Data Submitted (UTC 11): 2/17/2022 7:00:00 AM First name: Karie Last name: Decker Organization: Rocky Mountain Elk Foundation

Title: Director of Wildlife and Habitat

Comments: February 17, 2022 Ashley National Forest ATTN: Plan Revision Team 355 North Vernal Avenue Vernal, Utah 84078 Rocky Mountain Elk FoundationAshley National Forest Plan Revision Team, The Rocky Mountain Elk Foundation (RMEF) appreciates the opportunity to comment on the Ashley National Forest draft environmental impact statement. The mission of RMEF is to ensure the future of elk, other wildlife, their habitat, and our hunting heritage. RMEF[rsquo]s 225,000+ members include hunters, ranchers, guides, outfitters, other business owners, wildlife enthusiasts, and other conservationists who have both recreational and economic interests in hunting and enjoying elk on National Forests. Since 1984, RMEF has conserved and enhanced more than 8.4 million acres of North America[rsquo]s most vital habitat for elk and other wildlife, including over 2.6 million acres across Utah and Wyoming. RMEF recognizes that the Forest Plan Revision Process under the 2012 planning rule is designed to emphasize restoration of natural resources to make our National Forests more resilient to climate change, protect water resources, and improve forest health. We request that the following recommendations be incorporated into the Forest Plan and in subsequent project design and implementation: General Inclusion of elk and elk habitat in planning efforts Healthy, free-roaming elk herds contribute to and are intermingled with the social well-being, ecological integrity, cultural, and economic goals of the Forest. Elk and other big game serve [Isquo]distinct roles and contributions[rsquo] to multiple user types on the Forest (viewing, hunting, etc.) and the Forest Plan plays an important role in supporting future big game populations. RMEF recommends recognition of elk as an important species and their economic and cultural value. Coordination with state wildlife agencies RMEF works closely with each state[rsquo]s wildlife agency. These agencies are our vital partners. In setting new management directions for elk habitat in forest plans and project design, we support and encourage continued forest planning efforts be coordinated with state wildlife agencies and that state agency goals for elk are integrated into the plan. RMEF recommends including vegetation and wildlife habitat goals that help manage wildlife populations at levels meeting Utah Department of Wildlife Resources and Wyoming Game and Fish Department big game management plan objectives. Migration Corridors Wildlife connectivity is increasingly threatened by habitat loss and degradation as well as development activities. RMEF recommends Plan components that recognizes the importance of big game migration corridors (especially summer range on FS lands) and includes management direction for conserving corridors across National Forest and neighboring lands. Science-based management RMEF appreciates USFS recognition and use of the adaptive management process based on the best available science. Additional citations/references are offered below for inclusion to help guide management. Past and recent research has identified several challenges to North America[rsquo]s elk country, including unnaturally dense forests, invasions of noxious weeds, lack of dependable water sources, and many others. RMEF supports use of the past 25+ years of research from the Starkey Project and other studies that have laid the groundwork for managing healthy elk habitat (Quigley and Wisdom 2015). More recent research on ungulate migration (Sawyer et al. 2013, Middleton et al. 2013), nutrition (Cook et al. 2013, Wisdom et al. 2018), and elk security (Ranglack et al. 2017, Wisdom et al. 2018) continue to build on this foundation. RMEF recommends that recent research on the benefits of actively managed landscapes and relevant components of Executive Order 13855 on active management on America[rsquo]s forests (2018) be incorporated into the Plan. Selection of Alternatives Specific to the four alternatives presented, RMEF does not support any one of the alternatives in its entirety. Rather, RMEF recommends the USFS consider various components of each of the alternatives to best fit the purpose and need along with stakeholder input. Comments below regarding specific