



FINAL REPORT

Governor's Task Force on Forests

January 2015

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EXECUTIVE SUMMARY

Wyoming's forests are facing significant challenges. Bark beetle infestations, drought, highly destructive wildfires, introduction of invasive non-native species, and increased residential development are happening at a level not seen in recent history. Such challenges may inhibit the ability of our forests to provide the full range of multiple uses and values people enjoy and rely on. In light of these threats and the importance of forests to the ecological, economic, social, and cultural fabric of Wyoming, Governor Matt Mead created the Task Force on Forests in 2013 to study the benefits forests provide, and analyze and consider new response strategies and recommendations for both active and passive management.

The Task Force met on five occasions from December 2013 through June 2014. Each Task Force meeting spanned three days. The Task Force focused on three major themes: (1) fire and other disturbance, (2) forest management, and (3) economic opportunities and innovation. Within each major theme, Task Force members deliberated on a number of specific subtopics:

Fire and other disturbance

- Wildfire prevention, preparedness, and response
- Fire management within the wildland-urban interface (WUI)
- Climate
- Non-native invasive species
- Ecological resiliency
- Budgeting and funding

Resource management

- Administrative processes
- Cooperation, collaboration, and partnerships
- Local management
- Diverse forest communities
- Socio-economic and cultural factors
- Wildlife habitat
- Data and monitoring
- Infrastructure
- Multiple use
- Ecosystem services
- Conservation
- Water quality
- Roads and trails

Economic opportunities and innovation

- Outdoors and tourism
- Forest products
- Grazing
- Education

The Forest Task Force reached consensus on 12 major recommendations comprising 53 sub-recommendations, for the Governor's consideration. The final recommendations are designed to help inform and guide the Governor in decision making and policy implementation.

The ideas presented in the Task Force final recommendations reflect near and long term strategies, recommendations and measurable actions that the State can implement. The recommendations can also be shared with federal agencies, local governments, the Wyoming Legislature, and other interested parties and stakeholders in order to effectively address as many recommendations as possible. The recommendations listed below are grouped thematically, and their order does not indicate priority.

TASK FORCE RECOMMENDATIONS

ALL THREE THEMES

Recommendation 1. The Governor’s Task Force on Forests endorses the Wyoming Forest Action Plan and recommends the Governor continue to support it.

Recommendation 2. Facilitate the creation of local collaborative working groups to address local forest management issues.

- 2.1 Provide procedural and financial support for effective collaboration within the proposed local working groups.*
- 2.2 Facilitate the creation of a collaboration fund to financially and technically support place-based collaboration on forest issues.*
- 2.3 Create regional broad interest-based working groups in each of the state forestry districts. These working groups will act as a starting point from which local issues can be addressed for all forested lands.*

FIRE AND OTHER DISTURBANCE

Recommendation 3. The State of Wyoming should proactively reduce the threat and occurrence of destructive wildfires by managing vegetation and fuels; protecting homes, communities, and other values at risk; and effectively and efficiently responding to wildfire.

- 3.1 Continue state funding for bark beetle mitigation in areas with an active forest products industry.*
- 3.2 Work with the Wyoming Legislature to provide adequate funding, matching other local, private, and federal dollars, to increase vegetative management and fuels mitigation projects.*
- 3.3 Promote aspen management where appropriate.*
- 3.4 Work to improve coordinated public information and education campaigns to increase public understanding of wildland fire including: wildland fire prevention, risk in the WUI, and the role fire plays as a natural process in ecosystems.*
- 3.5 Request the Wyoming Legislature to consider an interim study on ways to encourage insurance companies to create incentives and disincentives that motivate proactive management in the WUI.*
- 3.6 Provide guidelines to local governments for land use planning and development in the WUI and guidelines with respect to building in the WUI, utilizing Firewise, Fire Safe and/or Fire Adapted Community programs.*
- 3.7 Ask County Commissioners to encourage planners to include County Fire Wardens in the development, planning and building permitting in the WUI.*
- 3.8 Explore opportunities to work with the energy and utility companies to conduct fuels management on rights of way.*
- 3.9 Develop cross-jurisdictional watershed protection plans for municipal water supply drainages that focus on proactive management to preserve and enhance water quality, and to avoid catastrophic effects large-scale fires have on municipal watersheds.*

- 3.10** *Continue to work to resolve the “fire borrowing” issue in the US Forest Service (USFS) and the Department of Interior (DOI). The Governor’s involvement is critical in terms of enabling the federal agencies to carry out their missions.*
- 3.11** *Support initiatives to increase fire response capacity, using all resources, public and private.*
- 3.12** *Support adequate dedicated federal and state funding for fire management, including fire prevention, fuels reduction, preparedness, training, fire suppression, and post-fire restoration.*

Recommendation 4. In partnership with federal agencies, support increased funding to prevent, detect, and control non-native invasive plants, wildlife, and insects that threaten the health of Wyoming forests.

- 4.1** *In cooperation with the Wyoming Weed and Pest Council, the Wyoming State Forestry Division (WSFD), the USFS, and the Bureau of Land Management (BLM), support an overall statewide plan for public education of the threat of non-native species. Such a plan should facilitate coordination among federal, state, and local governments and funding mechanisms to provide broad, strategic direction to prevent, mitigate, and manage non-native species’ threats across Wyoming.*
- 4.2** *Expand multi-jurisdictional cooperation for mapping, monitoring, and control of non-native invasive species.*
- 4.3** *Continue to support aquatic invasive education and inspection program.*
- 4.4** *Continue to support and fund existing multi-stakeholder groups and processes that address non-native invasive species.*
- 4.5** *Emphasize and support cooperative weed control mechanisms across the state; looking to Teton County’s Jackson Hole Weed Management Association as a model.*

RESOURCE MANAGEMENT

Recommendation 5. Collaborate with forest managers to make available and enhance a sustainable supply of wood and biomass consistent with sound management.

- 5.1** *Implement cooperative agreements and/or Good Neighbor Authority and Wyden Authority, with all federal agencies where opportunities exist.*
- 5.2** *Encourage the expansion of the timber sale program on federal lands consistent with forest plans and resource management plans that ensure sustainable forest management.*
- 5.3** *Work with federal agencies to streamline the process for timber contracts.*

Recommendation 6. Continue to stress the importance of grazing to forest management.

- 6.1** *Recognizing that the livestock industry is an important component of the socio-economic and cultural fiber of many local communities and that grazing of USFS lands and forested BLM lands is essential to keeping many private lands in open space and is critical to wildlife habitat, strive to optimize the availability of federal lands for sustainable livestock grazing, including the use of grazing for vegetative management and use of targeted grazing.*
- 6.2** *Request that the USFS expedite the availability of vacant allotments, closed allotments and forage reserves and provide more flexibility in management including changes in kind and class of livestock.*

- 6.3** *Encourage the Western Governors' Association to seek a regulatory change to allow permittees to graze non-owned livestock on the national forests.*

Recommendation 7. Conduct a review of recent and ongoing National Environmental Policy Act (NEPA) analyses on forest lands in Wyoming that address vegetation management in order to identify best practices and promote efficiency and effectiveness.

- 7.1** *The Task Force recommends that the Governor, in collaboration with local government and federal agencies, conduct a review of the implementation and management of NEPA for national forests and BLM field offices in Wyoming regarding federal land management planning and implementation of vegetation management projects including forest improvement and fuels mitigation. This review should consider:*
- *the use and creation of efficiencies;*
 - *the use of best practices;*
 - *the use of authorities and tools, where appropriate, to expedite the NEPA process such as Healthy Forest Restoration Act (HFRA) and the new Categorical Exclusion (CE) authority;*
 - *evaluation of risk management in the decision;*
 - *inconsistencies among federal field units and USFS Regions; and*
 - *ways to enhance flexibility at a local level.*
- 7.2** *Look to models such as Planning 2.0 and iterative NEPA for examples on how the NEPA process may be streamlined.*
- 7.3** *Support an increased level of monitoring to guide future adaptive management and measure the results of activities implemented.*
- 7.4** *Support conducting socio-economic analyses for use at the state and county levels for use in the NEPA processes affecting forest lands.*
- 7.5** *Encourage federal agency partners to engage state and local governments in the NEPA processes.*

Recommendation 8. Develop a structure and process for local collaborative working groups to review and assess roadless areas and recommend management actions and to consider specific designations and/or releases where appropriate.

- 8.1** *Create a structure for local collaborative working groups to review and assess roadless areas, forest by forest. If there is interest, determine which areas are appropriate for wilderness designation, which areas should be released from roadless, and areas that should remain roadless. Working groups will present recommendations to the Governor, and with his approval, ask the Wyoming delegation to bring legislation.*
- 8.2** *Encourage local collaborative working groups to recommend appropriate management activities that should occur in roadless areas within the guidelines of Roadless Area Conservation Rule.*
- 8.3** *Maintain the recreational, economic, and ecological values and opportunities for solitude inherent in backcountry areas.*

Recommendation 9. Work with federal, state and private landowners to identify, maintain and enhance important wildlife corridors and habitats, and other preservation and conservation opportunities.

