2) "reduce the probability of large-scale, high intensity fires," and (3) "reduce susceptibility to bark beetle infestation." 2005 Record of Decision, App. at 1123-24.

Biodiversity challenges the Forest Service's technical and scientific evaluation of the Phase II Amendment's snag standards and objectives,⁴⁷ arguing they fail to ensure the viability of species. For example, Biodiversity contends that "[e]xperts recommend roughly 41" snags per acre as optimal for black-backed woodpeckers. Aplt. Br. at 41.⁴⁸

⁴⁶ This contrasts with the snag management standard in the Chief's 1999 Decision to retain either 2 or 4 snags per acre greater than 10 inches in diameter (depending on the slope's orientation), 25 percent of which must be greater than 20 inches in diameter. Chief's 1999 Decision, App. at 2465; *see also* Phase I Amendment Decision Notice and FONSI, App. at 368, 377.

⁴⁷ In addition, Biodiversity attacks the Phase II Amendment's use of standards and objectives for snags, as opposed to standards only. Aplt. Br. at 41. It cites no authority, and its argument that objectives offer less accountability and are less effective at ensuring the viability of species fails to show how the Phase II Amendment violates the APA.

⁴⁸ The experts' recommendation of 41 snags per acre is "for burned forest" only. Conservation Assessment of Woodpeckers in the BHNF, South Dakota and Wyoming, App. at 932 n.b.

Biodiversity therefore concludes the Phase II Amendment's snag standard providing for only 3 snags per acre fails to ensure the viability of this species. Moreover, Biodiversity argues that pygmy nuthatches "prefer snags of 19 or more" inches in diameter. *Aplt. Br.* at 42. Biodiversity concludes the Phase II Amendment's snag standard providing for snags 9 inches in diameter, 25% of which are 14 inches in diameter, and retaining all snags greater than 20 inches, fails to ensure the pygmy nuthatches' viability in the BHNF.

Biodiversity's argument addresses what a species prefers, rather than what a species needs for viability in terms of snags. It fails to show why we should not defer to the Forest Service's technical and scientific expertise. *Forest Guardians*, 641 F.3d at 442.

For example, experts told the Forest Service that black-backed woodpeckers prefer high snag densities produced by fires and mountain pine beetles, but lower snag densities "provide suitable nesting and foraging habitat" in between fire or beetle outbreaks. Expert Interview Summary for the BHNF LRMP, App. at 532-33. Moreover, the Phase II Amendment contains objectives retaining high snag-densities following fires or infestations. See 2005 Revised Forest Plan, App. at 2066. Expert reports also advised the Forest Service that although the pygmy nuthatch prefers 19-inch diameter snags, this species uses a range of snag sizes, including snags as small as 11-inches in diameter. See

Conservation Assessment of the Pygmy Nuthatch in the BHNF, South Dakota and Wyoming, App. at 1006-07.⁴⁹

Relying on this technical and scientific expertise, the Forest Service concluded its snag standards and objectives would provide sufficient habitat to ensure species viability, including for the black backed woodpecker, 2005 Final EIS, App. at 1451-52, and the pygmy nuthatch, 2005 Final EIS, App. at 1399-1400. Biodiversity has not shown why we should not defer to the Forest Service's technical or scientific assessment.

Applying deference to the Forest Service's reliance on technical or scientific expertise, we have examined the Phase II Amendment's analyses for each snag-dependent species identified by Biodiversity. We conclude Biodiversity has not shown that the Phase II Amendment as to snag standards and objectives is arbitrary, capricious, an abuse of discretion, or otherwise contrary to law.

3) Sensitive plants

Biodiversity argues the Phase II Amendment fails to establish "unambiguous" standards and guidelines to protect the viability of sensitive plants from ground-disturbing activities such as timber harvesting and other vegetative management. Aplt. Br. at 44-46; Reply at 22. Biodiversity does not identify any statute, regulation, or case law to support its argument. Instead, it relies on the Chief's 1999 Decision and the

⁴⁹ The Forest Service integrated this information into its pygmy nuthatch viability analysis, noting that "snags greater than 15 inches in diameter are an integral part of pygmy nuthatch nesting and roosting habitat," and that providing for snags at least 14 inches in diameter and requiring retention of all snags greater than 20 inches in diameter would meet the pygmy nuthatch's habitat needs. 2005 Final EIS, App. at 1339.

Settlement Agreement, which required the Forest Service to promulgate “specific and unambiguous standards and guidelines” to protect and maintain viability of sensitive plants. Chief’s 1999 Decision, App. at 2516. But, as noted above, those documents cannot serve as an independent basis for a violation of the APA.

Even considering the Chief’s 1999 Decision and the Settlement Agreement as factors, the Forest Service did not violate the APA. The Phase II Amendment includes numerous protections for sensitive plants. *See* 2005 Final EIS, App. at 1202; 2005 Revised Forest Plan, App. at 2104-09, 2111, 2118-19, 2121-24, 2175, 2180, 2184, 2201, 2283. Biodiversity does not argue those protections are arbitrary, capricious, or have no factual basis. Instead, it contends the protections are unclear and inadequate to protect sensitive plants. The scope of our APA review is narrow. We do not “substitute our judgment for that of the agency’s on matters within its expertise,” *Colorado Wild, Heartwood v. USFS*, 435 F.3d 1204, 1213 (10th Cir. 2006), including how to protect sensitive plants.

Without having more than Biodiversity’s vague and unpersuasive argument that those protections might have been more restrictive or written more clearly, we cannot find an APA violation. *See also Forest Guardians v. USFS*, 329 F.3d 1089, 1099 (9th Cir. 2003) (“An agency’s actions need not be perfect; we may only set aside decisions that have no basis in fact, and not those with which we disagree.”). Biodiversity fails to show how the sensitive plant protections in the Phase II Amendment are arbitrary, capricious, an abuse of discretion, or otherwise contrary to law.

b. *Protect RNAs and Botanical Areas*

Biodiversity argues the Phase II Amendment fails to comply with the 1982 Rule requiring the Forest Service to establish and follow heightened protections in two BHNF areas: Research Natural Areas (“RNAs”) and Botanical Areas.

i. Protecting RNAs

Biodiversity contends the Forest Service violated NFMA and the APA by allowing livestock on RNAs without first having RNA management plans in place. Aplt. Br. at 49-51, Aplt. Reply Br. at 25-27.

The 1982 Rule required the Forest Service to establish and protect RNAs. 36 C.F.R. § 251.23 (1982). RNAs must “be retained in a virgin or unmodified condition except where measures are required to maintain a plant community which the area is intended to represent.” *Id.* The Forest Service may “establish a level of acceptable casual or incidental livestock use that can be tolerated and is consistent with the management prescription for the research natural area.” Forest Service Manual § 4063.3(3); Suppl. App. at 181-82.

The Forest Service designates RNAs via a multi-step process that takes several years to complete. As part of this process, the Forest Service must establish boundaries, maps, and monuments; withdraw those areas from “mineral entry” (disallowing new mineral rights claims); and create an individualized management plan. *See* Forest Service Manual ch. 4060. The regulations do not impose deadlines to complete the RNA designation process. *See id.*

In 2005, the Forest Service conducted a detailed RNA analysis, 2005 Final EIS, App. at 1526-37, and designated four new RNAs in the BHNF, subject to general RNA management guidelines and protections, 2005 Revised Forest Plan, App. at 2020, 2176-2180. The Phase II Amendment directs the Forest Service to prepare individualized management plans for these RNAs by 2008. 2005 Revised Forest Plan, App. at 2179. The Forest Service admits it missed that deadline, but reports it is withdrawing the RNAs from mineral entry and proceeding with the management plan process. Aplee. Br. at 42.

Biodiversity contends the Forest Service failed to comply with its RNA duties under NFMA by missing the Phase II Amendment's internal deadline to complete individualized management plans and by allowing livestock to trample and graze on sensitive plants in the RNAs. Aplt. Br. at 49-51, Aplt. Reply Br. at 25-27. Biodiversity insists that, without individualized management plans, the Forest Service must ban all livestock in the RNAs because it is impossible to determine whether any use would be consistent with the management plan for the RNA. Aplt. Br. at 50-51; *see also* Forest Service Manual § 4063.3(3).

The APA “leaves in the courts the discretion to decide whether agency delay is unreasonable.” *Forest Guardians v. Babbitt*, 174 F.3d 1178, 1190 (10th Cir. 1999). If an agency has no “concrete statutory deadline” for agency action and such action is “governed only by general timing provisions,” such as a general statutory admonition that agencies complete a task “within a reasonable time,” then “a court must compel only action that is delayed unreasonably.” *Id.* at 1190-91 (quotations omitted); *see Cobell v. Norton*, 240 F.3d 1081, 1096 (D.C. Cir. 2001) (“An agency’s own timetable for

performing its duties in the absence of a statutory deadline is due considerable deference.” (quotations omitted)).

Biodiversity has not shown how the Forest Service’s delay regarding the RNA management plans is unreasonable. Although completion of the plans is pending, the Phase II Amendment imposes standards and guidelines to protect sensitive plants forest-wide, *see, e.g.*, 2005 Revised Forest Plan, App. at 2089, 2099-100, 2109, and includes additional RNA-specific protections, 2005 Revised Forest Plan, App. at 2179. The Forest Service has excluded livestock grazing in two of the new RNAs (other than a semi-annual cattle drive through one RNA), and it has limited livestock grazing in the other two areas to incidental use. 2005 Final EIS, App. at 1534; Chief’s 2006 Decision, App. at 2715. The Forest Service also monitors conditions in the RNAs. *See* Monitoring Reports, App. 2717-940. If livestock use “begins to affect the ecological characteristic[s], the use will be removed from the RNA.” 2005 Revised Forest Plan, App. at 2179.