plan sections reflect this approach [ndash] elements from alternatives B and/or D (primarily) are identified as preferred options. Sustainable Recreation Public access and hunting heritage [bull] For many hunter-conservationists, public lands provide the best opportunity to pursue their hunting heritage. These activities deliver economic benefits for local communities, as well as cultural and social benefits. RMEF appreciates inclusion of hunting, fishing, trapping and shooting sports as contributing to local economies and the well-being and guality of life of National Forest users. The forest plan should provide for the continuation of these activities as a valid and vital component of the recreation spectrum. The Federal Lands Hunting, Fishing and

Shooting Sports Roundtable MOU between the U.S. Department of Agriculture, the U.S. Department of the Army, and the U.S. Department of the Interior (2011) develops and expands a framework of cooperation among the parties at all levels for planning and implementing mutually beneficial projects and activities related to hunting, fishing, trapping and shooting sports conducted on federal land. [bull] Identified as a significant barrier to maintaining hunting and angling participants, access to public land plays a critical role in ensuring the future of our hunting heritage. RMEF recommends consideration of public land access needs in forest planning efforts, including close collaboration with State Wildlife Agencies to create or maintain access points to the National Forest that are important for managing wildlife. In addition, RMEF recommends inclusion of relevant components within Executive Order 13443 on facilitation of hunting heritage and wildlife conservation (2007), the John D. Dingell, Jr. Conservation, Management, and Recreation Act (2019), and the Great American Outdoors Act (2020). Management of motorized and non-motorized recreation [bull] Elk and many other wildlife species are sensitive to human travel patterns, especially motorized use. Research from the Starkey Project has done much to quantify effects of roads, trails, and associated motorized (Wisdom et al. 2005) and non-motorized traffic on elk (Wisdom et al. 2018). RMEF supports a balanced approach regarding the Recreation Opportunity Spectrum. Multi-use activities occur year-round and RMEF recommends that the Forest provide access for those seeking varied experiences (primitive and roaded). However, RMEF also recommends inclusion of Desired Conditions, Goals, and/or Guidelines that provide seasonal protection (during critical times) for elk and other wildlife from impacts of recreation (via roads, trails and associated motorized and non-motorized traffic). Timing restrictions should be based on the best available science as well as site-specific factors (topography, available habitat, etc.). Fire and Fuels Management [bull] RMEF is very supportive of active management on our public lands to benefit wildlife habitat and fire risk management. Executing active forest management techniques such as prescribed burns, thinning and other treatments help forests survive wildfires and assists in long-term ecosystem resilience (Prichard et al. 2020, Schultz and Moseley 2019). In addition, managing natural ignitions can help achieve fuels and vegetation goals. As such, RMEF recommends Alternative D: 10,000-40,000 acres proposed for fuels treatment to improve or maintain desired vegetation conditions. [bull] RMEF also recommends Alternative B or C: managing at least 10%-20% of natural, unplanned ignitions to meet resource objectives across the entire forest. Vegetation Management, Timber Harvest and Sustainable Ecosystems Livestock Grazing [bull] Noxious and invasive plants are slowly replacing native forage for elk and other species, RMEF encourages the Forest Service to actively manage landscapes to control and reduce noxious weeds through an integrated weed management approach (biological, mechanical, chemical, and outreach). Early detection and rapid response remains a critical component of effective weed management (Westbrooks 2004). Native plant communities provide the highest nutritional value for wildlife, thus RMEF encourages the use of native plant seed mixes in all restoration work. [bull] Managed livestock grazing can improve the health of rangelands and forest meadows if the system is designed with habitat values for