- 9.1** *Support the development and utilization of conservation tools for mitigation in forest management.*

- 9.2** *Facilitate coordination between federal and state agencies and private landowners to identify important forest migration corridors, determine the threats to those corridors, and take action to mitigate those threats while respecting private property rights.*
- 9.3** *Encourage agencies to ensure that decisions:*
- *incorporate the best available science;*
 - *utilize best management practices (BMPs) to minimize impacts of roads on soil and stream integrity;*
 - *consider impacts to wildlife habitats and migration corridors, and how it affects species diversity; and*
 - *promote the maintenance of ecosystem services, e.g., nutrient recycling, clean water and air, carbon sequestration, etc.*

ECONOMIC OPPORTUNITIES AND INNOVATION

Recommendation 10. Explore opportunities to attract and develop a more robust and diverse forest products industry that provides economic opportunities and jobs in Wyoming.

- 10.1** *Attract and develop a biomass industry in Wyoming by:*
- *working directly with the Wyoming Legislature to diversify the energy sources to include woody biomass in the state of Wyoming;*
 - *asking the University of Wyoming to develop a Bioenergy Research Program;*
 - *convening a bio-energy summit to entice entrepreneurs to engage in the discussion;*
 - *providing mechanisms such as construction loans, guarantees, tax credits, etc.; and*
 - *promoting small application biofuel energy production for heating and co-generation production.*
- 10.2** *Encourage the use of the Business Ready Community program for assisting in establishment of wood product industries.*
- 10.3** *Collaborate with the Western Governors' Association to seek federal legislation allowing woody biomass from federal lands to be eligible for Renewable Identification Number (RIN) credits.*
- 10.4** *Create a professional or contracted position, with expertise in forest products and biomass utilization, who can work with entrepreneurs and government agencies to expedite forest products and biomass development.*

Recommendation 11. Develop a comprehensive plan to expand on the outdoor recreation programs and frameworks that currently exist in Wyoming's forests to support Wyoming's travel and tourism sector and the outdoor recreation economy.

- 11.1** *Provide leadership in bringing together local, state and federal agencies, commercial operations, and non-profits to develop and market responsible forest recreation opportunities.*
- 11.2** *Provide leadership in bringing together local, state and federal agencies, commercial operators, and non-profits to maintain and enhance responsible outdoor recreation infrastructure.*
- 11.3** *Encourage citizens to take advantage of outdoor programs that currently exist.*
- 11.4** *Encourage continuation of Wyoming Recreation Action Team (REACT) for input on recreation amenity fees on federal lands and provide guidance on recreation opportunities.*

- 11.5 Work with federal agencies to streamline the process for hosting an event, processing special use permits and outfitter and guide permits on federal lands.*
- 11.6 Work with federal partners to encourage responsible mechanized recreation use.*
- 11.7 Seek assurances that recreation fees are used for onsite enhancements of recreational opportunities, amenity sites, and permitting administration.*

Recommendation 12. Support forestry, natural resource, and environmental education programs.

- 12.1 Request the University of Wyoming designate graduate level “Forest Resource Assistantships,” and provide undergraduate and graduate scholarships to study forestry.*
- 12.2 Support outdoor activity-based natural resource, forestry and environmental educational programs for youth.*
- 12.3 Request the University of Wyoming recognize the benefits of the Wyoming Conservation Corps and fully implement the program.*
- 12.4 Consider natural resource tours that include forest issues and promote successes in resource management.*



Governor's Task Force on Forests FINAL REPORT

INTRODUCTION

Wyoming has a land area of over 62.6 million acres, and elevations range from a low of 3,099 feet on the Belle Fourche River in Crook County in the northeastern corner of the state, to 13,804 feet on Gannett Peak in Fremont County. Approximately 19 percent of Wyoming, or about 11.8 million acres, is forested. Wyoming's forests provide clean water and air, wood products, habitat for wildlife and other biota, forage for livestock, the foundation of a profitable travel and tourism economy, and places for recreation and spiritual reflection.

Wyoming's forests are facing significant challenges. Bark beetle infestations, drought, highly destructive wildfires, introduction of invasive non-native species, and increased residential development are happening at a level not seen in recent history. Such challenges may inhibit the ability of our forests to provide the full range of multiple uses and values people enjoy and rely on. In light of these threats and the importance of forests to the ecological, economic, social, and cultural fabric of Wyoming, Governor Matt Mead created the Task Force on Forests in 2013 to study the benefits forests provide, and analyze and consider new response strategies and recommendations for both active and passive management.

Wyoming's Forests

Most of Wyoming's forests are located at higher elevations on federal land. Lodgepole pine is the most dominate forest type, followed in order of prevalence by spruce-fir, ponderosa pine, Douglas-fir, juniper, aspen, whitebark pine, and limber pine. More than half of Wyoming's forest land is administered by the US Forest Service (USFS), 17 percent is privately-owned (including Indian Trust Land), 15 percent is administered by the National Park Service, 11 percent is administered by the Bureau of Land Management (BLM), and 4 percent is owned by state, county, and various other federal agencies (WSFD, 2010).

Forests in Wyoming provide important ecosystem-based services including habitat for wildlife and fisheries, clean drinking water, decomposition of wastes, flood control, and climate modulation. Wyoming's watersheds, rivers, and streams form significant portions of the headwaters for the three great rivers of the Western US (Missouri-Mississippi, Green-Colorado, Snake-Columbia). Each is fed by the winter snowpack in the forested mountain ranges of the state. Each is sustained and made productive by the rainfall intercepted by Wyoming's forests and forest-protected soils. Surface water from Wyoming forests supplies water to 35% of Wyoming's residents (WSFD, 2009).

Forest-based wildlife and fisheries resources include more than 663 vertebrate species. The prominent species such as mule deer, moose, elk, bighorn sheep, grizzly bears, and wolves have high human-value associations as well as vast spatial habitat requirements. In 2011, 961,000 Wyoming residents and nonresidents 16 years old and older participated in some type of wildlife-based recreation in Wyoming (USDOJ, USFWS, and United States Department of Congress, 2014). Of the total number of participants, 303,000 fished, 140,000 hunted, and 518,000 participated in wildlife-watching activities, including observing, feeding, and photographing wildlife. State residents and nonresidents spent \$1.1 billion on wildlife recreation in Wyoming in 2011.

Tourism is Wyoming's second largest industry, and is dependent upon recreational opportunities and ecological services provided by Wyoming's forests. Unique natural areas, designated snowmobile trails, scenic drives, ski areas, and blue-ribbon trout streams are attractions concentrated on forested lands. Visitors spent approximately \$3.2 billion in Wyoming in 2013, directly supporting 30,800 full time jobs across the state (Dean Runyan Associates, 2014).

Wyoming forests support a wood products industry that is an important sector of our state's economy. According to "Wyoming's Forest Products Industry and Timber Harvest, 2010" (McIver et al, 2014), the value of wood products from Wyoming producers was \$29.2 million in 2010. A total of 29 primary wood-processing facilities operated in 13 Wyoming counties during 2010. These facilities included:

- 12 sawmills
- 7 post and pole producers
- 3 log home manufacturers
- 2 log furniture manufacturers
- 5 other wood products facilities

The number of sawmills has declined significantly since 1976, when there were 50 sawmills operating in Wyoming (McIver et al., 2014).

In 2010, lumber and sawn products accounted for \$24.2 million, sales of house logs and log homes accounted for \$1.1 million, and sales of other wood products were nearly \$3.8 million. Since 2010, the sawmill in Saratoga has been re-opened and is operating as Saratoga Forest Management. The sawmill in Encampment is also being operated by Thompson Logging, and West Range Reclamation is operating a log sort yard and re-load at the Bighorn Lumber site in Laramie. With the recovery of housing and lumber markets and the operation of these facilities, the 2013 value of lumber and sawn products has increased to an estimated \$45 million (Jim Neiman, pers. comm.).

The sawtimber allowable sale quantity for the national forests in Wyoming is approximately 63.6 million board feet (MMBF). Wyoming's 2010 timber harvest volume was 33 MMBF, with 49 percent of the timber coming from national forests, 31 percent from private and tribal lands, 11 percent from state-owned lands, and slightly more than 9 percent from the BLM. The total timber harvested in the state increased to an estimated 60 MMBF in 2013, with the split between ownerships relatively the same.

Ponderosa pine was Wyoming's most harvested species in 2010, accounting for nearly 16 MMBF, or 47 percent of the total harvest. This was followed by lodgepole pine with 26 percent or 9 MMBF, and Engelmann/Black Hills spruce with 20 percent or 6.5 MMBF. With the re-opening of the Saratoga mill, this species mix shifted significantly toward lodgepole pine by 2013.

In addition, Wyoming residents value the state's forest lands not only because of the uses, services, and resources that they offer, but also for the benefits they derive from the forests' very presence. Wyoming's forests have aesthetic value, are places for spiritual renewal, have cultural and historical significance, and are emblematic of landscapes that residents want to be sure remain for their children and grandchildren to enjoy (Clement and Cheng, 2011).

Challenges

Insects and diseases

According to the Wyoming Forest Action Plan (WSFD, 2010), more than 1.5 million acres of forestland are at risk of significant basal area loss associated with bark beetle caused tree mortality through 2025. The at-risk acres are located in every forested part of the state. Additionally, whitebark pine and limber pine stands are experiencing significant mortality from a combination of white pine blister rust and mountain pine beetle. There are a number of factors involved in high tree-mortality rates, including forest stand conditions, effective fire suppression, and climatic factors. In many areas, age-class diversity is lacking, leaving large parts of forests susceptible to a particular damaging agent at the same time.

Altered fire regimes and increased costs of fire suppression

Nineteen of Wyoming's 23 counties are ranked "high priority" in a national prioritization of areas for broad-scale fuels management. This ranking is based on relative combinations of high level of wild-fire, fire-adapted native vegetation, and/or communities concentrated within the wildland-urban interface (USDOI and USDA 2014, 61). The confluence of climate factors and the fuel accumulations that result from sustained suppression make some forestlands susceptible to high-severity wildfires.