We conclude Biodiversity has not shown the Forest Service acted arbitrarily or capriciously, abused its discretion, or otherwise violated the law as to RNAs.

ii. Protecting Botanical Areas

Biodiversity claims the Phase II Amendment lacks adequate monitoring requirements to protect sensitive plants in Botanical Areas from livestock damage. Aplt. Br. at 46-48; Aplt. Reply Br. at 23-24.

Botanical Areas protect sensitive species and “exhibit plant communities, associations, and/or individual species of particular interest.” 2005 Revised Forest Plan, App. at 2183; *see also* Forest Service Manual § 2372.05(3) (definition). Although not

subject to the same level of regulation and approval as RNAs, they receive protections to preserve their unique ecological characteristics. *Compare* Forest Service Manual § 2372.2 (Botanical Area designation process) *with id.* ch. 4060 (RNA designation process).

To protect Botanical Areas, the 1997 Forest Plan adopted Standard 3.1-2501, which allowed livestock grazing in Botanical Areas if it did “not conflict with the values for which the botanical area was designated.” *See* Chief’s 1999 Decision, App. at 2515 (describing Standard 3.1-2501 under the 1997 Forest Plan). The Chief’s 1999 Decision criticized this standard, stating that “Standard 3.1-2501 . . . lacks sufficiently strong monitoring requirements to quantify impacts to sensitive plants in a manner that would provide a basis for ensuring that standard is met.” *Id.*

In response to this criticism, both the Phase I and Phase II Amendments added Standard 3.1-2503, which requires the Forest Service to “[r]estrict access of domestic livestock to protect . . . sensitive and species of local concern plant occurrences in designated botanical areas.” 2005 Revised Forest Plan, App. at 2185 (same); *see also* Phase I Amendment Decision Notice and FONSI, App. at 347. Although livestock may still graze in Botanical Areas (if not in conflict with the areas’ ecological values), the Forest Service must “restrict” livestock access if the Botanical Area contains sensitive plants. *See* Revised Forest Plan, App. at 2185. When the Forest Chief denied Biodiversity’s administrative challenge to the Phase II Amendment in 2006, he determined these standards “provide adequate direction with respect to grazing, which is consistent with NFMA regulations” Chief’s 2006 Decision, App. at 2716.

Biodiversity argues the Phase II Amendment “failed to strengthen monitoring requirements or other protections,” Aplt. Br. at 48, in violation of the Chief’s 1999 Decision’s directing the Forest Service to strengthen monitoring requirements and the Settlement Agreement’s promising to remedy “‘all inadequacies identified in the Chief’s [1999 Decision].’” Aplt. Reply Br. at 24 (quoting Settlement Agreement, App. at 436).⁵⁰ It contends the Phase II Amendment’s monitoring requirements are too weak to ensure livestock grazing does not compromise Botanical Areas. Aplt. Reply Br. at 24. Biodiversity insists that instances of livestock grazing and trampling sensitive plants in some of the Botanical Areas between 2006 and 2009 prove Standards 3.1-2501 and 3.1-2503 are not strong enough. Aplt. Br. at 48-49; Aplt. Reply Br. at 23-24.

Biodiversity’s argument, however, only goes so far. Our APA review “is narrow,” asking only whether the Forest Service “examine[d] the relevant data and articulate[d] a satisfactory explanation for its action including a rational connection between the facts found and the choice made.” *Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (quotations omitted). We must not “substitute [our] judgment for that of the agency.” *Judulang v. Holder*, 132 S. Ct. 476, 483 (2011) (quotations omitted).

⁵⁰ Although Biodiversity alleges the Forest Service failed to strengthen monitoring requirements to protect sensitive plants in Botanical Areas “in violation of NFMA,” Aplt. Br. at 49, it does not cite any NFMA statutory or regulatory authority. Biodiversity cites only the Chief’s 1999 Decision and the Settlement Agreement. As we have noted, an APA claim cannot be based on these non-statutory and non-regulatory documents. They only may be considered as factors in our APA analysis.

The Forest Service added Standard 3.1-2503 in the Phase I Amendment “[t]o clarify protection of sensitive plant populations within designated Botanical Areas as per the Deputy Chief’s direction.” 1997 Revised Forest Plan Corrections or Additions, App. at 386. It expanded on that rationale in the Phase II Amendment, explaining “the standard was reworded to clarify that livestock would be restricted access to R2 sensitive . . . plant occurrences.” 2005 Revised Forest Plan, App. at 1522 (also recognizing Standard 3.1-2503 would be explained in greater detail in the “Forest Plan Monitoring and Implementation Guide”).⁵¹ It further explained that if monitoring shows livestock access Botanical Areas with sensitive plants, the Forest Service would take steps to exclude the cattle. *See* 2005 Final EIS, App. at 1773.

By adding Standard 3.1-2503 to restrict livestock from Botanical Areas that contain sensitive plants, the Phase II Amendment does more than strengthen “monitoring requirements to quantify impacts to sensitive plants,” Chief’s 1999 Decision, App. at 2515—it “[r]estrict[s]” livestock from Botanical Areas that have sensitive plants. 2005

⁵¹ Neither party included a full copy of Appendix D of the Final EIS, which explains the rationale underlying Standard 3.1-2503. *See* U.S. Forest Service, 2005 Final EIS app. D at 93 (Oct. 2005), *available at* http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5195112.pdf. In that document, the Forest Service stated “[m]onitoring must ensure that livestock grazing does not affect sensitive species and species of local concern in botanical areas. This will be included in the Monitoring Implementation Guide.” *Id.* Neither party submitted the 2005 “Monitoring Implementation Guide,” nor was the court able to locate a copy. *Cf.* 2005 Revised Forest Plan, App. at 2290 (listing a now-broken website link for the Monitoring Implementation Guide).

Revised Forest Plan, App. at 2185.⁵² Moreover, the Forest Service annually monitored sensitive plants in Botanical Areas between 2006 and 2009, noted livestock damage, and made recommendations for corrective action. *See, e.g.*, BHNF FY 2006 Monitoring and Evaluation Report, App. at 2717; BHNF FY 2007 Monitoring and Evaluation Report, App. at 2770; BHNF FY 2008 Monitoring and Evaluation Report, App. at 2832; BHNF FY 2009 Monitoring and Evaluation Report, App. at 2892.

Although Biodiversity cites the portions of the monitoring reports about livestock damaging some sensitive plants in Botanical Areas between 2006 and 2009, Aplt. Br. at 48-49, it must show more than lapses in the Forest Service's enforcement. *See Ecology Ctr., Inc. v. USFS*, 451 F.3d 1183, 1188 (10th Cir. 2006).⁵³ Biodiversity fails to

⁵² Although the Forest Service does not define "restrict" in the Phase II Amendment, it does say in the 2005 Final EIS that if "domestic livestock are not restricted from accessing" sensitive plants in Botanical Areas under Standard 3.1-2503, "then method(s) will be implemented to remove the cattle" from those areas. 2005 Final EIS, App. at 1773; *see also id.*, App. at 1795 (same). And during its discussion of specific sensitive plant species, the 2005 Final EIS further states, "[i]t is assumed that restrictions of livestock will be fully implemented and therefore no direct effects would be associated with livestock use at [highbush cranberry (a sensitive plant)] occurrences within the designated Biological Areas." 2005 Final EIS, App. at 1768.

⁵³ Claims regarding an agency's failure to act may proceed under § 706(1) of the APA, which authorizes courts to "compel agency action unlawfully withheld or unreasonably delayed." 5 U.S.C. § 706(1). Such challenges are appropriate, however, only when the plaintiff shows "an agency failed to take a *discrete* agency action that it is *required to take*." *Norton v. So. Utah Wilderness Alliance*, 542 U.S. 55, 64 (2004) (emphasis in original).

Biodiversity does not claim the Forest Service failed to enforce Standard 3.1-2503, nor does it bring its claims under § 706(1) of the APA. *See* Pet. for Review, App. at 31 (petitioning under "§ 706(2)(A) & (D)"); *see also* Biodiversity's Trial Br. at 51, *Biodiversity v. USFS*, No. 1:11-cv-00340-SWS (D. Wyo. May 8, 2012), ECF No. 48, at 51 ("Phase II failed to strengthen monitoring requirements such that botanical values are

Continued . . .

demonstrate based on the monitoring reports how the Forest Service acted arbitrarily or capriciously when it adopted Standard 3.1-2503 in 2005. Biodiversity makes no argument the Forest Service failed to examine relevant data or inadequately explained the rationale for adopting Standards 3.1-2501 and 3.1-2503. *See State Farm*, 463 U.S. at 43.

Based on our review of the Phase II Amendment's protective measures and the Forest Service's explanation for their adoption and our weighing the monitoring reports, Biodiversity has not shown the Forest Service acted arbitrarily or capriciously with respect to Botanical Areas.

c. Suitability and capability assessments

Biodiversity contends the Forest Service did not comply with § 219.20 of the 1982 Rule, which required the Forest Service to conduct a proper suitability and capability analysis for MIS and livestock grazing in preparing the Phase II Amendment. *See* 36 C.F.R. § 219.20.

i. When to conduct a suitability or capability analysis

The parties dispute when § 219.20 required each type of analysis. Biodiversity contends § 219.20 required the Forest Service to conduct both a suitability and a capability analysis for inclusion in the overall forest plan, and do both again for each site-specific project. *Aplt. Reply Br.* at 30-31. The Forest Service interprets § 219.20 as requiring a suitability analysis only at the forest-wide level, and then a capability analysis

Cont.

preemptively protected from conflicts before destruction through grazing, trampling, and trailing.” (emphasis added)).

only at the project level. *See, e.g.,* Aplee Br. at 44-45 (“The Forest Service makes suitability determinations at the forest plan level. . . . Capability is verified at the project level.”). The Phase II Amendment itself takes that position. 2005 Revised Forest Plan, App. at 2414.