elk and other wildlife in mind. An effective range management program between the agency and permittees is essential to maintaining the economic base and lifestyle that have helped keep private lands across elk country as working ranches. RMEF encourages the Forest Service to employ grazing management systems and techniques compatible with maintaining desired levels of elk and other wildlife. In addition, RMEF recommends adding Desired Conditions to provide forage and residual cover for wildlife (especially following management activities or natural disturbances), and to adjust stocking rates in drought conditions when vegetation is slow to recover. [bull] Early seral forest provides important habitat for elk and other wildlife and is often achieved following disturbance such as fire and mechanical thinning. Decades of fire suppression have reduced early successional stages across the National Forest System. RMEF supports the use of mechanical thinning and prescribed burning to encourage growth of grasses, forbs, young shrubs, and trees which provide critical forage and cover for elk and other species (Swanson et al. 2011). [bull] RMEF supports balanced use of timber production and encourages consideration of wildlife habitat enhancement through timber production activities. Opportunities for timber production which can provide greater flexibility in using the full array of active vegetation management activities are more effective at meeting desired vegetative conditions. [bull] RMEF recommends forest product harvest levels in Alternative B or D, allowing the USFS to maximize opportunities to achieve fuels reduction, vegetation management and wildlife habitat goals. Management Areas and Areas Administratively Recommended for Designation[bull] As stated above. RMEF supports a balanced approach regarding the Recreation Opportunity Spectrum. Multi-use activities occur yearround, and RMEF recommends that the Forest provide access for those seeking varied experiences.[bull] RMEF supports active management on our public lands to benefit wildlife habitat and manage fire risk. Wilderness designation restricts various active management activities. Given the current condition of many of our forests, RMEF supports policies that limit additional Wilderness acreages, as represented in Alternative A, B or D.Land Status and Ownership[bull] RMEF supports Guidelines recognizing that acquisition or conveyance land ownership adjustments should improve management of National Forest System lands by consolidating land ownership, providing public access to public lands, and protecting and enhancing resources.[bull] RMEF recommends inclusion of Guidelines/Desired Conditions that seek opportunities to maintain or increase public land connectivity across the Forest through land acquisitions, land transfers, etc. and prioritize such actions based on increasing public access, habitat connectivity, wildlife corridors, enhancement of recreational opportunities, etc.[bull] RMEF recommends inclusion of Guidelines/Desired Conditions to seek opportunities to improve road and trail rights-of-way for access to hunting, fishing, and other recreational opportunities.RMEF appreciates the opportunity to engage in the Forest Planning efforts of the Ashley National Forest. We look forward to reviewing the Final Plan and EIS, when available.Sincerely,Karie DeckerDirector of Wildlife and HabitatReferencesCook, R.C., J.G. Cook, D.J. Vales, B.K. Johnson, S.M. McCorquodale, L.A. Shipley, R.A. Riggs, L.L. Irwin, S.L. Murphie, B.L. Murphie, K.A. Schoenecker, F. Geyer, P.B. Hall, R.D. Spencer, D.A. Immell, D.H. Jackson, B.L. Tiller, P.J. Miller, and L. Schmitz. 2013. Regional and Seasonal Patterns of Nutritional Condition and Reproduction in Elk. Wildlife Monographs 184:1-45. Exec. Order No. 13855, 84 FR 45. 2018. Promoting Active Management of America[rsquo]s Forests, Rangelands, and Other Federal Lands to Improve Conditions and Reduce Wildfire Risk. 45-48.Middleton, A.D., M.J. Kauffman, D.E. McWhirter, J.G. Cook, R.C. Cook, A.A. Nelson, M.D. Jimenez, R.W. Klaver. 2013. Rejoinder: challenge and opportunity in the study of ungulate migration amid environmental change. Ecology 94: 1280-1286.Prichard, S.J., N.A. Povak, M.C. Kennedy, and D.W. Peterson, 2020. Fuel treatment effectiveness in the context of landform, vegetation, and large, wind-driven wildfires. Ecological Applications 30: e02104.Quigley, T.M., and M.J. Wisdom. 