Fire management costs have risen in response to increasingly severe wildfire seasons. The average acreage burned nationally was 3.32 million acres annually for 1990-1999 and 6.93 million acres annually for 2000-2009. The six biggest fire seasons of the past 50 years nationally have occurred in the last decade (Gorte, 2011), and Wyoming has experienced its four biggest fire seasons in the last decade

as well. The threat of severe wildland fires and the costs of fire protection have grown because many forests have unnaturally high fuel loads coupled with increasing numbers of homes, a longer fire season, and people in the wildland-urban interface (WUI). As more people and homes are exposed to wildfire threats, the costs to suppress wildfires to protect those people and houses rises substantially. Annual federal wildfire management appropriations in the past decade have been more than triple the annual funding in the 1990s. Adjusted for inflation, annual wildfire protection funds for the USFS and Department of Interior (DOI) averaged \$1.39 billion from FY1991 through FY 1999, and \$3.51 billion from FY2002 through FY 2012 (Gorte, 2011).

Fragmentation of forest landscapes

Fragmentation of intact natural landscapes into smaller patches of habitat adversely affects ecosystem function as well as the ability to effectively manage natural resources in Wyoming (Stein et al., 2007). Large blocks of private land have historically been important for open space and wildlife habitat. Residential and commercial development on the forest boundary, energy development, and linear land uses, including roads and power lines, bisect intact habitat and wildlife corridors, and can affect wildlife distribution and ecosystem functioning. As large blocks of private land are subdivided, resource management becomes more difficult. Forest health issues are more difficult to address and fire management becomes more complex. There is economy of scale in forest management, and management of small parcels can become economically unfeasible.

Non-native invasive species

Non-native invasive species impose enormous costs to agriculture, forestry, and fisheries, and are a leading threat to Wyoming's rich biodiversity and functioning of terrestrial and aquatic ecosystems. The USFS lists invasive species as one of four significant threats to our nation's forests and rangeland ecosystems (USFS, 2004). Efforts to find and eliminate infestations are hampered by the lack of a coordinated early warning and rapid response systems, especially when they extend across multiple political jurisdictions and ownerships. Rehabilitation and restoration efforts require new and expanded sources of native plant materials and require improved techniques to repair damaged ecosystems.

Reduction in timber supply and tightening markets for forest products

The source of wood fiber for the timber industry in Wyoming has made a dramatic shift. Today, privately owned forest land has become critical to the survival of the state's timber industry. In 1976, 78 percent of forest products in Wyoming were derived from public lands with only 22 percent derived from private lands. The drop in harvest levels resulted from numerous constraints on harvesting timber on public lands and reduced national forest funding. Wyoming's timber harvest volume was 33.6 MMBF in 2010, less than half of the 70.5 MMBF in 2000 (McIver et al., 2014).

Inefficiencies in forest permitting, planning, and project implementation

The National Environmental Policy Act of 1969 (NEPA) was enacted to ensure that information on the environmental impacts of any federal, or federally funded, action is available to public officials and citizens before decisions are made and implemented. The time and effort needed to complete NEPA review processes has been a concern of project proponents and permittees as well as the federal agencies that conduct them. In 2002, the USFS estimated that planning and assessment accounts for 40 percent of its total direct work—an annual sum of approximately \$250 million (Gaines and Lurie, 2007). That figure has likely increased significantly since that time. Improving efficiencies in NEPA review and permitting processes is critically important for facilitating sound resource management practices.

Governor’s Task Force on Forests

Governor Matt Mead created the Task Force on Forests in 2013 to study the benefits forests provide, and analyze and consider new response strategies and recommendations for both active and passive management in response to the challenges described above. The Governor identified three themes for the Task Force to address: 1) fire and other disturbance, 2) forest management, and 3) economic opportunities and innovation. The purpose of the Task Force was to provide the Governor with recommendations to assess and address the challenges affecting forest condition and management. These challenges have resulted in a need for collaboration between organizations and stakeholders to provide expertise, and collectively compile recommendations to improve the state and management of Wyoming’s forests. The Task Force also sought to compose recommendations that remove barriers and direct resources toward the achievement of resiliency and sustainability of Wyoming’s forests.

The Governor appointed 20 Task Force members (Table 1) who represent a diversity of interests and experiences related to forest use and management.

Table 1

Name	Affiliation
Aaron Bannon	National Outdoor Leadership School
Joel Bousman	Sublette County Board of County Commissioners
Jacque Buchanan	Forest Service, Rocky Mountain Region
Bill Crapser	Wyoming State Forestry Division
Jessica Crowder	Wyoming Governor’s Office
Sen. Ogden Driskill	Wyoming State Senate
Jason Fearneyhough (Chris Wichmann, alternate)	Wyoming Department of Agriculture
Buddy Green	BLM Wyoming
Steve Kilpatrick, Don Claunch (alternate)	Wyoming Wildlife Federation
Mark Konishi, Mary Flanderka (alternate)	Wyoming Game and Fish Department
Harry LaBonde	Wyoming Water Development Office
Carl Larson	Citizen-at-large Representative
Jim Magagna	Wyoming Stock Growers Association
Lisa McGee, Co-chair	Wyoming Outdoor Council
Jeff Moberg*	Wyoming State Snowmobile Association
Jim Neiman, Co-chair	Neiman Enterprises, Inc.
Rep. Jerry Paxton	Wyoming House of Representatives
Reg Phillips	Dubois-Crowheart Conservation District
Dan Tinker	University of Wyoming, Department of Botany
David Whittekiend	Uinta-Wasatch-Cache National Forest

*Did not participate in Task Force meetings.

Task Force members were expected to represent their own interests, the organizations that authorized the Task Force member to represent them, and/or groups of constituents from a similar stakeholder group. Task Force members were responsible for keeping the organizations and interest groups they represented informed of the Task Force’s actions and outcomes.

The Task Force meetings were facilitated by two faculty from the University of Wyoming Ruckelshaus Institute: Jessica Clement and Steve Smutko. The Ruckelshaus Institute handled meeting logistics, developed agendas, organized information for effective use, and helped the Task Force stay on task and on topic. A forestry management consultant, Richard Stem, provided the Task Force with substantive content information to assist in its deliberations.

Two co-chairs, Lisa McGee of the Wyoming Outdoor Council and Jim Neiman of Neiman Enterprises, led the Task Force. A Steering Committee consisting of the two co-chairs, Joel Bousman (Sublette County Board of County Commissioners), Bill Crapser (Wyoming State Forestry Division), Jessica Crowder (Wyoming Governor's Office), and Dave Whittekiend (Uinta-Wasatch-Cache National Forest) met periodically to provide direction, review agendas, process documents, and evaluate progress.

The full Task Force met on five occasions from December 2013 through June 2014. Each Task Force meeting spanned three days. At the first meeting, members of the Task Force settled on procedures and identified issues to address. Meetings 2, 3, and 4, were focused on generating potential recommendations related to the issues they identified. The final meeting was spent deliberating recommendations generated in previous meetings and finalizing a set of consensus recommendations.

The Task Force focused on three major themes: (1) fire and other disturbance, (2) forest management, and (3) economic opportunities and innovation. Within each major theme, Task Force members deliberated on a number of specific subtopics:

Fire and other disturbance

- Wildfire prevention, preparedness, and response
- Fire management within the WUI
- Climate
- Non-native invasive species
- Ecological resiliency
- Budgeting and funding

Resource management

- Administrative processes
- Cooperation, collaboration, and partnerships
- Local management
- Diverse forest communities
- Socio-economic and cultural factors
- Wildlife habitat
- Data and monitoring
- Infrastructure
- Multiple use
- Ecosystem services
- Conservation
- Water quality
- Roads and trails