NFMA directs the Forest Service to “specify guidelines for land management plans” that “provide for diversity of plant and animal communities based on the *suitability* and *capability* of the specific land area in order to meet overall multiple-use objectives.” 16 U.S.C. § 1604(g)(3)(B) (emphasis added). Section 219.20 of the 1982 Rule provided further direction, requiring the Forest Service to conduct a suitability and capability analysis for MIS and grazing:

In forest planning, the suitability and potential capability of National Forest System lands for producing forage for grazing animals and for providing habitat for management indicator species shall be determined as provided in paragraphs (a) and (b) of this section. Lands so identified shall be managed in accordance with direction established in forest plans.

(a) Lands suitable for grazing and browsing shall be identified and their condition and trend shall be determined. The present and potential supply of forage for livestock, wild and free-roaming horses and burros, and the capability of these lands to produce suitable food and cover for selected wildlife species shall be estimated. The use of forage by grazing and browsing animals will be estimated. Lands in less than satisfactory condition shall be identified and appropriate action planned for their restoration.

(b) Alternative range management prescriptions shall consider grazing systems and the facilities necessary to implement them; land treatment and vegetation manipulation practices; and evaluation of pest problems; possible conflict or beneficial interactions among livestock, wild free-roaming horses and burros and wild animal populations, and methods of regulating these; direction for rehabilitation of ranges in unsatisfactory condition; and comparative cost efficiency of the prescriptions.

36 C.F.R. § 219.20 (1982). The 1982 Rule defined “suitability” and “capability.” *Id.* § 219.3.⁵⁴

Section 219.20 did not specify the level at which and how often the Forest Service must have conducted suitability and capability analyses. The Forest Service states its interpretation of § 219.20 in the Phase II Amendment:

The planning regulations at 36 CFR 219.20 requires lands to be identified which are capable and suitable for producing forage for grazing animals and for providing habitat for indicator species. . . . Capability and suitability for grazing and browsing use is presently determined at two Forest Service planning levels (i.e. Forest plans (suitability) and project plans (AMPs) (capability)).

2005 Revised Forest Plan, App. at 2414.

Among the reasonable interpretations of § 219.20, the Forest Service’s is one of them. We will defer to it unless it is “unreasonable, plainly erroneous, or inconsistent with the regulation’s plain meaning.” *Utah Envtl. Cong. v. Troyer*, 479 F.3d 1269, 1281 (10th Cir. 2007) (quotations omitted); see *Auer v. Robbins*, 519 U. S. 452, 461 (1997).

Biodiversity posits an alternative interpretation, directing us to *Western Watersheds Project v. USFS*, No. CV-05-189-E-BLW, 2006 WL 292010, at *5-7, 11 (D.

⁵⁴ “Suitability” was defined as “[t]he appropriateness of applying certain resource management practices to a particular area of land, as determined by an analysis of the economic and environmental consequences and the alternative uses foregone. A unit of land may be suitable for a variety of individual or combined management practices.” 36 C.F.R. § 219.3 (1982).

“Capability” was defined as “[t]he potential of an area of land to . . . allow resource uses under an assumed set of management practices and at a given level of management intensity. Capability depends upon current conditions and site conditions such as climate, slope, landform, soils, and geology,” as well as risks of “fire, insects, and disease.” *Id.*

Idaho Feb. 7, 2006) for the proposition that “forest-wide determinations set up a baseline against which site-specific determinations must then be made based on site-specific conditions.” Aplt. Br. at 56.⁵⁵ It also argues the Forest Service offered contradictory and inconsistent statements in some of the site-specific project documents regarding whether to conduct a suitability or capability analysis at the site-specific level. *Id.* at 54-56.

These arguments propose an alternative interpretation and criticize the Forest Service’s ambiguous use of terminology. We find no reason, however, to conclude the Forest Service’s interpretation is unreasonable, plainly erroneous, or inconsistent with the regulation. *See Decker v. Nw. Env’tl. Def. Ctr.*, 133 S. Ct. 1326, 1337 (2013) (“[A]n agency’s interpretation need not be the only possible reading of a regulation—or even the best one—to prevail.”). As a result, we defer to the Forest Service’s interpretation.

ii. MIS suitability and capability analyses

Biodiversity alleges the Forest Service did not conduct an adequate suitability or capability analysis of the selected MIS populations for the Phase II Amendment.⁵⁶

⁵⁵ The parties have not cited to any Tenth Circuit authority about how to interpret § 219.20, nor have we found any.

⁵⁶ The Phase II Amendment selected nine MIS: black-backed woodpecker, brown creeper, golden-crowned kinglet, grasshopper sparrow, ruffed grouse, song sparrow, beaver, white-tailed deer, and mountain sucker. 2005 Revised Forest Plan, App. at 2102.

1) MIS suitability analysis

Biodiversity first argues the Forest Service failed to conduct an adequate MIS suitability analysis at the forest-planning level. It does not allege the Forest Service failed to conduct an MIS suitability analysis at the site-specific level.⁵⁷

Biodiversity points out that the Phase II Amendment (1) does not contain a formal MIS suitability analysis and (2) states that “[h]abitat capability/suitability models are available for’ only ‘some management indicator species (MIS), Sensitive Species, Species of Local Concern and Demand Species.’” Aplt. Br. at 52 (emphasis added) (quoting 2005 Revised Forest Plan, App. at 2436). This shows, Biodiversity says, the Forest Service did not conduct an adequate MIS suitability analysis. *Id.* at 52.

Although the Forest Service did not conduct a formal suitability analysis on MIS, it evaluated each MIS’s habitat needs and assessed how various proposed actions might affect the MIS.⁵⁸ Each analysis examined the distribution and natural history of each species, what kind of habitat it favors, conditions and trends in the habitat, population

⁵⁷ Biodiversity contends the Forest Service “failed to determine the suitability and capability of lands for MIS.” Aplt. Br. at 52. Biodiversity’s arguments, however, are directed to the lack of forest-wide analyses. *See id.* at 52-53. To the extent that Biodiversity challenges the lack of site-specific analyses, that argument is inadequately developed, and we do not consider it here. *See Utah Environmental Congress v. Bosworth*, 439 F.3d 1184, 1194 n.2 (10th Cir. 2006) (“An issue mentioned in a brief on appeal, but not addressed, is waived.”)

⁵⁸ *See* 2005 Final EIS, App. at 1429-42 (mountain sucker); *id.* at 1444-52 (black-backed woodpecker); *id.* at 1453-63 (brown creeper); *id.* at 1463-69 (golden-crowned kinglet); *id.* at 1474-79 (ruffed grouse); *id.* at 1480-88 (song sparrow); *id.* at 1489-96 (beaver); *id.* at 1496-1504 (white-tailed deer).

status and trends, how various management activities affect the habitat and population (such as the ecosystem approach to management, the designation of RNAs, and the activities designed to reduce the risks of fire and insect infestation), and how the MIS would be monitored.

Biodiversity does not explain how these detailed analyses—especially those that examined the effects of management activities on the MIS—fail to comply with § 219.20. Biodiversity also does not explain how a lack of some “habitat capability/suitability models,” 2005 Revised Forest Plan, App. at 2436, renders an MIS suitability analysis inadequate. Accordingly, Biodiversity has failed to show the Forest Service did not comply with § 219.20’s mandate to analyze “[t]he appropriateness of applying certain resource management practices to a particular area of land,” including examining “the economic and environmental consequences and the alternative uses foregone” concerning the habitat needed to support the MIS. 36 C.F.R. § 219.3 (1982); *see San Juan Citizens Alliance v. Stiles*, 654 F.3d 1038, 1045 (10th Cir. 2011) (“When courts consider [APA] challenges, an agency’s decision is entitled to a presumption of regularity, and the challenger bears the burden of persuasion.” (citation omitted)).

2) MIS capability analysis

Biodiversity alleges the Forest Service failed to conduct a forest-wide MIS capability analysis. *See* Aplt. Br. at 52-53; Aplt. Reply Br. at 30-31. We defer to the Forest Service’s interpretation that no such capability analysis was required under § 219.20. Biodiversity does not allege the Forest Service failed to conduct an MIS

capability analysis at the site-specific level. Biodiversity's MIS capability analysis argument therefore fails.

iii. Grazing suitability and capability analyses

The 1982 Rule required the Forest Service to analyze “the suitability and potential capability” of the land “for producing forage for grazing animals.” 36 C.F.R. § 219.20 (1982). As noted above, the Forest Service conducts a suitability analysis at the forest-wide level, and then a further capability analysis at the project level. *See id.* § 219.3; 2005 Revised Forest Plan, App. at 2414. We therefore limit our review to the Forest Service's grazing suitability analysis at the forest-wide level and its grazing capability analysis at the project level.

1) Grazing suitability analysis

Biodiversity contends the Forest Service did not conduct a proper grazing suitability analysis for the Phase II Amendment because it improperly relied on the 1997 Forest Plan's grazing suitability analysis. Aplt. Br. at 53, 56.

The Forest Service conducted a grazing suitability analysis for the 1997 Forest Plan. 1997 Final EIS, App. at 284-87; 1997 Record of Decision, App. at 324. In 1999, the Chief determined the “Forest [Service] has performed the suitability determination and analysis necessary for compliance with NFMA,” and there was no deficiency “concerning the general issue of livestock grazing suitability.” Chief's 1999 Decision, App. at 2537. He did, however, recognize deficiencies in other areas of the 1997 Forest Plan, and therefore gave “[i]nstructions for further action concerning grazing associated with riparian areas, sensitive species, and Botanical Areas, [as] provided in the Decision

Summary.” *Id.*; see also Chief’s 2006 Decision, App. at 2704 (concluding “[l]ivestock grazing was not identified as a major issue” in the Phase II Amendment).