2015. The Starkey Project: Long-term research for long-termmanagement solutions. Pages 9-16 in Wisdom, M.J., technical editor, The Starkey Project: a synthesis of long-term studies of elk and mule deer. Reprinted from the 2004 Transactions of the North American Wildlife and Natural Resources Conference, Alliance Communications Group, Lawrence, Kansas, USA.Ranglack, D.H., K.M. Proffitt, J.E. Canfield, J.A. Gude, J. Rotella, and R. Garrott. 2017. Security areas for elk during archery and rifle hunting seasons. Journal of Wildlife Management 81:778-791.Rowland, M.M., M.J. Wisdom, R.M. Nielson, J.G. Cook, R.C. Cook, B.K. Johnson, P. Coe, J.M. Hafer, B.J. Naylor, D.J. Vales, R.G. Anthony, E.K. Cole, C.D. Danilson, R.W. Davis, F. Geyer, S. Harris, L.L. Irwin, R. McCoy, M.D. Pope, M. Vavra. 2018. Modeling Elk Nutrition and Habitat Use in Western Oregon and Washington. Wildlife Monographs. 199. 1-69. Sawyer, H., M.J. Kauffman, A.D. Middleton, T.A. Morrison, R.M. Nielson and T.B. Wyckoff. 2013. A framework for understanding semi-permeable barrier effects on migratory ungulates. Journal of Applied Ecology 50:68-78. Schultz, C.A., and C. Moseley. 2019. Collaborations and capacities to transform fire management. Science 366:38-40.Swanson, M.E., J.F. Franklin, R.L. Beschta, C.M. Crisafulli, D.A. DellaSala, R.L. Hutto, D.B. Lindenmayer, F.J. Swanson. 2011. The forgotten stage of forest succession: early-successional ecosystems on forest sites. Frontiers in Ecology and the Environment 9:117-125Westbrooks, R.G. 2004. New approaches for early detection and rapid response to invasive plants in the United States. Weed Technology 32:1468-1471.Wisdom, M. J., A. A. Ager, H. K. Preisler, N. J. Cimon, and B. K. Johnson. 2005. Effects of Off-Road Recreation on Mule Deer and Elk. Pages 67-80 in Wisdom, M. J., technical editor, The Starkey Project: a synthesis of long-term studies of elk and mule deer. Reprinted from the 2004 Transactions of the North American Wildlife and Natural Resources Conference, Alliance Communications Group, Lawrence, Kansas, USA.Wisdom, M.J., H.K. Preisler, L. Navlor, R.G. Anthony, B.K. Johnson, M.M. Rowland. 2018. Elk responses to trail-based recreation on public forests. Forest Ecology and Management 411:223-233.

February 17, 2022 Ashley National Forest ATTN: Plan Revision Team 355 North Vernal Avenue Vernal, Utah 84078 Rocky Mountain Elk FoundationAshley National Forest Plan Revision Team, The Rocky Mountain Elk Foundation (RMEF) appreciates the opportunity to comment on the Ashley National Forest draft environmental impact statement. The mission of RMEF is to ensure the future of elk, other wildlife, their habitat, and our hunting heritage. RMEF[rsquo]s 225,000+ members include hunters, ranchers, guides, outfitters, other business owners,

wildlife enthusiasts, and other conservationists who have both recreational and economic interests in hunting and enjoying elk on National Forests. Since 1984, RMEF has conserved and enhanced more than 8.4 million acres of North America[rsquo]s most vital habitat for elk and other wildlife, including over 2.6 million acres across Utah and Wyoming. RMEF recognizes that the Forest Plan Revision Process under the 2012 planning rule is designed to emphasize restoration of natural resources to make our National Forests more resilient to climate change, protect water resources, and improve forest health. We request that the following recommendations be incorporated into the Forest Plan and in subsequent project design and implementation: General Inclusion of elk and elk habitat in planning efforts Healthy, free-roaming elk herds contribute to and are intermingled with the social well-being, ecological integrity, cultural, and economic goals of the Forest. Elk and other big game serve [Isquo]distinct roles and contributions[rsquo] to multiple user types on the Forest (viewing, hunting, etc.) and the Forest Plan plays an important role in supporting future big game populations. RMEF recommends recognition of elk as an important species and their economic and cultural value. Coordination with state wildlife agencies RMEF works closely with each state[rsquo]s wildlife agency. These agencies are our vital partners. In setting new management directions for elk habitat in forest plans and project design, we support and encourage continued forest planning efforts be