Economic opportunities and innovation

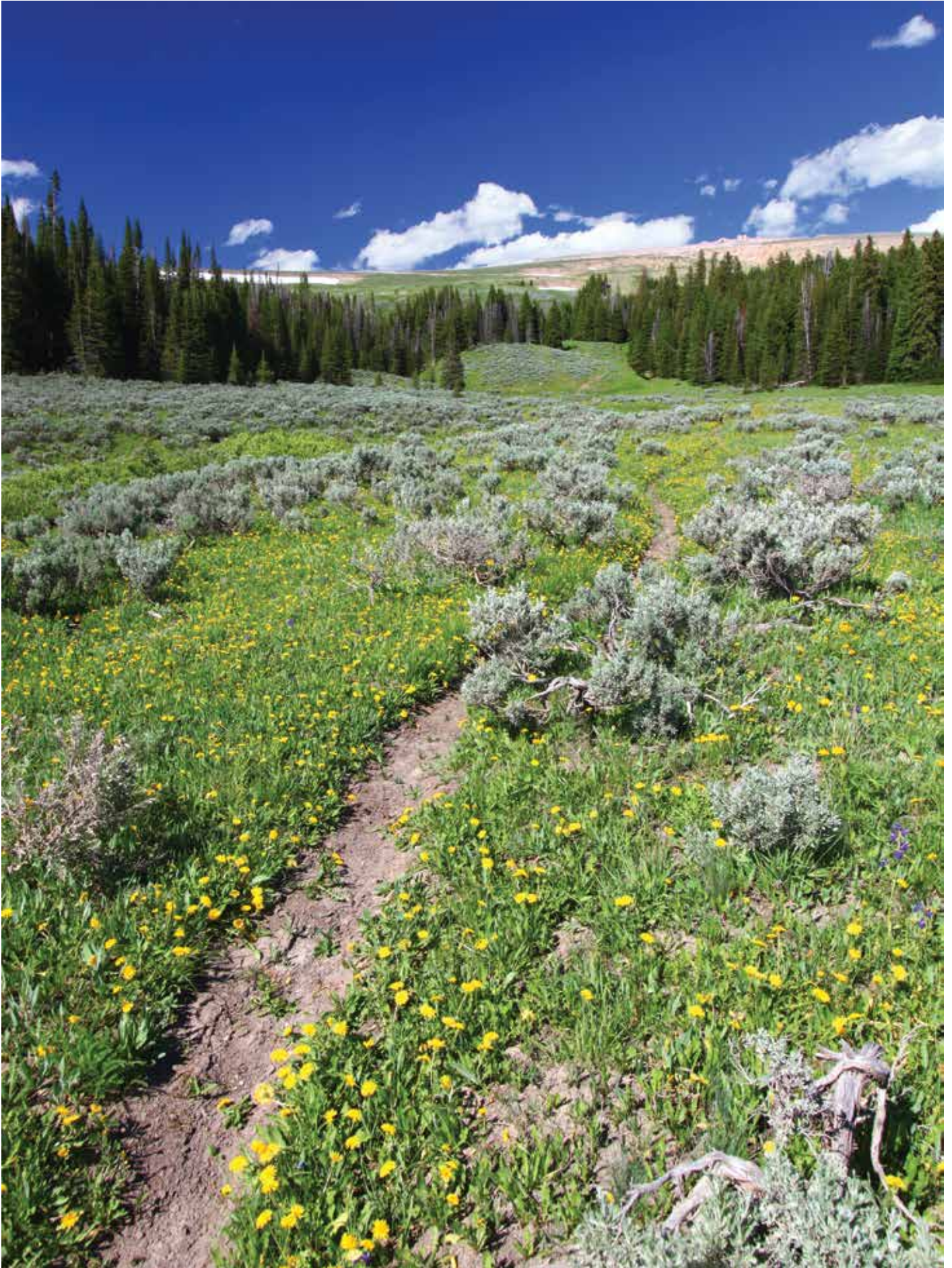
- Outdoors and tourism
- Forest products
- Grazing
- Education

Within each thematic grouping, the Task Force spent time articulating the problems to be addressed or solved and generating ideas for the Governor's consideration. This process generated nearly 200 potential recommendations, actions, and agreements in principle. This list was eventually reduced to a set of actionable recommendations and a number of principles that formed the basis for eventual agreement. These final draft recommendations were then deliberated and voted on.

Principles

During the process of deliberating the issues and forming consensus recommendations, the Task Force identified a set of principles that illustrate the diversity of the task force and the concepts that helped shape the recommendations. The principles include:

- Resource management actions should be based on the best available science.
- Resource management actions should be tailored to desired future conditions, and historic range of variability is a useful tool for determining a range of desired future conditions.
- Complex, dynamic forest systems can be managed but not controlled.
- An understanding and appreciation of forest dynamics and natural disturbances can help us manage forests effectively.
- Policies and actions should strive toward more resilient, sustainable forests.
- Multiple use is a cornerstone of our nation's public land management ethic.
- Forests provide unparalleled opportunities for solitude, serenity, and personal reflection.
- Forests should be managed for diversity in species, patch size, and age class.
- A viable forest-products industry in Wyoming is an important component in sound forest management practices.
- Forests provide opportunities for natural processes to proceed unabated.
- Forests occupy part of a landscape that crosses political jurisdictions and land ownership.
- Wise resource management is based on principles of monitoring, learning and adapting to new information.
- Implementation of management and policy decisions should be monitored.
- Water quality and quantity are valuable outputs of a healthy forest.
- Multi-jurisdictional coordination and coordination between working groups are necessary conditions for effective public land planning and management.
- Firefighter and public safety should guide fire management decisions.
- Wyoming citizens have a role in determining land management decisions that affect Wyoming's forests.



RECOMMENDATIONS

The Task Force reached consensus on 12 major recommendations comprising 53 sub-recommendations, for the Governor’s consideration. The ideas presented in the Task Force final recommendations reflect near and long term strategies, recommendations and measureable actions that the state can implement, and are designed to inform and guide the Governor in decision making and policy implementation. These recommendations can also be shared with federal agencies, local governments, the Wyoming Legislature, and other interested parties and stakeholders in order to effectively address as many recommendations as possible.

The Task Force recommendations are presented in the following section, organized by theme. The ordering of the recommendations does not indicate priority. Although some recommendations can be achieved sooner than others, the Task Force is invested in seeing all 12 recommendations realized over time.

Following each recommendation is a discussion about how the recommendation could be implemented, as well as information about what actions are already being undertaken by local government, state and federal agencies, and the private and non-profit sectors. Also included is a discussion of existing or foreseeable gaps, and specific areas where the Governor could take direct action toward fulfilling the recommendation. Sub-recommendations are included in the narrative that accompanies each recommendation later in this report.

Although the Task Force reached consensus on all 12 major recommendations, not all 53 sub-recommendations were unanimously agreed to by all 20 Task Force members. In cases where a member disagreed with a sub-recommendation, yet still upheld the overall recommendation, the particular sub-recommendation is denoted with an asterisk (*).

ALL THREE THEMES

- Recommendation 1.** The Governor’s Task Force on Forests endorses the Wyoming Forest Action Plan and recommends the Governor continue to support it.
- Recommendation 2.** Facilitate the creation of local collaborative working groups to address local forest management issues.

FIRE AND OTHER DISTURBANCE

- Recommendation 3.** The State of Wyoming should proactively reduce the threat and occurrence of destructive wildfires by managing vegetation and fuels; protecting homes, communities, and other values at risk; and effectively and efficiently responding to wildfire.
- Recommendation 4.** In partnership with federal agencies, support increased funding to prevent, detect, and control non-native invasive plants, wildlife, and insects that threaten the health of Wyoming forests.

RESOURCE MANAGEMENT

- Recommendation 5.** Collaborate with forest managers to make available and enhance a sustainable supply of wood and biomass consistent with sound management.
- Recommendation 6.** Continue to ensure that grazing remains an important forest management tool.
- Recommendation 7.** Conduct a review of recent and ongoing NEPA analyses on forest lands in Wyoming that address vegetation management in order to identify best practices and promote efficiency and effectiveness.
- Recommendation 8.** Develop a structure and process for local collaborative working groups to review and assess roadless areas and recommend management actions and to consider specific designations and/or releases where appropriate.
- Recommendation 9.** Work with federal, state and private landowners to identify, maintain and enhance important wildlife corridors and habitats, and other preservation and conservation opportunities.

ECONOMIC OPPORTUNITIES AND INNOVATION

- Recommendation 10.** Explore opportunities to attract and develop a more robust and diverse forest products industry that provides economic opportunities and jobs.
- Recommendation 11.** Develop a comprehensive plan to expand on the outdoor recreation programs and frameworks that currently exist in Wyoming's forests.
- Recommendation 12.** Support forestry, natural resource, and environmental education programs.



ALL THREE THEMES

RECOMMENDATION 1: The Governor’s Task Force on Forests endorses the Wyoming Forest Action Plan and recommends the Governor continue to support it.

The Wyoming Forest Action Plan contains an assessment of forest resource conditions, trends, threats, and priorities. It also provides a long-term, comprehensive, coordinated strategy for investing state, federal, and leveraged partner resources to address the management and landscape priorities identified in its assessment.

The Forest Action Plan is an important and useful document for planning and managing forests in Wyoming. The Wyoming State Forestry Division (WSFD) should be provided the resources to keep it updated on a regular, periodic basis.

RECOMMENDATION 2: Facilitate the creation of local collaborative working groups to address local forest management issues.

Place-based collaboration is becoming more integrated into public land planning and management throughout the West. Because forests and other public lands are places that people care about and experience first-hand, people are motivated to actively participate in their management. Over the last decade, land management agencies have been experimenting with ways to more meaningfully involve citizens in resource management and policy decisions and to reduce public lands conflicts. Collaboration has proven to be a powerful tool for giving citizens a voice in land management decisions and improving the quality of those decisions. Through collaboration, people with diverse perceptions and interests work together in a systematic and organized way to find workable solutions

to shared problems about land management and policy. Collaborative processes are useful in a variety of public land decision contexts such as resource planning, multiple use allocation, and resource management.

Collaboration in forest management and planning encompasses a range of deliberative processes and applications. It typically involves convening people with very different ideas, perceptions, and experiences related to a forest, together with agency decision makers, and enabling them to collectively define the problem to be addressed, generate alternatives that satisfy multiple interests and objectives, evaluate alternatives using objective criteria, and then negotiate the tradeoffs among competing alternatives.

Collaborative groups are inclusive and usually defined by the context of the issues they are working on. For example, in travel management decisions, working groups could be composed of people with interests and expertise in the various modes of travel in the forest such as ATV users, equestrians, hikers, skiers, snowmobilers, etc. To be effective, participation in collaborative groups should be balanced and voluntary, that is, all parties should be willing and able to participate and select their own representatives.