Biodiversity argues “[i]n light of the number of issues identified by the Chief [in 1999] regarding livestock and sensitive plants, grazing suitability falls within the scope of the Phase II Amendment,” and the Forest Service should have conducted a new grazing suitability analysis. Aplt. Reply Br. at 27. Biodiversity’s assessment, however, overstates the Chief’s concerns with livestock grazing.

The Chief’s 1999 Decision focused on four “primary deficiencies of concern,” none of which contemplated extensive changes to livestock grazing. See Chief’s 1999 Decision, App. at 2462 (identifying the primary deficiencies as: (1) “[v]iability determinations for some species,” (2) “[s]tandards and guidelines to maintain viability of some species,” (3) “[m]anagement indicator species (MIS) requirements,” and (4) “[m]onitoring direction for some sensitive species”). As a result, consistent with the Chief’s 1999 Decision, the Phase II Amendment contains limited changes to grazing and no major changes at the forest-wide level. See 2005 Record of Decision, App. at 1126-27; see *id.* at 1123-31 (describing the rationale for the Phase II Amendment, which does not contemplate major changes to livestock grazing); *id.* at 1156 (describing purpose of the Phase II Amendment, which does not include modifying livestock grazing allotments forest-wide). The Phase II Amendment addresses grazing suitability mostly by repeating the Forest Service’s 1997 analysis. See 2005 Revised Forest Plan, App. at 2414-16.

Biodiversity has not shown how the Forest Service’s treatment of grazing in the Phase II Amendment violates the APA. The 1982 Rule required the Forest Service to

conduct a grazing suitability analysis. 36 C.F.R. § 219.20 (1982). It did so in 1997.

Neither the Chief's 1999 Decision nor the Phase II Amendment identified grazing as one of the major issues for revision, nor did they contemplate modifying grazing activities forest-wide. Instead, grazing was considered in conjunction with other issues, such as addressing additional measures to protect sensitive plants and animals "in areas with ongoing livestock grazing activities." Chief's 1999 Decision, App. at 2463.

Biodiversity fails to show how the Phase II Amendment's reliance on the 1997 grazing suitability analysis and its changes to the 1997 Forest Plan grazing were arbitrary, capricious, an abuse of discretion, or otherwise contrary to law.

2) Grazing capability analysis

Biodiversity also argues the Forest Service did not conduct proper grazing capability analyses for four site-specific projects.⁵⁹ It contends the Forest Service either omitted or inadequately addressed the issue because the site-specific project documents contain inconsistent statements about whether to conduct a suitability or capability analysis at the site-specific level. Aplt. Br. at 53-56.

A grazing capability analysis examines a project area to determine "[t]he potential of an area of land to" produce forage "at a given level of management intensity" subject to conditions at the site. 36 C.F.R. § 219.3 (1982).

⁵⁹ The Bearlodge Range Project, the Mystic Range Project, the North Zone 05 Project, and the North Zone 08 Project.

Each project includes an EIS or EA that contains a grazing capability analysis or incorporates it by reference. See Bearlodge Range Project EA, App. at 3022-30 (including a “[r]ange capability” analysis); Mystic Range Project Final EIS, App. at 4372-4404 (including a grazing “capability assessment”); North Zone 05 Project Final EIS, App. at 4826, 4944 (stating “[r]angeland analysis and inventories were conducted” and the Forest Service analyzed which acres “were capable for grazing”); North Zone 08 Project EA, App. at 5179, 5218-52 (incorporating by reference a “Range Specialist Report” and summarizing the range capability analysis). We agree with Biodiversity that the Forest Service could have used the terms “suitability” and “capability” more clearly, but that shortcoming does not amount to an APA violation.

Biodiversity has not shown how the Forest Service’s actions regarding capability analyses in the four challenged site-specific projects were arbitrary, capricious, an abuse of discretion, or otherwise contrary to law.

D. NEPA Issues

Biodiversity challenges the Wyoming federal district court’s conclusion that the Phase II Amendment complies with NEPA. It contends the Forest Service violated NEPA in three ways: by failing to (1) consider a reasonable range of alternatives in the Final EIS because it did not include a “no grazing” alternative; (2) take a “hard look” at how the Phase II Amendment would affect sedimentation in the BHNF’s waterways, including how the sedimentation might affect sensitive plants and aquatic fauna; and (3) take a “hard look” at historical grazing practices before re-authorizing grazing use in the Phase II Amendment.

1. Reasonable Range of Alternatives

Biodiversity argues the Phase II Amendment's Final EIS should have included a forest-wide "no grazing" alternative. Aplt. Br. at 59-60; Aplt. Reply Br. at 32. We disagree because that alternative fell outside the main purposes of the Phase II Amendment.

"Under NEPA, an EIS prepared by a federal agency must include a discussion of 'alternatives to the proposed action.'" *Wyoming v. USDA*, 661 F.3d 1209, 1243 (10th Cir. 2011) (quoting 42 U.S.C. § 4332(2)(C)(iii)). The agency must "[r]igorously explore and objectively evaluate all reasonable alternatives" for the proposed action in response to a "specif[ied] underlying purpose and need." 40 C.F.R. §§ 1502.13, 1502.14(a); *see also Wyoming*, 661 F.3d at 1243. The range of reasonable alternatives must at least include the alternative of taking "no action." 40 C.F.R. § 1502.14(d).

The range of reasonable alternatives "is not infinite." *Utahns for Better Transp. v. U.S. Dep't of Transp.*, 305 F.3d 1152, 1166 (10th Cir. 2002); *see also Vermont Yankee Nuclear Power Corp. v. Natural Res. Def. Council, Inc.*, 435 U.S. 519, 551 (1978) ("Common sense also teaches us that the 'detailed statement of alternatives' cannot be found wanting simply because the agency failed to include every alternative device and thought conceivable by the mind of man."). "[O]nce an agency establishes the objective of the proposed action—which it has considerable discretion to define—the agency need not provide a detailed study of alternatives that do not accomplish that purpose or objective, as those alternatives are not 'reasonable.'" *Wyoming*, 661 F.3d at 1244 (citations omitted); *see also Biodiversity Conservation Alliance v. Bureau of Land Mgmt.*,

608 F.3d 709, 715 (10th Cir. 2010) (“The [agency] may eliminate alternatives that . . . do not meet the purposes and needs of the project.”)

When we review an EIS under the APA to determine whether an agency acted arbitrarily or capriciously by not considering certain alternatives, a “rule of reason and practicality” informs the analysis. *Airport Neighbors Alliance, Inc. v. United States*, 90 F.3d 426, 432 (10th Cir. 1996). We ask whether the agency selected and considered a range of alternatives “sufficient to permit a reasoned choice among the options.”

Wyoming, 661 F.3d at 1243 (quotations omitted). The “rule of reason” considers both the range of alternatives and the extent the agency discusses the selected alternatives. *Utahns for Better Transp.*, 305 F.3d at 1166; *see also Env'tl. Def. Fund, Inc. v. Andrus*, 619 F.2d 1368, 1375 (10th Cir. 1980) (“The discussion of environmental effects of all alternatives need not be exhaustive, but it must be such that sufficient information is contained therein to permit a ‘rule of reason’ designation of alternatives beyond the primary proposal.”).

The Chief’s 1999 Decision identified the four “primary deficiencies” in the 1997 Forest Plan as: (1) “[v]iability determinations for some species,” (2) “[s]tandards and guidelines to maintain viability of some species,” (3) “[m]anagement indicator species (MIS) requirements,” and (4) “[m]onitoring direction for some sensitive species.”

Chief’s 1999 Decision, App. at 2462. The Chief said the Forest Service should address grazing only “relative to the deficiencies identified” in his 1999 Decision, including ensuring sensitive plants were adequately protected. *Id.* at 2466. The inadequacies identified by the Chief in 1999 did not contemplate cessation or other major changes to

livestock grazing. The Settlement Agreement did not mention livestock. *See* Settlement Agreement, App. at 418-47. And as noted by the Chief in 2006, the Phase II Amendment did not identify livestock grazing “as a major issue.” Chief’s 2006 Decision, App. at 2704.

The 2005 Final EIS summarized the scope of the Phase II Amendment:

(1) “[c]ompl[y] with the Chief’s October 1999 [Administrative] Appeal Decision” and correct various deficiencies in the 1997 Forest Plan by ensuring the viability of species, following MIS requirements, and creating monitoring objectives for sensitive species;

(2) “[f]ulfill[] components of the 2000 Settlement Agreement to complete an analysis of candidate RNAs . . . and evaluate the viability of MIS and northern goshawk”; and

(3) “[m]odify[] management direction for fire hazard and insect risk to address both species viability and diversity and effects on resources, human safety, and property” 2005 Final EIS, App. at 1156; *see also id.* at 1159-60.⁶⁰

Within this scope, the Forest Service considered two “no action” (1 and 2) and four “action” alternatives (3 to 6):

- Alternative 1 would re-implement the 1997 Forest Plan;
- Alternative 2 would allow the Phase I Amendment to continue without modification, including keeping grazing levels the same;
- Alternative 3 would provide diversity by creating ideal habitat forest-wide;
- Alternative 4 would create dense, mature forest conditions forest-wide;
- Alternative 5 would allow timber harvest to equal annual timber growth; and

⁶⁰ Biodiversity does not challenge the Forest Service’s definition of the Phase II Amendment’s scope.

- Alternative 6 would aggressively reduce fire and insect hazards while at the same time provide ideal habitat for species forest-wide.

See 2005 Record of Decision, App. at 1133-34; *see also* 2005 Final EIS, App. at 1201-06 (providing a detailed summary of the six alternatives as they relate to the scope of the Phase II Amendment).