coordinated with state wildlife agencies and that state agency goals for elk are integrated into the plan. RMEF recommends including vegetation and wildlife habitat goals that help manage wildlife populations at levels meeting Utah Department of Wildlife Resources and Wyoming Game and Fish Department big game management plan objectives. Migration Corridors Wildlife connectivity is increasingly threatened by habitat loss and degradation as well as development activities. RMEF recommends Plan components that recognizes the importance of big game migration corridors (especially summer range on FS lands) and includes management direction for conserving corridors across National Forest and neighboring lands. Science-based management RMEF appreciates USFS recognition and use of the adaptive management process based on the best available science. Additional citations/references are offered below for inclusion to help guide management. Past and recent research has identified several challenges to North America[rsquo]s elk country, including unnaturally dense forests, invasions of noxious weeds, lack of dependable water sources, and many others. RMEF supports use of the past 25+ years of research from the Starkey Project and other studies that have laid the groundwork for managing healthy elk habitat (Quigley and Wisdom 2015). More recent research on ungulate migration (Sawyer et al. 2013, Middleton et al. 2013), nutrition (Cook et al. 2013, Wisdom et al. 2018), and elk security (Ranglack et al. 2017, Wisdom et al. 2018) continue to build on this foundation. RMEF recommends that recent research on the benefits of actively managed landscapes and relevant components of Executive Order 13855 on active management on America[rsquo]s forests (2018) be incorporated into the Plan. Selection of Alternatives Specific to the four alternatives presented, RMEF does not support any one of the alternatives in its entirety. Rather, RMEF recommends the USFS consider various components of each of the alternatives to best fit the purpose and need along with stakeholder input. Comments below regarding specific plan sections reflect this approach [ndash] elements from alternatives B and/or D (primarily) are identified as preferred options. Sustainable Recreation Public access and hunting heritage [bull] For many hunter-conservationists, public lands provide the best opportunity to pursue their hunting heritage. These activities deliver economic benefits for local communities, as well as cultural and social benefits. RMEF appreciates inclusion of hunting, fishing, trapping and shooting sports as contributing to local economies and the well-being and quality of life of National Forest users. The forest plan should provide for the continuation of these activities as a valid and vital component of the recreation spectrum. The Federal Lands Hunting, Fishing and Shooting Sports Roundtable MOU between the U.S. Department of Agriculture, the U.S. Department of the Army, and the U.S. Department of the Interior (2011) develops and expands a framework of cooperation among the parties at all levels for planning and implementing mutually beneficial projects and activities related to hunting, fishing, trapping and shooting sports conducted on federal land. [bull] Identified as a significant barrier to maintaining hunting and angling participants, access to public land plays a critical role in ensuring the future of our hunting heritage. RMEF recommends consideration of public land access needs in forest planning efforts, including close collaboration with State Wildlife Agencies to create or maintain access points to the National Forest that are important for managing wildlife. In addition, RMEF recommends inclusion of relevant components within Executive Order 13443 on facilitation of hunting heritage and wildlife conservation (2007), the John D. Dingell, Jr. Conservation, Management, and Recreation Act (2019), and the Great American Outdoors Act