THE TASK FORCE RECOMMENDS THE FOLLOWING ACTIONS:

- 2.1 *Provide procedural and financial support for effective collaboration within the proposed local working groups.*
- 2.2 *Facilitate the creation of a collaboration fund to financially and technically support place-based collaboration on forest issues.*
- 2.3 *Create regional broad interest-based working groups in each of the state forestry districts. These working groups will act as a starting point from which local issues can be addressed for all forested lands.*

MAKING IT HAPPEN

The outcomes of collaboration should be high-quality decisions and processes that are seen as fair and legitimate, and made by participants who are informed about the issues and are able to work together for future decisions. Enabling these outcomes will require participation by people who are knowledgeable about the issues related to a particular forest or geographic region, are keen advocates for their interests and yet are willing and able to work with others, and who have local and regional legitimacy to represent the interests of various stakeholders. The key will be to establish a mechanism for forming local working groups that allows flexibility in participation, but is sufficiently consistent across regions to be seen as fair and legitimate.

Local collaborative working groups could initially be geographically arranged by the five WSFD Districts. Each working group should consist of representatives of the major interests that are predominant in the forests of that region and should include participation by the relevant federal and state land management agencies in the region. Groups could be appointed at the sub-District level as need arises.

The establishment of local collaborative working groups does not replace or supersede NEPA processes for public involvement, but augments them. One of the primary goals of NEPA is to encourage meaningful public input and involvement in federal environmental review. NEPA processes have evolved considerably over the decades and increasingly, collaboration has been more fully integrated into them (CEQ, 2007). In Wyoming, the integration of cooperating agencies, county commissions in particular, has created opportunities for integrating collaboration into NEPA processes.



FIRE AND OTHER DISTURBANCES

RECOMMENDATION 3: The State of Wyoming should proactively reduce the threat and occurrence of destructive wildfires by managing vegetation and fuels; protecting homes, communities, and other values at risk; and effectively and efficiently responding to wildfire.

The challenges posed to wildland fire managers are daunting and continue to become more complex. Combating these challenges requires coordinated efforts and a fundamental understanding of the necessary resource needs.

While it is understood that wildland fire plays an important ecological role, fires that pose imminent danger to life and property require some form of control. Catastrophic wildland fires will continue to impact state and federal budgets, and the lives of Wyoming residents, particularly those located in the WUI. The safety of the public and firefighters is vitally important, and protecting them can be aided through education, training, and resources.

Vegetation and fuels

Nineteen of Wyoming's 23 counties are ranked "high priority" in a national prioritization of areas for broad-scale fuels management. This ranking is based on relative combinations of high level of wildfire, fire-adapted native vegetation, and/or communities concentrated within a broader wildland landscape (USDOJ and USDA 2014, 61).

Nearly all forest communities across the western United States historically burned – many quite frequently, but many at long intervals of many decades to centuries. In general, more frequent burning is associated with less intense or severe forest fires. Conversely, infrequent burning leads to higher severity fires that consume much of the aboveground vegetation, the principle fuel in wildfire. More extreme fire conditions can be expected in areas where the time between fires has been extended, unless fuels have been reduced by other means (USDOJ and USDA, 2014).

Fire Regime Groups (FRGs) characterize the relationship between fire frequency and fire severity and their ecological implications (Barrett et al., 2010). The preponderance of Wyoming’s forested lands were historically classified as FRG III, IV, or V (Wildland Fire Leadership Council, no date). Many of the large fires that occur today disproportionately occur in areas that historically were FRGs IV and V. These include many areas where the natural fire regime is relatively infrequent, high-severity fires—the most difficult and expensive to control or extinguish with increased risks to firefighter and public safety, and more severe social and ecological damage (USDOJ and USDA 2014, 27).

The confluence of climate factors and the fuel accumulations that result from sustained suppression make some forestlands conducive to high-severity wildfires. The primary purpose of hazardous fuels management is to reduce the extent, intensity, and severity of wildfire if and when it encounters a treatment area during the lifespan of the treatments. To be effective, fuel treatments must reduce fire-line intensities under the conditions most likely to result in harm (USDOJ and USDA 2014, 29).

The primary methods of managing fuels include prescribed fire, managing wildfire for ecological purposes and resource objectives, and non-fire treatments that involve timber harvest, and other biological or chemical methods. Appropriate treatments depend on management objectives, and resource and market availability. It is important to consider all available options when deciding which vegetation and fuels management techniques to implement.

Homes, communities, and other values at risk

The National Cohesive Wildland Fire Management Strategy (USDOJ and USDA 2014, 20) identifies nearly all of the forested counties in Wyoming as falling into two of seven “community clusters” based on the proportion of area burned, structures lost, and buildings involved (Carbon County is the only exception). These two clusters, community cluster 2 and community cluster 4, contain the largest proportion of areas burned (cluster 2) and the largest proportion of structures lost (cluster 4) among all seven clusters. These community clusters include counties where community planning and coordinated action in combination with individual actions by proper owners should be highly encouraged. Protecting homes from wildfires requires coordinated action at the community level, which poses many challenges but is vitally important to avoid loss of life and property.

Wildfire response

To successfully combat wildfires, managers must utilize finite resources efficiently. To safeguard life and prevent substantial damage to property, managers need to enhance wildfire response preparedness in areas that are more likely to experience large, long-duration wildland fires that are unwanted or threaten communities and homes. Emphasizing wildland fire prevention, fire management, and fire response capacity help to increase the effectiveness of initial response.

THE TASK FORCE RECOMMENDS THE FOLLOWING ACTIONS:

Manage vegetation and fuels:

- 3.1 *Continue state funding for bark beetle mitigation in areas with an active forest products industry.*
- 3.2 *Work with the Wyoming Legislature to provide adequate funding, matching other local, private, and federal dollars, to increase vegetative management and fuels mitigation projects.*
- 3.3 *Promote aspen management where appropriate.¹*

Protect homes, communities, and other values at risk:

- 3.4 *Work to improve coordinated public information and education campaigns to increase public understanding of wildland fire including: wildland fire prevention, risk in the WUI, and the role fire plays as a natural process in ecosystems.*
- 3.5 *Request the Wyoming Legislature to consider an interim study on ways to encourage insurance companies to create incentives and disincentives that motivate proactive management in the WUI.*
- 3.6 *Provide guidelines to local governments for land use planning and development in the WUI and guidelines with respect to building in the WUI, utilizing Firewise, Fire Safe and/or Fire Adapted Community programs.*
- 3.7 *Ask County Commissioners to encourage planners to include County Fire Wardens in the development, planning and building permitting in the WUI.*
- 3.8 *Explore opportunities to work with the energy and utility companies to conduct fuels management on rights of way.*
- 3.9 *Develop cross-jurisdictional watershed protection plans for municipal water supply drainages that focus on proactive management to preserve and enhance water quality, and to avoid catastrophic effects large-scale fires have on municipal watersheds.*

Effectively and efficiently respond to wildland fire:

- 3.10 *Continue to work to resolve the “fire borrowing” issue in the USFS and the DOI. The Governor’s involvement is critical in terms of enabling the federal agencies to carry out their missions.*
- 3.11 *Support initiatives to increase fire response capacity, using all resources, public and private.*
- 3.12 *Support adequate dedicated federal and state funding for fire management, including fire prevention, fuels reduction, preparedness, training, fire suppression, and post-fire restoration.*

MAKING IT HAPPEN

The USFS, BLM, and state and local agencies work diligently to prevent and mitigate negative impacts from wildland fires, reduce suppression costs to the public, and reduce risks to life and property, all while balancing their limited budgets. Looking to the future, land managers in Wyoming should work to safely and effectively extinguish fire when conditions require it, use fire and vegetative treatments as management tools where appropriate, and live with wildland fire whenever possible.

Manage vegetation and fuels

What is happening

Currently, the Wyoming Legislature has appropriated \$4 million for 2015-2016, to use for bark beetle mitigation projects in areas where there is an active forest products industry. Among other

¹ Consensus with one major reservation.

benefits, this funding is helping to reduce fuel loading in some areas. In addition, WSFD receives approximately \$1 - 1.5 million annually for fuels mitigation on private and state lands through grants from the USFS.

Existing and foreseeable challenges and gaps

Many of our forestlands remain at risk for high-severity fires. Although surface and canopy fuels accumulate over decades as forests grow and mature, in some areas, sustained fire suppression has contributed to fuel accumulations that, under the right conditions, can result in catastrophic fires. Although funding was made available by the Wyoming Legislature for bark beetle mitigation projects, these projects address varied objectives related to post-beetle mitigation, and not specifically toward fuels reduction. The USFS funding is helpful but not adequate to address the fuels mitigation needs around the state.

Suggested next steps

Federal and state land management agencies, as well as local fire entities have existing staff dedicated to fire management. Also, the WSFD, consulting foresters, local fire districts and County Fire Wardens, and fuels mitigation coordinators provide assistance to private landowners in reducing fuel loading on private property. To supplement these efforts, the Governor could consider continued funding through the Federal Natural Resource Policy Account (FRNPA), where appropriate. The Task Force also discussed the potential for allocating \$5 million to the Wyoming Wildlife and Natural Resource Trust (WWNRT) to be matched by other partners and be used for vegetation management and fuels projects on private lands as well as public forests.

Protect homes, communities, and other values at risk

Protecting homes and communities in the WUI from wildland fire requires a combination of efforts to deter new building in risk-prone areas, constructing fire-safe structures and communities, and providing property owners with the information and resources to help protect their property.

What is happening

Currently, the WSFD works closely with local governments to fund fuels coordinators in several counties, helps fund and develop Community Wildland Fire Protection Plans (CWPPs), and coordinates wildland fire prevention programs such as Smokey Bear, Firewise, Fire Safe, Ready-Set-Go, and Fire Adapted Community programs. The WSFD also works to educate Wyoming residents about being fire-wise through publications, public workshops, and one-on-one visits with landowners.