Each alternative addressed livestock. See 2005 Final EIS, App. at 1591-92 (summarizing the proposed changes to livestock management under each alternative). For example, Alternative 6 proposed installing structures to protect ponds containing leopard frogs, prohibiting livestock from watering within hardwood groves, and restricting livestock access to Botanical Areas containing sensitive plants. *Id.* None of the alternatives contemplated major changes to livestock grazing forest-wide. See *id.*⁶¹

Biodiversity argues Alternative 2 was not enough to comply with NEPA's "no action alternative" requirement because the Forest Service should have considered a no grazing option "forest-wide." Aplt. Br. at 59-60; Aplt. Reply Br. at 32.⁶² Biodiversity relies on *Western Watersheds Project v. Rosenkrance*, No. 4:09-CV-298-EJL, 2011 WL 39651, at *10-11 (D. Idaho Jan. 5, 2011), which addressed a challenge to the Bureau of Land Management's ("BLM") decision to grant several livestock grazing permits. The

⁶¹ The Forest Service declined to consider an alternative that would "[s]top commercial development . . . (e.g., timber sales, domestic livestock grazing, and other resources or services from the national forests)." The Forest Service stated those activities are "a basic component of national forest management policy," and "[c]hanging this national policy is outside the scope of the Phase II Amendment" 2005 Final EIS, App. at 1199.

⁶² Biodiversity does not address Alternative 1.

plaintiff argued the agency failed to consider a no grazing “[n]o [a]ction [a]lternative.”

Id. at *1-2 (quotations omitted). The district court agreed, reasoning that a “real no action alternative” would consider allowing “old grazing permits [to] expire” and not allowing “new permits [to] issue,” thereby ceasing grazing altogether. *Id.* at 10.

Biodiversity argues a similar analysis should have happened here. *Aplt. Br.* at 59-60.

Biodiversity’s argument is misplaced. *Western Watersheds* is distinguishable because the only purpose of the BLM’s grazing allotment decision was to determine whether grazing permits should be issued. Livestock grazing was the centerpiece of the agency action. *See id.* at *1-2. By contrast, changing forest-wide grazing was not a major purpose of the Phase II Amendment. *See* 2005 Final EIS, App. at 1591-92; *see also* Chief’s 2006 Decision, App. at 2704 (recognizing that “[l]ivestock grazing was not identified as a major issue” in the Phase II Amendment).

The scope of the Phase II Amendment did not call for consideration of a no grazing alternative. After “an agency establishes the objective of the proposed action . . . the agency need not provide a detailed study of alternatives that do not accomplish that purpose or objective” *Wyoming*, 661 F.3d at 1244 (citations and quotations omitted); *see, e.g., Biodiversity*, 608 F.3d at 716-17 (concluding the BLM did not need to consider a proposed alternative that “would not meet the project’s purposes”).

The purpose of the Phase II Amendment was to remedy deficiencies identified in the Chief’s 1999 Decision, fulfill components of the 2000 Settlement Agreement, and address fire hazard and insect infestation concerns. 2005 Final EIS, App. at 1156; *see also* 2005 Record of Decision, App. at 1123-31. The Forest Service addressed grazing

when relevant to those purposes, *see* 2005 Final EIS, App. at 1591-92, but a forest-wide no grazing alternative fell outside the scope of the Phase II Amendment.

The Forest Service's choice of NEPA alternatives met the rule of reason. Its omitting a no grazing alternative was not arbitrary or capricious.

2. Hard Look at Sedimentation Policies

Biodiversity argues the Forest Service did not rigorously evaluate how the Phase II Amendment would affect sedimentation and therefore did not meet NEPA's "hard look" requirement.⁶³

NEPA requires agencies to identify adverse effects of proposed agency actions on the environment. 42 U.S.C. § 4332(2)(C)(i) & (ii). Agencies must "take a 'hard look' at the environmental consequences of proposed actions utilizing public comment and the best available scientific information." *Colorado Env'tl. Coal. v. Dombeck*, 185 F.3d 1162, 1171 (10th Cir. 1999) (quoting *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989)). An agency meets the "hard look" requirement when it has "made a reasoned evaluation of the available information and its method was not arbitrary or capricious." *Utah Shared Access Alliance v. USFS*, 288 F.3d 1205, 1213 (10th Cir.

⁶³ "Sedimentation" is the accumulation of gravel, sand, silt, and other particulates in streams and lakes. *See* Phase II Amendment Glossary, App. at 2360 (defining sediment). Nature can cause it, but human and livestock activities, such as motorized vehicles, mining, and overgrazing, can accelerate it. *See* 2005 Final EIS, App. at 1266-67, 1385, 1440-41. Sedimentation threatens some plant and animal species, especially fish. *See id.* at 1267, 1440-41. For example, the Phase II Amendment discusses the threats of sedimentation to the American dipper (a bird) and the lake chub (a fish). *Id.* at 1385, 1875.

2002). A “hard look” seeks to ensure the “agency did a careful job at fact gathering and otherwise supporting its position.” *New Mexico ex rel. Richardson*, 565 F.3d at 704 (quotations omitted).

Biodiversity contends the Forest Service inadequately evaluated whether its two proposed methods of sedimentation mitigation in the Phase II Amendment—Watershed Conservation Practices Handbook (“WCPH”)⁶⁴ and Best Management Practices (“BMPs”)⁶⁵—will mitigate the impacts of sedimentation in lakes and streams caused by livestock, timber harvesting, mining, road construction, and recreation. Aplt. Br. at 62-63. The record indicates otherwise. The Forest Service looked hard at how the WCPH and the BMPs would mitigate sedimentation.

First, the Forest Service explained how the WCPH provides “proven watershed conservation practices to protect soil, aquatic, and riparian systems,” 2005 Final EIS, App. at 1268, that “conserve and enhance riparian and wetland ecosystems on the [BHNF],” *id.* at 1254. Based on the effective use of WCPH mitigation practices since

⁶⁴ The WCPH contains numerous detailed standards “to protect soil, aquatic, and riparian systems,” including “hydrologic function, riparian areas, sediment control, soil productivity, and water purity.” Watershed Conservation Practices Handbook, App. at 4645; *see also id.* at 4644-66.

For example, it directs the Forest Service to “[a]void season-long grazing in riparian areas and wetlands” and “[a]pply short-duration grazing as feasible (generally less than 20 days) to provide greater opportunity for regrowth” *Id.* at 4649.

⁶⁵ In 2005, BMPs were defined as “management practices to prevent or reduce the pollution of ‘waters of the United States,’” such as “practices to control plant site runoff.” 40 C.F.R. § 122.2 (2005).

1996, the Forest Service incorporates the WCPH “verbatim into forest plans as standards.” *Id.* at 1268.

Second, regarding BMPs, the Final EIS recognized that certain human and livestock activities could cause sedimentation, but explained how BMPs would help mitigate the effects. *See, e.g.*, 2005 Final EIS, App. at 1267-68. The Forest Service cited how BMPs had been used effectively in other national forests and compared those practices to relevant areas in the BHNF, *id.* at 1268. It determined that “the implementation of BMPs [in the BHNF] . . . will be as effective or more effective at preventing erosion . . . as those studied [in other areas] because of the less erodible soil types, the seasonal rainfall pattern, and the gentler topography existing [in the BHNF].” *Id.* The Final EIS also noted that evaluations conducted in 2001 showed the BMPs in the BHNF effectively mitigated sedimentation. 2005 Final EIS, App. at 1662. One such sedimentation evaluation had a “91 percent incidence of meeting or exceeding BMP application standards and a 96 percent effectiveness in providing adequate protection” against sedimentation. *Id.*

We conclude the Forest Service made a reasoned evaluation of how the WCPH and the BMPs would mitigate sedimentation under the Phase II Amendment, and reliance on these methods was not arbitrary or capricious. Biodiversity has not shown that the Forest Service failed to meet NEPA’s “hard look” requirement.

3. Hard Look at Historical Grazing Practices

Biodiversity also argues the Forest Service violated NEPA by failing to take a “hard look” at the effects of past grazing projects before approving four site-specific

grazing projects.⁶⁶ Aplt. Br. at 64. It contends the Forest Service ““should disclose the history of success and failure of similar projects”” to meet NEPA’s “hard look” requirement. Aplt. Br. at 64 (quoting *Sierra Club v. Morton*, 510 F.2d 813, 824 (5th Cir. 1975)). Biodiversity has not carried its burden because it does not explain why considering past grazing information merits inclusion or is reasonably necessary for the evaluation of each project. See *Wyoming*, 661 F.3d at 1251 (stating the Forest Service need not discuss impacts more than “reasonably necessary under the circumstances for evaluation of the project.” (quotations omitted)); see also *San Juan Citizens Alliance v. Stiles*, 654 F.3d 1038, 1045 (10th Cir. 2011) (noting the “challenger bears the burden of persuasion”).

Even if the Forest Service were required to consider past grazing practices for the four site-specific projects, the record indicates it did so. See Bearlodge Range Project Final EIS, App. at 2999-3000 (noting the project analyzed the “cumulative effects” of “past human actions” by “focusing on the current aggregate effects of past actions without delving into the historical details of individual past actions”); Mystic Range Project Final EIS, App. at 4368 (same); North Zone 05 Project Final EIS, App. at 4776 (same); North Zone 08 Project Final EIS, App. at 5179 (same).

⁶⁶ The Bearlodge Range Project, the Mystic Range Project, the North Zone 05 Project, and the North Zone 08 Project.

In sum, Biodiversity has not shown the Forest Service failed to meet the hard look requirement as to the four site-specific projects, nor has it shown arbitrary or capricious action in consideration of the four site-specific projects.