(2020). Management of motorized and non-motorized recreation [bull] Elk and many other wildlife species are sensitive to human travel patterns, especially motorized use. Research from the Starkey Project has done much to quantify effects of roads, trails, and associated motorized (Wisdom et al. 2005) and non-motorized traffic on elk (Wisdom et al. 2018). RMEF supports a balanced approach regarding the Recreation Opportunity Spectrum. Multi-use activities occur year-round and RMEF recommends that the Forest provide access for those seeking varied experiences (primitive and roaded). However, RMEF also recommends inclusion of Desired Conditions, Goals, and/or Guidelines that provide seasonal protection (during critical times) for elk and other wildlife from impacts of recreation (via roads, trails and associated motorized and non-motorized traffic). Timing restrictions should be based on the best available science as well as site-specific factors (topography, available habitat, etc.). Fire and Fuels Management [bull] RMEF is very supportive of active management on our public lands to benefit wildlife habitat and fire risk management. Executing active forest management techniques such as prescribed burns, thinning and other treatments help forests survive wildfires and assists in long-term ecosystem resilience (Prichard et al. 2020, Schultz and Moseley 2019). In addition, managing natural ignitions can help achieve fuels and vegetation goals. As such, RMEF recommends Alternative D: 10,000-40,000 acres proposed for fuels treatment to improve or maintain desired vegetation conditions. [bull] RMEF also recommends Alternative B or C: managing at least 10%-20% of natural, unplanned ignitions to meet resource objectives across the entire forest. Vegetation Management, Timber Harvest and Sustainable Ecosystems Livestock Grazing [bull] Noxious and invasive plants are slowly replacing native forage for elk and other species. RMEF encourages the Forest Service to actively manage landscapes to control and reduce noxious weeds through an integrated weed management approach (biological, mechanical, chemical, and outreach). Early detection and rapid response remains a critical component of effective weed management (Westbrooks 2004). Native plant communities provide the highest nutritional value for wildlife, thus RMEF encourages the use of native plant seed mixes in all restoration work. [bull] Managed livestock grazing can improve the health of rangelands and forest meadows if the system is designed with habitat values for elk and other wildlife in mind. An effective range management program between the agency and permittees is essential to maintaining the economic base and lifestyle that have helped keep private lands across elk country as working ranches. RMEF encourages the Forest Service to employ grazing management systems and techniques compatible with maintaining desired levels of elk and other wildlife. In addition, RMEF recommends adding Desired Conditions to provide forage and residual cover for wildlife (especially following management activities or natural disturbances), and to adjust stocking rates in drought conditions when vegetation is slow to recover. [bull] Early seral forest provides important habitat for elk and other wildlife and is often achieved following disturbance such as fire and mechanical thinning. Decades of fire suppression have reduced early successional stages across the National Forest System. RMEF supports the use of mechanical thinning and prescribed burning to encourage growth of grasses, forbs, young shrubs, and trees which provide critical forage and cover for elk and other species (Swanson et al. 2011). [bull] RMEF supports balanced use of timber production and encourages consideration of wildlife habitat enhancement through timber production activities. Opportunities for timber production which can provide greater flexibility in using the full array of active vegetation management activities are more effective at meeting desired vegetative conditions. [bull] RMEF recommends forest product harvest levels in Alternative B or D, allowing the USFS to maximize opportunities to achieve fuels reduction, vegetation management and wildlife habitat goals. Management Areas and Areas Administratively Recommended for Designation[bull] As stated above, RMEF supports a balanced approach regarding the Recreation Opportunity Spectrum. Multi-use activities occur yearround, and RMEF recommends that the Forest provide access for those seeking varied experiences.