Existing and foreseeable challenges and gaps

At the local government level, only about half of the counties in the state include the County Fire Warden in land planning and subdivision approval processes. At the federal level, the USFS lacks adequate resources to manage all at-risk national forest lands. Moving forward, support for state and local initiatives should be continued. In addition, the state could consider promoting community and homeowner involvement in both planning and implementing actions that mitigate impacts from wildland fire to communities and homes situated near or adjacent to forested lands.

Suggested next steps

The State of Wyoming could encourage local governments to participate more proactively in wildland fire risk mitigation actions, such as CWPPs and other methods of comprehensive community planning, particularly where new development and expansion into forested landscapes is occurring. Changes are often easier to implement in new developments while projects are still in planning stages. In order for local governments to better evaluate building and development specifications, county planners, county fire departments, the State Fire Marshal's Office, and the insurance industry could be involved. Guidance can be found in the FLAME Act (2009) and the National Cohesive Wildland Fire Management Strategy.

Effectively and efficiently respond to wildland fire

Although few unwanted fires escape initial attack, those that do can result in huge public expenditures and significant risks to firefighters and communities. It is important to enhance wildland fire response preparedness in areas that are more likely to experience large, long-duration wildland fires that are unwanted or threaten communities and homes. It is also important to improve wildland fire response preparedness in areas experiencing high rates of structure loss per area burned (USDOI and USDA 2014, 57-58).

What is happening

Currently, the WSFD receives funding from the USFS through State Fire Assistance Grants, Volunteer Fire Assistance and the Hazardous Fuels Reduction Program, as well as some general fund dollars to assist in fuels reduction, preparedness, training, fire suppression, and post-fire restoration projects. The DOI had provided funds for the Ready Reserves program, which provides wildland fire training to rural fire departments to enhance safety, effectiveness and local response capability in initial attack of wildland fires in or near their communities, but that funding no longer exists.

Existing and foreseeable challenges and gaps

Federal funding for critical wildland fire management and response programs has been significantly reduced or cut back entirely. The DOI's Ready Reserves Program and the Department of Agriculture's Rural Fire Assistance Program have not been funded for some time. As a result, Wyoming's fire response agencies are experiencing a gradual decline in resources, equipment, and fire management capacity.

Suggested next steps

Expand support for existing state fire mitigation programs, including State Forestry's fire training, fuels reduction programs, and fire prevention, preparedness and suppression programs. In addition, expanded state support could help to maintain equipment, staffing and funding for state helitack, county resources, and increases to the Emergency Fire Suppression Account. Work with our congressional delegation to support funding for federal fire fighting resources in Wyoming.

RECOMMENDATION 4: In partnership with federal agencies, support increased funding to prevent, detect, and control non-native invasive plants, wildlife, and insects that threaten the health of Wyoming forests.

Non-native invasive species impose enormous costs to agriculture, forestry, and fisheries, and are a leading threat to Wyoming's rich biodiversity and ecosystem function. Controlling their introduction, and managing their impact in places where they have established a foothold will improve the resiliency and diversity of Wyoming's forests. Wyoming's Forest Action Plan identifies the following non-native species as posing particular harm to Wyoming's forests:

- White pine blister rust is affecting the distribution and vitality of ecologically important white-bark pine and limber pine stands.
- Saltcedar and Russian olive are exotic plants that are replacing native willow and cottonwood forests that play a significant ecological role in Wyoming.
- A particular non-native species that was noted by the USDA Wyoming Forest Health Report (2001) as a threat to forests is leafy spurge. This noxious and toxic weed tends to form extensive mono-cultures that are very difficult to contain and control, and can result in tree mortality as an off target consequence of the chemical control process. Herbicide treatments can adversely affect some native vegetation where control treatments are administered. Leafy spurge is dramatically increasing in Wyoming, particularly in the northeastern area where the most commercially valuable forests in the state occur.

THE TASK FORCE RECOMMENDS THE FOLLOWING ACTIONS:

- 4.1 In cooperation with the Wyoming Weed and Pest Council, the WSFD, the USFS, and the BLM, support an overall statewide plan for public education of the threat of non-native species. Such a plan should facilitate coordination among federal, state, and local governments and funding mechanisms to provide broad, strategic direction to prevent, mitigate, and manage non-native species' threats across Wyoming.*
- 4.2 Expand multi-jurisdictional cooperation for mapping, monitoring, and control of non-native invasive species.*
- 4.3 Continue to support aquatic invasive education and inspection program.*
- 4.4 Continue to support and fund existing multi-stakeholder groups and processes that address non-native invasive species.*
- 4.5 Emphasize and support cooperative weed control mechanisms across the state; looking to Teton County's Jackson Hole Weed Management Association as a model.*

MAKING IT HAPPEN

Invasive species education

What is happening

The Wyoming Weed and Pest Council has an education committee tasked with implementing a statewide education program funded through donations from all 23 county Weed and Pest Districts. In the recent past, the committee has produced television commercials and radio spots. Their efforts, to a degree, have been successful but have been minimalized by a lack of funding.

Existing and foreseeable challenges and gaps

Currently, there is no statewide plan regarding public education of the threat of non-native invasive species to forests. The lack of a strong educational campaign has been recognized as a need by other entities including the Western Weed Coordinating Committee, North American Invasive Species Management Association, and the State Weed Coordinators Alliance.

Suggested next steps

A new state funding source could be channeled through the Wyoming Department of Agriculture (WDA) to assist the Wyoming Weed and Pest Council in developing a unified campaign strategy utilizing all media outlets available in the state. This funding would also assist the committee in organizing and coordinating an ad campaign that could be used regionally, if not nationally. The state should also work to promote Wyoming Weed Awareness Week through annual proclamations and press releases. Additionally, the Western Governors' Association (WGA) and the National Association of State Departments of Agriculture (NASDA), along with partnering federal agencies, could petition the Ad Council to create a National Invasive Species Campaign to provide national recognition to the problem. Previously, the Ad Council has created other successful national campaigns including Smokey Bear and the National Drunk Driving Campaign.

Mapping and monitoring

What is happening

Presently, there is no statewide tracking of the location and spread of terrestrial invasive species beyond county-level presence and absence. Additionally, no annual reporting requirements on statewide weed and pest activities exist. There is GIS mapping of terrestrial invasive plant species by counties, but the quality of mapping varies between locations.

Suggested next steps

The WDA has programs in place that could be utilized to channel funding toward mapping and education efforts in Wyoming. Supplementing existing Weed and Pest Control District mapping efforts could be done with additional annual operating funds. In 2006, the Fremont County Weed and Pest Control District volunteered staff and other resources to assist the other 22 Weed and Pest Control Districts with their mapping efforts to create a comprehensive statewide mapping program. Through Fremont County's efforts, and backed by limited state funding, most of the districts have implemented stronger mapping protocols and are slowly seeing a comprehensive picture of the invasive weed threat throughout the state. This effort should be expanded.

In addition to an annual operating budget, grant funding provided through the WDA could also be increased. This would provide the Districts with the necessary resources to supplement their mapping information and expand existing efforts in working with the districts in compiling accurate information. Comprehensive, accurate statewide mapping could also assist localized and statewide control efforts in effectively targeting and planning treatments for invasive species.

Collaborative, multi-stakeholder initiatives

What is happening

According to the 2010 Wyoming State Wildlife Action Plan (WGFD, 2010), cooperative efforts comprised of multiple agencies and/or counties are becoming increasingly common for invasive species control. Examples include the North Platte Weed Initiative which covers Carbon, Converse, Goshen, Platte, Natrona, and potentially Fremont County; the Big Horn Exotic Plant Group; Greater Yellowstone Coordinating Committee Invasive Species Program; and the Wyoming Green River Basin Healthy Lands Initiative. Coordinated Resource Management (CRM) programs, administered through the WDA, have used a collaborative, stakeholder-based model to address land management issues in Wyoming since 1984. Currently, there are approximately 40 CRM programs in Wyoming, most of which have a weed management component. The CRM process works well with the Weed and Pest's Weed Management Area designation. CRMs help to identify the ecological needs of the area, address monitoring and any needed reclamation, and ensure success of control methods.

Suggested next steps

The Wyoming State Wildlife Plan states that while coordination on invasive species control activities is effective at the county level, greater coordination is needed between state and federal agencies. Areas where coordination can be improved include the sharing of goals and priorities, coordinating educational initiatives, and enhancing understanding of individual agency regulations, policies, and

guidelines. Federal land management agencies are required to follow state directives; however, at times there is insufficient coordination with federal land management agencies on invasive species issues to achieve this requirement.

Collaboration and inter-agency coordination is vital to successful management of weed and pest control. The Governor could institute or encourage multi-agency collaboration at the county



Aquatic Invasives Program

Wyoming's Aquatic Invasive Species Control Program is an excellent example of an important first-step in the effort to control non-native invasive species. Providing information to sportsmen and women, recreational boaters and the general public about the importance of invasive species control and what they can do to prevent invasion of their favorite water bodies by non-native weeds and mussels is an excellent example of a combined education and enforcement program designed to reduce the spread of non-native aquatic invasive pests. The Aquatic Invasive Species Program Management Plan provides a framework for a successful program.

level for weed control programs that are similar to the way that Teton County has structured theirs. The Teton County Weed and Pest District began in 1998 and originated from the ground up. This organization includes federal, state and local government as well as non-profit and private partners all working together to address noxious weed issues in Teton County across jurisdictional boundaries.