III. DISCUSSION—COLORADO APPEAL

After losing in Wyoming, Biodiversity attempted to reopen the Colorado litigation in May 2013 by filing a motion to enforce the Settlement Agreement and compel the Forest Service to prepare a Phase II Amendment that complies with NFMA, the 1982 Rule, the Chief’s 1999 Decision, and the Settlement Agreement. *See* Mot. to Enforce Settlement Agreement, App. at 150, 159-60. The district court denied the motion based on laches, reasoning that Biodiversity had waited too long to enforce the Settlement Agreement. Order Den. Mot. to Enforce Settlement Agreement, App. at 247, 253-54. Biodiversity argues on appeal the district court abused its discretion. *See* Aplt. Br. at 66-77.

We (A) describe relevant facts and procedure; (B) review the law of laches and our standard of review; and (C) address Biodiversity’s argument.

A. Factual and Procedural Background

1. The Settlement Agreement

In August 2000, the Forest Service and Biodiversity settled litigation involving the Beaver Park timber sale. Settlement Agreement, App. at 418-47. In a section titled “Phase II Forest Plan Amendment defined,” the Settlement Agreement said:

In the Phase II Forest Plan amendment the Forest Service shall amend current management direction—including forest-wide standards and guidelines—with appropriate public involvement to ensure compliance

with requirements of NFMA, its implementing regulations and agency policy, and all inadequacies identified in the Chief's appeal decision of October 12, 1999 for the remainder of the life of the Forest Plan Revision, except as otherwise amended pursuant to applicable law. Phase II shall address all of the issues identified in paragraphs 2, 3, and 4 of this settlement agreement, including northern goshawk, Management Indicator Species, and Research Natural Areas.

Settlement Agreement § 9(a), App. at 436.

2. Administrative Challenges to the Phase II Amendment

In October 2005, the Forest Service promulgated the Phase II Amendment, which Biodiversity challenged in May 2006. *See* Administrative Appeals, App. at 2581, 2600-01, & 2612. Biodiversity argued, in part, the Phase II Amendment violated the Settlement Agreement. *See* Administrative Appeals, App. at 2583-84, 2604, 2606, 2609, 2615, 2617 n.1, 2619, 2663-64, 2683-2686.

On November 1, 2006, the Forest Chief denied this administrative challenge, stating in part that the Forest Service had considered the Settlement Agreement when it promulgated the Phase II Amendment. Chief's 2006 Decision, App. at 2698-99, 2704. Biodiversity then challenged nine site-specific projects implemented under the Phase II Amendment. During some of those administrative challenges, Biodiversity alleged violations of the Settlement Agreement.⁶⁷ Each was denied. *See supra* notes 22-24 and accompanying text.

⁶⁷ Biodiversity argued the Forest Service violated the Settlement Agreement in at least five of its administrative challenges to the site-specific projects. Biodiversity's Dean Project Admin. Appeal, App. at 3831 (June 26, 2006) ("In light of all the aforementioned deficiencies in the [2005 Final EIS] and the Regional Forester's [2005 Record of Decision], the Phase II Amendment fails to live up to the USFS's promises as

Continued . . .

3. Wyoming Litigation

Even though Biodiversity had already alleged Settlement Agreement violations in its administrative challenges, on January 31, 2011, it sent “notice to the Forest Service that . . . the Forest Service has breached the [Settlement A]greement.” Notice of Breach, App. at 167. The Forest Service declined to negotiate.

In October 2011, Biodiversity petitioned the Wyoming federal district court for review of the Phase II Amendment under the APA. *See* Pet. for Review, App. at 25, 31. Biodiversity alleged the Phase II Amendment “violates the September 6, 2000 Settlement Agreement” *Id.* at 31.

In November 2012, the district court denied Biodiversity’s APA challenge. *See* Order Den. Pet., App. at 76. It noted Biodiversity had requested “declaratory and injunctive relief vacating and setting aside” the Phase II Amendment until it complied with the Chief’s 1999 Decision and the Settlement Agreement. *Id.* at 95, 97. The district court said it “lack[ed] subject matter jurisdiction to address alleged violations of these

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set forth in the Settlement Agreement in Civil Action No. 99-N-2173.”); Biodiversity’s Moskee Project Admin. Appeal, App. at 4270 (Oct. 29, 2007) (“[T]he Phase II Amendment violates the Settlement Agreement by failing to address and fix the following flaws in the 1997 Revised BHNF LRMP as identified in the Chief’s 1999 Appeal Decision”); Biodiversity’s Citadel Project Admin. Appeal, App. at 3402 (Oct. 29, 2007) (arguing the Forest Service’s actions were “in complete contradiction of the Settlement Agreement”); Biodiversity’s Telegraph Project Admin. Appeal, App. at 6342 (Aug. 24, 2009) (“[T]he Phase II Amendment fails to comply with key paragraphs of the Settlement Agreement.”); Biodiversity’s Rattlesnake Project Admin. Appeal, App. at 5788 (July 2, 2010) (“[T]he Phase II Amendment itself is illegal and does not comply with the applicable 1982 implementing regulations, 1999 Appeal Decision, or 2000 Settlement Agreement”).

documents because neither independently provide [Biodiversity] with appealable issues under the APA.” *Id.* at 95.

In April 2013, the district court reiterated its reasoning when it denied Biodiversity’s motion for reconsideration. *See* Order Den. Mot. for Reconsideration, App. at 148-49 (“Petitioners have cited no authority supporting the novel proposition that any federal district court other than the District of Colorado could properly exercise ancillary jurisdiction to enforce the agreement.”).

4. The Motion to Enforce the Settlement Agreement in Colorado and Dismissal Based on Laches

One month later, on May 31, 2013, Biodiversity moved to enforce the Settlement Agreement in the Colorado federal district court, arguing the Forest Service breached by failing to promulgate a Phase II Amendment that “compl[ied] with the 1982 Rule” and “repair[ed] all inadequacies identified” in the Chief’s 1999 Decision. Mot. to Enforce the Settlement Agreement, App. at 150, 159 (quotations omitted).

The district court denied the motion based on laches, concluding Biodiversity had sat on its contract rights too long. *See* Order Den. Mot. to Enforce the Settlement Agreement, App. at 247, 253. The district court said laches is appropriate when the delay is unreasonable and prejudiced the defendant. *Id.* at 251. It concluded Biodiversity could have brought its claim at least as early as November 1, 2006—the day the Forest Chief denied Biodiversity’s administrative appeal of the Phase II Amendment. The district court said:

[Biodiversity] knew or should have known by at least November 1, 2006, that Phase II would be implemented as set forth in the 2005 [Record of

Decision], that is, without the provisions here claimed the agreement required be included. Their claim that such failure constituted a breach of the terms of the Settlement Agreement therefore was fully ripe at that time, and their failure to seek a judicial remedy of that alleged breach until years later constitutes the type of unreasonable delay which the equitable doctrine of laches was intended to address.

Id. at 252.

The district concluded the six-and-a-half year delay between November 2006 and May 2013 was unreasonable because Biodiversity “offer[ed] little explanation of their activities relevant to pursuing available remedies during this appreciable lapse of time.”

Id. Biodiversity’s argument that it “could not immediately challenge the Phase II Amendment but instead exhausted their administrative remedies on a number of site-specific projects implementing Phase II,” was unpersuasive because “[Biodiversity] provide[d] not a shred of evidence to substantiate these bald, global assertions.” *Id.* (quotations omitted).

The district court also determined the delay prejudiced the Forest Service: “the Forest Service has managed the BHNF in accordance with the Phase II [A]mendment, with no apparent indication that plaintiffs believed such implementation to constitute a violation of the Settlement Agreement.” *Id.* at 253. The court mentioned the Forest Service had undertaken significant efforts to implement the Phase II Amendment, such as thinning trees to reduce insect infestation and fire risks. *Id.* It concluded “any delay in implementing” the Phase II Amendment’s measures controlling these threats “poses a significant risk not only to the forest itself, but to property and persons located adjacent to it.” *Id.*

B. *Standard of Review and Legal Background*

1. **Standard of Review**

We review a district court's laches decision for abuse of discretion. "Whether laches bars an action in a given case . . . 'is a question primarily addressed to the discretion of the trial court.'" *Burnett v. New York Cent. R.R. Co.*, 380 U.S. 424, 435 (1965) (quoting *Gardner v. Panama R.R. Co.*, 342 U.S. 29, 30-31 (1951) (per curiam)). On appeal, "we may not disturb the trial court's ruling in the absence of abuse of that discretion." *Brunswick Corp. v. Spinit Reel Co.*, 832 F.2d 513, 523 (10th Cir. 1987); *Mile High Indus. v. Cohen*, 222 F.3d 845, 857 (10th Cir. 2000) (same). "We review the district court's factual findings as to [a defendant's] equitable defenses under the clearly erroneous standard, and its legal conclusions *de novo*." *Mile High*, 222 F.3d at 859; *see also Bermuda Exp., N.V. v. M/V Litsa*, 872 F.2d 554, 557 (3d Cir. 1989) ("Our standard of review on the laches issue has various components. We review factual findings such as length of delay and prejudice under the clearly erroneous standard; we review the district court's balancing of the equities for abuse of discretion; and our review of legal precepts applied by the district court in determining that the delay was excusable is plenary.").⁶⁸

⁶⁸ The parties agree we should review the laches decision here for abuse of discretion. *See* Aplt. Br. at 66-77; Aplee. Br. at 56-57; Aplt. Reply Br. at 34-35, 37. Although summary judgment based on laches was reviewed *de novo* in *Jacobsen v. Deseret Book Co.*, 287 F.3d 936, 948 (10th Cir. 2002) and *Hutchinson v. Pfeil*, 105 F.3d 562, 564 (10th Cir. 1997), the standard of review for summary judgment is typically *de novo*, *e.g.*, *Adler v. Wal-Mart Stores, Inc.*, 144 F.3d 664, 670 (10th Cir. 1998), this appeal does not arise from summary judgment, and the clear weight of authority is that circuit

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2. Legal Background

The laches defense bars a party's dilatory claim. *Nat'l R.R. Passenger Corp. v. Morgan*, 536 U.S. 101, 121-22 (2002); *Jicarilla Apache Tribe v. Andrus*, 687 F.2d 1324, 1338 (10th Cir. 1982).⁶⁹ It stems from the principle that "equity aids the vigilant and not those who slumber on their rights." *Kansas v. Colorado*, 514 U.S. 673, 687 (1995) (quotations omitted); see also *Bowman v. Wathen*, 42 U.S. 189, 193 (1843) ("[A] court of equity . . . has always refused its aid to stale demands, where the party has slept upon his rights for a great length of time." (quotations omitted)). Laches bars a claim when there is: "(1) lack of diligence by the party against whom the defense is asserted, and (2) prejudice to the party asserting the defense." *Nat'l R.R. Passenger Corp.*, 536 U.S. at 121-22 (quotations omitted).