[bull] RMEF supports active management on our public lands to benefit wildlife habitat and manage fire risk. Wilderness designation restricts various active management activities. Given the current condition of many of our forests, RMEF supports policies that limit additional Wilderness acreages, as represented in Alternative A, B or D.Land Status and Ownership[bull] RMEF supports Guidelines recognizing that acquisition or conveyance land ownership adjustments should improve management of National Forest System lands by consolidating land ownership, providing public access to public lands, and protecting and enhancing resources.[bull] RMEF recommends inclusion of Guidelines/Desired Conditions that seek opportunities to maintain or increase public land connectivity across the Forest through land acquisitions, land transfers, etc. and prioritize such actions based on increasing public access, habitat connectivity, wildlife corridors, enhancement of recreational

opportunities, etc.[bull] RMEF recommends inclusion of Guidelines/Desired Conditions to seek opportunities to improve road and trail rights-of-way for access to hunting, fishing, and other recreational opportunities.RMEF appreciates the opportunity to engage in the Forest Planning efforts of the Ashley National Forest. We look forward to reviewing the Final Plan and EIS, when available.Sincerely,Karie DeckerDirector of Wildlife and HabitatReferencesCook, R.C., J.G. Cook, D.J. Vales, B.K. Johnson, S.M. McCorquodale, L.A. Shipley, R.A. Riggs, L.L. Irwin, S.L. Murphie, B.L. Murphie, K.A. Schoenecker, F. Geyer, P.B. Hall, R.D. Spencer, D.A. Immell, D.H. Jackson, B.L. Tiller, P.J. Miller, and L. Schmitz. 2013. Regional and Seasonal Patterns of Nutritional Condition and Reproduction in Elk. Wildlife Monographs 184:1-45.Exec. Order No. 13855, 84 FR 45. 2018. Promoting Active Management of America[rsquo]s Forests, Rangelands, and Other Federal Lands to Improve Conditions and Reduce Wildfire Risk. 45-48.Middleton, A.D., M.J. Kauffman, D.E. McWhirter, J.G. Cook, R.C. Cook, A.A. Nelson, M.D. Jimenez, R.W. Klaver. 2013. Rejoinder: challenge and opportunity in the study of ungulate migration amid environmental change. Ecology 94: 1280-1286. Prichard, S.J., N.A. Povak, M.C. Kennedy, and D.W. Peterson. 2020. Fuel treatment effectiveness in the context of landform, vegetation, and large, wind-driven wildfires. Ecological Applications 30: e02104.Quigley, T.M., and M.J. Wisdom. 2015. The Starkey Project: Long-term research for long-termmanagement solutions. Pages 9-16 in Wisdom, M.J., technical editor, The Starkey Project: a synthesis of long-term studies of elk and mule deer. Reprinted from the 2004 Transactions of the North American Wildlife and Natural Resources Conference, Alliance Communications Group, Lawrence, Kansas, USA.Ranglack, D.H., K.M. Proffitt, J.E. Canfield, J.A. Gude, J. Rotella, and R. Garrott. 2017. Security areas for elk during archery and rifle hunting seasons. Journal of Wildlife Management 81:778-791.Rowland, M.M., M.J. Wisdom, R.M. Nielson, J.G. Cook, R.C. Cook, B.K. Johnson, P. Coe, J.M. Hafer, B.J. Naylor, D.J. Vales, R.G. Anthony, E.K. Cole, C.D. Danilson, R.W. Davis, F. Geyer, S. Harris, L.L. Irwin, R. McCoy, M.D. Pope, M. Vavra. 2018. Modeling Elk Nutrition and Habitat Use in Western Oregon and Washington. Wildlife Monographs. 199. 1-69. Sawyer, H., M.J. Kauffman, A.D. Middleton, T.A. Morrison, R.M. Nielson and T.B. Wyckoff. 2013. A framework for understanding semi-permeable barrier effects on migratory ungulates. Journal of Applied Ecology 50:68-78. Schultz, C.A., and C. Moseley. 2019. Collaborations and capacities to transform fire management. Science 366:38-40.Swanson, M.E., J.F. Franklin, R.L. Beschta, C.M. Crisafulli, D.A. DellaSala, R.L. Hutto, D.B. Lindenmayer, F.J. Swanson. 2011. The forgotten stage of forest succession: early-successional ecosystems on forest sites. Frontiers in Ecology and the Environment 9:117-125Westbrooks, R.G. 2004. New approaches for early detection and rapid response to invasive plants in the United States. Weed Technology 32:1468-1471.Wisdom, M. J., A. A. Ager, H. K. Preisler, N. J. Cimon, and B. K. Johnson. 2005. Effects of Off-Road Recreation on Mule Deer and Elk. Pages 67-80 in Wisdom, M. J., technical editor, The Starkey Project: a synthesis of long-term studies of elk and mule deer. Reprinted from the 2004 Transactions of the North American Wildlife and Natural Resources Conference, Alliance Communications Group, Lawrence, Kansas, USA.Wisdom, M.J., H.K. Preisler, L. Naylor, R.G. Anthony, B.K. Johnson, M.M. Rowland. 2018. Elk responses to trail-based recreation on public forests. Forest Ecology and Management 411:223-233.