RESOURCE MANAGEMENT

RECOMMENDATION 5: Collaborate with forest managers to make available and enhance a sustainable supply of wood and biomass consistent with sound management.

Timber availability from federal lands has been decreasing since the 1990s (McIver et al., 2010). The drop in harvest levels resulted from numerous constraints on harvesting timber on public lands and reduced national forest funding. According to the 2010 Wyoming Timber Industry Report (McIver et al., 2010), approximately 3.9 million acres or 42% of National Forest lands in Wyoming are “non-reserved” timberland. Non-reserved timberland is forest land that is producing or is capable of producing crops of industrial wood and is not withdrawn from timber utilization by statute or administrative regulation (GTR WO-78, 2009).

Wyoming’s 2010 timber harvest volume was 33.6 MMBF, with 49 percent (16.3 MMBF) of the timber coming from national forests, 31 percent (10.4 MMBF) from private and tribal lands, 11 percent (3.7 MMBF) from state-owned lands, and slightly more than 9 percent (2.9 MMBF) from the BLM (McIver et al., 2010).

The source of wood fiber for the timber industry has made a dramatic shift. Privately owned forest land has become critical to the survival of the timber industry in Wyoming. In 1976, 78 percent of forest products were derived from public lands with only 22 percent derived from private lands (McIver et al., 2010).

An adequate and sustainable wood supply from the national forests – historically and currently the largest supplier of timber and other forest products in Wyoming – is critical for the retention of existing forest products companies in Wyoming. Retaining forest products companies is important both for their role in forest management and community diversity, as well as their potential to provide by-products for biomass utilization facilities. Sustaining the forest products industry also depends on utilizing new and evolving tools and technology to increase both timber access and utilization, and the efficiency of wood products facilities.

THE TASK FORCE RECOMMENDS THE FOLLOWING ACTIONS:

- 5.1 *Implement cooperative agreements and/or Good Neighbor Authority and Wyden Authority, with all federal agencies where opportunities exist.*
- 5.2 *Encourage the expansion of the timber sale program on federal lands consistent with forest plans and resource management plans that ensure sustainable forest management.*
- 5.3 *Work with federal agencies to streamline the process for timber contracts.*

MAKING IT HAPPEN

What is happening

Wyoming State Forestry Division

Consistent with the “resource strategies” in the Wyoming Forest Action Plan, the WSFD is currently taking the following steps to help enhance wood supply in the state:

- WSFD is actively managing the 263,000 acres of forested state trust lands, focusing on accelerated salvage on state sections impacted by bark beetles and within the operating circles of existing mills.
- WSFD is utilizing the USFS Stewardship Program to work with private landowners to develop management plans and promote active management of those lands.
- Utilizing the “Bark Beetle Mitigation” funds authorized by the Legislature, WSFD is funding projects around the state that treat bark beetle impacted areas and supply fiber for local mills.
- WSFD comments and supplies input on USFS projects and plans, promoting active forest management.
- WSFD staff are involved in several collaborative efforts across the state, and have worked with local groups, state legislators, the Governor’s office, and other agencies promoting and developing industry and wood supply.
- The 2014 Legislature authorized a two-year employee so WSFD could provide forestry support and mentoring to the BLM Rawlins office to restart their timber sale and forest management program in that area. Several small sales were made available in 2014 and several more are planned in 2015.
- WSFD staff serve on many regional and national committees and workgroups that are committed to active forest management not only in the state, but across the country.

Bureau of Land Management

Besides the partnership with WSFD in Rawlins, the BLM is working hard to maximize their management on beetle impacted lands, and to develop a long term sustainable forest products program BLM has just recently issued new timber sale contracts as part of that expansion.

US Forest Service

The Bridger-Teton National Forest has ramped up its program dealing with disease and insects by making decisions in various affected watersheds. The Hamm’s Fork project will treat 8,000 acres and a

decision is pending for a project that is expected to treat up to 4,000 acres in the Labarge Creek area. Additionally the Bridger-Teton is looking at a “forest wide” approach to hazard trees and large pockets of infestation. The forest is also embarking on a long term sustainable treatment program to increase age-class diversity in an attempt to reduce the severity of future beetle epidemics.

Vegetative treatments have continued in the USFS Rocky Mountain Region (Region 2). In FY 2013 the Bighorn National Forest treated approximately 3,600 acres, the Medicine Bow – Routt treated approximately 1,750 acres and the Shoshone National Forest treated 457 acres.

The Uinta National Forest’s Lyman district has been treating 4,000 acres in one drainage, has recently made a decision to treat an additional 4,400 acres in an adjacent watershed and will be making a decision in December 2014 regarding treatment of up to 6,600 acres. The trees along the Uinta front are approximately 70-80 percent dead and the USFS is attempting to mitigate impacts from large fires in 2002 and resulting watershed damage from those fires.

Suggested next steps

WSFD should coordinate with other agencies to provide technical assistance to existing and/or potential wood products companies, adjacent communities, and other local entities. Increase assistance to private landowners in developing long term stewardship management plans, and offer assistance in preparing, selling, and administrating private land timber sales. These type of projects could be expanded to other ownerships including state, BLM, tribal lands, and USFS.

The state should continue to be actively involved in working with the USFS through agreements, consultants, associations, and any other method to ensure that the objectives of the national forest land management plans are followed in regards to timber supply and restoration needs. Each national forest’s Land and Resource Management Plan has been created through an extensive public involvement process. The state could review the success of individual national forest units in Wyoming in meeting plan objectives related to vegetative management and restoration. The Governor’s office and the WSFD should work closely with the USFS to develop a collective implementation strategy that works toward meeting all vegetation management objectives during the current planning cycle and then work toward meeting all vegetation management objectives for the future.

The current high mortality of trees on the national forests requires a hard look at the existing USFS timber contracts. The value of the wood is currently very low due to mortality and deterioration. Therefore, appraisals need to have a way to properly adjust those values and the ensuing contracts that result from the appraisals, and ensure proper valuation of biomass products that reflect final product values and transportation costs.

Encourage enhanced flexibility in federal contract administration to treat areas that the USFS has deemed as appropriate for treatment and are exhibiting large scale mortality. Work with the USFS to incorporate provisions such as Designation by Description, Designation by Prescription, use of weight sales, use of load counts, and species group’s combinations into timber sale contracts. In addition the contracts could contain economical slash disposal requirements, ensure that utilization standards are economically practical, and that harvest designs are feasible. Timber sale designs should be practical, economical, meet USFS objectives, and be consistent with project NEPA assessments. All of these items could be packaged into an overall review format both for short-term and long-term contracts so that implementation will achieve the desired condition.

RECOMMENDATION 6: Continue to stress the importance of grazing to important forest management.

Forest lands in the West have long served as an important forage source for livestock. Livestock grazing is one of many tools available to meet forest management objectives. In some instances, target grazing – grazing specifically to achieve goals – is used. Targeted grazing can alter or maintain plant communities, depending on goals and objectives, and aid in nearing optimum ecosystem health (Launchbaugh and Walker, 2006). Targeted grazing may also aid in reducing fine fuels and some ladder fuels (Nader et al., 2007). Livestock grazing can also play a role in maintaining and/or enhancing habitat for wildlife species, especially wild ungulates (Scotter, 1980).

For some Wyoming ranchers, the inability to graze livestock they do not own on USFS allotments has proven to be problematic. By USFS regulation, only livestock owned by the permit holder, or their direct family member, may be grazed on the permitted allotment. While this was a benefit when originally written, it provides little to no flexibility for permittees who may wish to change animal numbers on a permit. Other agencies, such as the BLM, allow permittees to sublet their allotments if they so choose. This allows for leased cattle to be run on the allotment and can provide for dramatic decreases in operational costs for some compared to the traditional cow-calf, year-round operation. Ranchers that significantly reduce herd sizes, for any reason, run the risk of not being able to recover herd numbers to a level adequate to maintain their permit. Each permit has requirements placed on animal numbers, high and low, and if these numbers cannot be achieved there is a possibility the permit will be cancelled. In addition, many allotments have been converted to forage reserves, closed to grazing or are simply vacant and awaiting NEPA analysis.

Finally, it is important to recognize that grazing on National Forests helps maintain the integrity of year-round ranching operations which are key to maintaining private lands in agriculture and open space.

THE TASK FORCE RECOMMENDS THE FOLLOWING ACTIONS:

- 6.1** *Recognizing that the livestock industry is an important component of the socio-economic and cultural fiber of many local communities and that grazing of USFS lands and forested BLM lands is essential to keeping many private lands in open space and is critical to wildlife habitat, strive to optimize the availability of federal lands for sustainable livestock grazing, including the use of grazing for vegetative management and use of targeted grazing.*
- 6.2** *Request that the USFS expedite the availability of vacant allotments, closed allotments and forage reserves and provide more flexibility in management including changes in kind and class of livestock.*
- 6.3** *Encourage the Western Governors' Association to seek a regulatory change to allow permittees to graze non-owned livestock on the national forests.²*

MAKING IT HAPPEN

Existing and foreseeable challenges and gaps

Changes in cattle markets, ranching techniques, and public perception have led to changes in the way grazing allotments are managed. The forested lands in Wyoming that are grazed are almost entirely under the jurisdiction of the USFS. By USFS requirement, only livestock actually owned by the

² Consensus with one major reservation.

permittee may graze on a USFS allotment. There are also requirements on number of animals, high and low, and if these numbers cannot be achieved by the permittee there is a risk the permit will be cancelled.