Courts apply the delay and prejudice elements with flexibility. As the Supreme Court noted, "[e]quity eschews mechanical rules; it depends on flexibility. Equity has acted on the principle that laches is not, like limitation, a mere matter of time; but principally a question of the inequity of permitting the claim to be enforced" *Holmberg v. Armbrrecht*, 327 U.S. 392, 396 (1946) (quotations omitted); see also

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courts review district courts' laches decisions for abuse of discretion, see *Burnett*, 380 U.S. at 435; *Mile High*, 222 F.3d at 857.

⁶⁹ In its opposition to Biodiversity's motion to enforce the Settlement Agreement, the Forest Service raised the laches defense. See Opp'n to Mot. to Enforce Settlement Agreement at 6-9, *Biodiversity v. USFS*, No. 1:99-cv-02173-REB-MJW (D. Colo. June 24, 2013), ECF No. 100.

Czaplicki v. The Hoegh Silvercloud, 351 U.S. 525, 533 (1956) (observing whether laches is appropriate depends on “the peculiar equitable circumstances” in each case); *Bechler v. Kaye*, 222 F.2d 216, 219 (10th Cir. 1955) (“In the final analysis each case must be determined upon its own circumstances and whether or not the doctrine of laches should be applied will be determined from the equities as shown by the evidence.”).

Courts have said the “lack of diligence” element was met when delay was “inexcusable,” “unreasonable,” or “undue;”⁷⁰ and the “prejudice” element was met when prejudice was “undue,” “substantial,” or “material.”⁷¹ Further, courts have said that prejudice is established when the defendant has expended substantial time and effort during the delay that the defendant’s claim could defeat. *See, e.g., Jicarilla*, 687 F.2d at 1338-39 (noting that if the plaintiffs’ delayed NEPA claim were successful and would thereby cancel defendants’ leases, defendants would be prejudiced because of expenditures to improve the land and the “loss of future profits”); *Southside Fair Hous. Comm. v. City of New York*, 928 F.2d 1336, 1355-56 (2d Cir. 1991) (concluding if a claim seeking withdrawal of the property sale were granted, defendants would suffer “significant financial loss” having spent millions of dollars to develop land for a synagogue). For example, a defendant’s substantial completion of a challenged project

⁷⁰ *Kansas*, 514 U.S. at 689 (inexcusable); *Jicarilla*, 687 F.2d at 1338 (unreasonable); *Moore v. Shultz*, 491 F.2d 294, 300 (10th Cir. 1974) (undue).

⁷¹ *Daingerfield Island Protective Soc. v. Lujan*, 920 F.2d 32, 37 (D.C. Cir. 1990) (undue); *Yates v. Am. Republics Corp.*, 163 F.2d 178, 180 (10th Cir. 1947) (substantial); *Hutchinson*, 105 F.3d at 564 (material).

during the delay period can constitute prejudice. *See, e.g., Apache Survival Coal. v. United States*, 21 F.3d 895, 913-14 (9th Cir. 1994) (affirming a district court’s application of laches because plaintiffs brought a claim “[o]nly after substantial work on the [project] had been completed,” resulting in “undue prejudice” to the Forest Service); *Citizens & Landowners Against the Miles City/New Underwood Powerline v. Sec’y, U.S. Dep’t of Energy*, 683 F.2d 1171, 1177 (8th Cir. 1982) (concluding defendants suffered prejudice because a power line was complete and operating, and a successful NEPA challenge would require significant expenditure of time and resources to reroute the power line, and result in power shortages during the rerouting); *see also Park Cnty. Res. Council, Inc. v. USDA*, 817 F.2d 609, 618 (10th Cir. 1987) (noting the alleged prejudice did not merit laches because the project was “not . . . substantially completed”), *overruled on other grounds by Vill. of Los Ranchos De Albuquerque v. Marsh*, 956 F.2d 970, 973 (10th Cir. 1992) (en banc).

In litigation brought under environmental federal statutes, laches “is disfavored because of the interests of the public in environmental quality and because the agency would escape compliance with NEPA if laches were generally applied, thus defeating Congress’ environmental policy.” *Jicarilla*, 687 F.2d at 1338-39. As we further explained in *Park County*, “laches must be invoked sparingly in environmental cases because ordinarily the plaintiff will not be the only victim of alleged environmental damage. A less grudging application of the doctrine might defeat Congress’s environmental policy.” 817 F.2d at 617 (quotations omitted).

In *Park County*, we said that if a district court “fails to consider the legal standard disfavoring laches [t]his failure amounts to an abuse of discretion.” *Id.* If a district court misapprehends the law in assessing a laches defense, the appellate court may remand for application of the correct standard, especially if further factual development is necessary. *Id.* at 617-18. Some circuit courts, however, have resolved the laches issue on appeal in cases brought under environmental statutes when the factual record is sufficiently developed. *Id.*; accord *Apache Survival Coal.*, 21 F.3d at 906-07.

C. *Analysis*

Biodiversity claims the district court abused its discretion in three ways:

- (1) failing to consider the precedent disfavoring laches in environmental cases;
- (2) erroneously determining Biodiversity’s delay was unreasonable; and (3) improperly concluding the delay prejudiced the Forest Service.

1. **Failure to Consider Laches Is Disfavored**

In its memorandum opinion and order dismissing the case based on laches, the district court said:

I note that [Biodiversity]’s claims in this suit do not arise under the NFMA or any other environmental statute; instead, they seek to enforce a contract. Therefore, whatever administrative or other remedial actions plaintiffs may have been required to undertake pursuant to any such environmental statutes are not relevant in considering their rights to enforce the terms of the Settlement Agreement.

Order Den. Mot. to Enforce Settlement Agreement, App. at 252.

Biodiversity argues the district court “fail[ed] to acknowledge this is an environmental case, and that in such cases, application of the doctrine of laches is disfavored.” Aplt. Br. at 69. This argument misreads the district court in two ways.

First, to assert the district court “fail[ed] to acknowledge this is an environmental case” is implausible—the district court’s rulings and analysis since Biodiversity filed its complaint in 1999 demonstrate it clearly understood the environmental nature of this case.

Second, as to acknowledging whether laches should be disfavored, the district court correctly noted that Biodiversity’s motion to enforce the Settlement Agreement is a breach of contract claim, not an APA claim based on NFMA, NEPA, or any other environmental statute. *See* Order Den. Mot. to Enforce Settlement Agreement, App. at 252. As such, administrative actions that must precede the usual environmental statutory claim are unnecessary. Rather than failing to acknowledge “the doctrine of laches is disfavored,” Aplt. Br. at 69, the district court, having received briefs from two parties making this very point about the doctrine and citing two cases applying it,⁷² said any administrative exhaustion rationale to disfavor laches does not apply—is “not relevant”—

⁷² *See* Intervenor’s Opp’n to the Mot. to Enforce, App. at 182 (“Laches is invoked ‘sparingly’ in environmental litigation, but it does apply when the movant has engaged in unreasonable delay and the nonmovant has relied extensively on the project at issue and would be prejudiced by the requested relief.” (citing *Park Cnty.*, 817 F.2d at 617)); Biodiversity’s Reply in Supp. of Mot. to Enforce, App. at 216 (“‘Laches must be invoked sparingly in environmental cases be [sic, because] ordinarily the plaintiff will not be the only victim of alleged environmental damage.’” (quoting *Park Cnty.*, 817 F.2d at 617)); Order Den. Mot. to Enforce Settlement Agreement, App. at 251 (citing *Park Cnty.*, 817 F.2d at 617; *Jicarilla*, 687 F.2d at 1338).

here. Order Den. Mot. to Enforce Settlement Agreement, App. at 252. The district court understood Biodiversity’s motion to enforce a breach of contract arises in a case about environmental concerns but is different from a claim based on environmental statutes. It decided the laches issue against that backdrop and was not persuaded this matter fits squarely into the category of cases based on environmental statutes to which the doctrine disfavoring laches typically applies.

As a result, we are not persuaded the district court did not “consider the legal standard disfavoring laches,” *Park Cnty.*, 817 F.2d at 617, and therefore reject Biodiversity’s abuse of discretion argument on this ground.⁷³

2. Unreasonable Delay

Biodiversity argues the district court erred in finding unreasonable delay by (1) determining the delay in bringing the breach of Settlement Agreement claim began on November 1, 2006—the date the Forest Chief denied Biodiversity’s administrative challenge to the Phase II Amendment—and (2) concluding any delay was unreasonable. *See* Aplt. Br. at 69-74.

⁷³ We note the concern about applying laches to “defeat Congress’s environmental policy,” *Park Cnty.*, 817 F.2d at 617 (quotations omitted), is mitigated here because (1) the motion to enforce was based on a contract—the Settlement Agreement—not a federal statute embodying environmental policy, and (2) Biodiversity has had ample opportunity to pursue its claims based on Congress’s environmental policy in its many administrative challenges to the Phase II Amendment and its implementation, and especially through its lawsuit in the Wyoming federal district court under NFMA, NEPA, and the APA.

First, as to the beginning of delay, if the Phase II Amendment violates the Settlement Agreement, Biodiversity knew or should have known of its breach claim at least by November 1, 2006. Indeed, the record shows Biodiversity knew of its breach claim even earlier when it filed its administrative challenge in May 2006, arguing “the Phase II Amendment fails to live up to the USFS’s promises as set forth in the Settlement Agreement.” Biodiversity’s Administrative Appeal, App. at 2683. Because contract actions accrue at the moment of breach, *see Zamora v. Prematic Serv. Corp.*, 936 F.2d 1121, 1123 (10th Cir. 1991) *and Hersh Cos. Inc. v. Highline Vill. Assocs.*, 30 P.3d 221, 224 (Colo. 2001) (en banc),⁷⁴ and because Biodiversity cannot argue it was unaware of its breach claim, the district court did not clearly err or otherwise abuse its discretion in using the November 1, 2006 date as the starting point for its laches analysis. *See Jacobsen v. Deseret Book Co.*, 287 F.3d 936, 949 (10th Cir. 2002) (“Generally speaking, the relevant delay is the period from when the plaintiff knew (or should have known) of the allegedly infringing conduct, until the initiation of the lawsuit in which the defendant seeks to counterpoise the laches defense.”) (quotations omitted).

Second, as to unreasonable delay, Biodiversity argues the district court ignored its strategic and diligent pursuit of its rights by “rais[ing] violations of the 2000 settlement agreement in its comments and administrative appeals.” Aplt. Br. at 71. Biodiversity

⁷⁴ In contrast, APA challenges to forest plans for violating NFMA are not ripe until they have been implemented through site-specific projects. *Ohio Forestry Ass’n, Inc. v. Sierra Club*, 523 U.S. 726, 732-37 (1998). As such, Biodiversity’s arguments regarding the “ripeness” of the breach claim under the principles in *Ohio Forestry* are misplaced. *See* Aplt. Br. at 71-72.

relies on *Park County*, 817 F.2d at 617-18, in which we concluded a district court erred in holding that laches barred a NEPA claim. We reasoned that plaintiffs' almost two-year delay in bringing its NEPA challenge was not unreasonable or "sinister" because it was merely a "tactical decision" to "concentrate their energies and resources" in "the most efficient way to press their substantive objectives." *Id.* at 618. Biodiversity argues its almost seven-year delay is similarly not unreasonable because it made "strategic decisions" to challenge the Phase II Amendment and the nine site-specific projects "in administrative processes before resorting to litigation." *Aplt. Br.* at 70-71.

Park County is distinguishable on several grounds. First, the delayed claim in *Park County* was a federal environmental statutory claim. Biodiversity's claim is a Settlement Agreement breach of contract claim. Second, the *Park County* plaintiffs delayed less than two years before filing suit. Biodiversity delayed more than three times longer to bring its motion. Third, the challenged project in *Park County* was "not . . . substantially completed" because significant drilling activities "ha[d] not yet transpired." *Park Cnty.*, 817 F.2d at 618. Biodiversity challenges a forest plan that the Forest Service has substantially implemented in dozens of projects and has relied upon to manage the BHNF for eight years. Fourth, we recognized the *Park County* plaintiffs' efforts to streamline their litigation by focusing on challenging a drilling permit before bringing the NEPA challenge. *Id.* By contrast, Biodiversity's strategy increased litigation. Starting in 2006, in numerous administrative challenges and then in the Wyoming federal district court, Biodiversity alleged violations of the Settlement Agreement even though, as the Wyoming court correctly decided, only the Colorado

federal district court had jurisdiction to enforce the agreement. Order Den. Mot. for Reconsideration, App. at 148-49.⁷⁵ Biodiversity chose to avoid the Colorado federal district court and attempted instead to enforce the Settlement Agreement in administrative *and* district court forums lacking jurisdiction. Only after those efforts failed did Biodiversity return to the Colorado federal district court, almost seven years after its breach of contract claim accrued and nearly thirteen years after the Settlement Agreement was finalized. Just because Biodiversity's delay may have been strategic does not make it reasonable—in fact, just the opposite.

For the foregoing reasons, the district court did not abuse its discretion when it determined that Biodiversity's delay was unreasonable.

3. Undue Prejudice

Biodiversity argues the district court abused its discretion by concluding the delay prejudiced the Forest Service. It argues (1) the Forest Service was aware of Biodiversity's concerns, Aplt. Br. at 75, and (2) enforcement of the Settlement Agreement would neither “halt any project underway” nor “necessarily delay ongoing

⁷⁵ During that whole period, Biodiversity was aware the Colorado federal district court had “retain[ed] jurisdiction of this matter for the purpose of entering such further orders, direction, or relief as may be necessary or appropriate for the construction, implementation, or enforcement of this Agreement” Settlement Agreement, App. at 442. As noted by the Wyoming federal district court, Biodiversity has “cited no authority supporting the novel proposition that any federal district court other than the District of Colorado could properly exercise ancillary jurisdiction to enforce the agreement.” Order Den. Mot. for Reconsideration, App. at 148-49.

on-the-ground implementation of projects.” Apl’t. Reply Br. at 36; *see also* Apl’t. Br. at 75-77.

How much of the district court’s prejudice analysis rested on factual determinations versus a balance of the equities is not clear. But whether we review the district court’s determination of prejudice under clear error or abuse of discretion, we see no reason to reverse the district court’s decision.

First, no party disputes the Forest Service was aware of Biodiversity’s concerns.⁷⁶ Starting in 2006, Biodiversity alleged Settlement Agreement violations in its administrative challenges and in its Wyoming lawsuit. But that does not foreclose prejudice to the Forest Service. The Forest Service devoted substantial time and resources responding to Biodiversity’s various administrative challenges and its Wyoming lawsuit while Biodiversity held in reserve the breach of contract claim it could have brought at least by November 1, 2006. Based on Biodiversity’s jurisdictionally defective protests of Settlement Agreement breach outside the Colorado forum, the Forest Service may reasonably have been lulled into thinking Biodiversity had chosen the route of challenging the Phase II Amendment for violations of NFMA and NEPA under the APA in lieu of attempting to enforce the Settlement Agreement in Colorado. *See Pro*

⁷⁶ On this score, we disagree with the district court’s statement that there was “no apparent indication that plaintiffs believed such implementation [of the Phase II Amendment] to constitute a violation of the Settlement Agreement.” Order Den. Mot. to Enforce the Settlement Agreement, App. at 253. That the Forest Service was on notice of Biodiversity’s Settlement Agreement violation concerns, however, not only does not alter our unreasonable delay and undue prejudice analysis, it strengthens it given the circumstances of this case.

Football, Inc. v. Harjo, 565 F.3d 880, 884 (D.C. Cir. 2009) (“When there has been an unreasonable period of delay by a plaintiff . . . prejudice to the defendant may ensue whether or not the plaintiff overtly lulled the defendant into believing that the plaintiff would not act, or whether or not the defendant believed that the plaintiff would have grounds for action.”).

Second, Biodiversity’s argument that enforcing the Settlement Agreement would not “necessarily delay” ongoing projects, Aplt. Reply Br. at 36, overlooks the prejudice the Forest Service would suffer from Biodiversity’s delayed motion. As the district court noted, “the Forest Service has managed the BHNF in accordance with the Phase II [A]mendment” as a blueprint for nearly eight years, including implementing dozens of projects and creating a forest-wide strategy to combat insect infestation and fire risks. Order Den. Mot. to Enforce Settlement Agreement, App. at 253. During the period of delay since November 2006, the Forest Service has invested significant time and resources, and requiring the Forest Service to change its blueprint governing these efforts would compromise work that has already been done.

For example, the district court observed the Forest Service “proffered evidence substantiating that [it] has undertaken significant efforts to manage the mountain pine beetle infestation that has plagued the BHNF in reliance on the Phase II [A]mendment and the terms of the Settlement Agreement.” Order Den. Mot. to Enforce Settlement Agreement, App. at 253. Because the BHNF includes within its boundaries not only federally managed lands, but also parcels of state-managed and private lands, the Forest Service has worked with the Intervenor and private landowners to battle the bark beetle

epidemic using a “wall to wall” coordinated strategy. *See* Am. Decl. of S.D. State Forester Raymond Sowers, App. at 209. Requiring the Forest Service to revisit and revise the Phase II Amendment now would threaten what has been achieved so far: “a comprehensive and continual program is required,” and an interruption “in implementing the measures already underway poses a significant risk not only to the forest itself, but to property and persons located adjacent to it.” Order Den. Mot. to Enforce Settlement Agreement, App. at 253; *see also* Intervenor’s Opp’n to Mot. to Enforce, App. at 185 (“This is not the time to stop for more study and then start again. Laches applies because . . . [the parties] have relied on the current Phase II and associated projects to invest heavily in control of the mountain pine beetle, and the beetle control efforts must be continued to be effective.”).

The district court properly weighed “the peculiar equitable circumstances” in this case, *Czaplicki*, 351 U.S. at 533, and determined the Forest Service would be unduly prejudiced from the delay in Biodiversity’s requested relief. We discern no reason to conclude the district court abused its discretion.

IV. CONCLUSION

In Case No. 13-8053, we affirm the Wyoming federal district court’s denial of Biodiversity’s petition for review under the APA. In Case No. 13-1352, we affirm the Colorado federal district court’s dismissal of Biodiversity’s motion to enforce the Settlement Agreement.