Suggested next steps

To optimize the availability of federal lands for sustainable livestock grazing, expedite the availability of vacant allotments, and provide more flexibility in allotment management and grazing use, the Governor can work with USFS leadership to:

- Prioritize completing NEPA on vacant allotments.
- Move to a system of suspending AUMs for vacated allotments rather than permanently cancelling them.
- Improve the process for changing the class/kind of livestock on a permit.
- Build flexibility into livestock grazing permits to allow for changes in livestock numbers depending on forage conditions.
- Change USFS policy to allow the grazing of non-owned livestock.

RECOMMENDATION 7: Conduct a review of recent and ongoing NEPA analyses on forest lands in Wyoming that address vegetation management in order to identify best practices and promote efficiency and effectiveness.

NEPA was enacted to ensure that information on the environmental impacts of any federal, or federally funded, action is available to public officials and citizens before decisions are made and implemented. NEPA requires federal agencies to integrate environmental, social, and economic values into their decision-making processes by considering the environmental impacts of their proposed actions and reasonable alternatives to those actions. Private individuals become involved when they need a permit issued by a federal agency, and all members of the public have a stake in projects proposed on our public lands.

The NEPA review and decision process consists of a number of legally defined steps and stages with specified time intervals between stages to allow for adequate public review and comment. The time and effort that a NEPA process requires depends on the degree of complexity and controversy of the proposed project, staffing levels and work load in the federal agency unit offices, and the practices and procedures that an agency utilizes in its review.

The time and effort needed to complete NEPA review processes has been a concern of project proponents and permittees as well as the federal agencies that conduct them. In 2002 the USFS estimated that planning and assessment accounts for 40 percent of its total direct work—an annual sum of approximately \$250 million (Gaines and Lurie, 2007). That figure has increased significantly since then (Richard Stem, pers. comm.). To that end, there have been ongoing efforts by federal agencies together with state and local partners, to find ways to improve the efficiency of the NEPA process.

In 2012, the USFS released *Increasing the Pace of Restoration and Job Creation on our National Forests* (USFS, 2012), a report that contained a number of recommendations for improving the efficiency of the NEPA process. The Task Force believes that improving efficiencies in NEPA review and permitting processes is critically important for facilitating sound resource management practices.

THE TASK FORCE RECOMMENDS THE FOLLOWING ACTIONS:

- 7.1** *The Task Force recommends that the Governor, in collaboration with local government and federal agencies, conduct a review of the implementation and management of NEPA for National Forests and BLM field offices in Wyoming regarding federal land management planning and implementation of vegetation management projects including forest improvement and fuels mitigation. This review should consider:*
- *the use and creation of efficiencies;*
 - *the use of best practices;*
 - *the use of authorities and tools, where appropriate, to expedite the NEPA process such as the Healthy Forest Restoration Act (HFRA) and the new Categorical Exclusion (CE) authority;*
 - *evaluation of risk management in the decision;*
 - *inconsistencies among federal field units and USFS Regions; and*
 - *ways to enhance flexibility at a local level.*
- 7.2** *Look to models such as Planning 2.0 and iterative NEPA for examples on how the NEPA process may be streamlined.*
- 7.3** *Support an increased level of monitoring to guide future adaptive management and measure the results of activities implemented.*
- 7.4** *Support conducting socio-economic analyses for use at the state and county levels for use in the NEPA processes affecting forest lands.*
- 7.5** *Encourage federal agency partners to engage state and local governments in the NEPA processes.*

MAKING IT HAPPEN

What is happening

Both the USFS and the BLM have been undergoing assessments and reviews of their NEPA processes. Currently, the BLM is working to effectively address landscape-level management challenges, and improve planning responsiveness. In efforts to improve the level of communication at all levels, and incorporate projects that cross jurisdictional boundaries, the BLM has been analyzing all NEPA activities.

Through an initiative called “Planning 2.0” the BLM intends to create a more efficient way of developing Resource Management Plans (RMPs). Planning 2.0 seeks to improve the agency’s ability to respond to environmental and social change in a timely manner, provide for a more cooperative and collaborative planning process, and plan across landscapes and at multiple scales.

BLM and the State of Wyoming recently entered into a Memorandum of Understanding (MOU) in which the State will automatically be a Cooperating Agency on all major land use planning or project level Environmental Impact Statements (EISs) and major Environmental Assessments (EAs). This will avoid EIS by EIS or major EA by EA requests to be a cooperating agency ensuring even closer collaboration and cooperation between the State and BLM.

In addition, BLM recently issued an internal instruction memorandum directing field units on how the MOU will be implemented. This includes how NEPA (EISs, EAs etc.) will be managed or processed internally to expedite the process and to implement organizational efficiencies.

The USFS developed a collaborative research agenda, NEPA for the 21st Century, to help improve its NEPA decision-making efficiency. NEPA for the 21st Century aims to provide a creditable science basis for development of new policies related to NEPA administration. The Service has completed several studies that compare the USFS NEPA approach with the approaches of other federal and state agencies, and has conducted surveys with USFS employees to better understand their perceptions of the process and identify factors that may contribute to success. This has been matched with success in areas such as reduced EA outlines and use of CEs. However, application of new approaches varies by unit and location across the state.

Adaptive management is a component of forest management and is integrated into many USFS projects. The USFS is working to improve its monitoring efforts. Increasing monitoring ensures more effective project planning. The BLM is using a collaborative monitoring process which helps avoid duplication of efforts. Although these efforts are under way, application is inconsistent across the state, and results are mixed.

Socioeconomic analysis is of growing importance in Wyoming. Currently, the BLM is working extensively with state agencies and local governments to obtain accurate socioeconomic data. The Wyoming County Commissioners Association is also working with the Governor's Office to develop a county-by-county framework for conducting socioeconomic analyses for use in NEPA project reviews and land management plans.

Existing and foreseeable challenges and gaps

Numerous reviews, studies, and strategies have been undertaken in an effort to improve the effectiveness and efficiency of NEPA procedures (see for example, Stein et al., 2007). However, a significant challenge that still remains is the inconsistency in which NEPA procedures are implemented within and among agencies. Differences in approach, personnel skill level, and capacity of the forest unit or BLM field office affect how agencies carry out environmental analyses and engage the public in their NEPA processes. Cuts in budget and personnel have certainly affected the agencies' capacity to carry out NEPA reviews and analyses. Interpretations and application of existing laws, rules, and regulations that enhance efficiencies in NEPA procedures while maintaining rigor and completeness vary widely by unit. Some NEPA administrators are willing and able to find creative ways of accomplishing NEPA in a rigorous and efficient manner, while others are not. Examples include the differential application of the HFRA among regions of the National Forest System, different interpretations for the use of CEs and biological assessments, and different approaches to public engagement. NEPA can be administered more uniformly, efficiently and effectively across all agencies while still addressing unique local needs and issues.

State leadership can bring an entirely different perspective to the issues facing project planning on federal lands. The State of Wyoming has been unique among western states in being an active partner in the management of the national forests within its borders. Wyoming has assisted in program reviews, provided funding for federal and contract personnel, and engaged in project development and planning. Examples include participating in reviews of the vegetation management program on the Black Hills National Forest, assisting with program management in the Bridger-Teton, and providing funding to the Evanston/Mountain View Ranger District for planning and implementing timber sales.

Suggested next steps

The state should continue its involvement in NEPA processes on federal lands in Wyoming. Using a positive partnership model, it can even increase its participation as the federal agencies struggle with budgets, skill, and capacity. Understanding the ways in which agencies can ensure NEPA procedures are as efficient as possible in a given context is critical, as is bringing the right people to the table to discuss and implement them. NEPA processes can be made more efficient via implementing procedures such as HFRA, using CEs where appropriate and using Level 1 and Level 2 consultations with the US Fish and Wildlife Service.

Before embarking on any kind of review to improve efficiency, the existing situation must be assessed so that any actions taken match identified needs. The Governor's office could ask the Regional Offices whether they would like to participate in a federal-state programmatic review of NEPA analyses relative to vegetation management projects. This could entail assembling a knowledgeable team from the Governor's office and staff from each region to collect data on such items as administrative consistency, skill level, use of authorities and approaches, organizational capacity, and what each unit is accomplishing. Based on this assessment, the team could generate a report on what is working well, and make recommendations for improvement. This combined state-federal review process for the national forests can serve as a blueprint for consistent, periodic future reviews with other federal partners across the state such as the BLM.

RECOMMENDATION 8: Develop a structure and process for local collaborative working groups to review and assess roadless areas and recommend management actions and to consider specific designations and/or releases where appropriate.

The USFS manages approximately 9.2 million acres in Wyoming, which are distributed among seven national forests and one national grassland. These national forests and grasslands are characterized by a diverse array of landscapes, ecosystems, natural resources, and land use activities.

Roadless areas are characterized generally by a lack of roads and managed for their roadless characteristics. Among other things, roadless areas are sources of drinking water, important fish and wildlife habitat, semi-primitive or primitive recreation areas, include motorized and non-motorized recreation opportunities, and are popular destinations among hunters and anglers.

In January 2001, the USFS promulgated the Roadless Area Conservation Rule. The Roadless Rule had been the subject of litigation for more than a decade, but it is now fully in effect. Concerns about provisions of the current rule, as well as a perceived lack of consistency with respect to the roadless characteristics among and within inventoried roadless areas prompted the Task Force to call for a review of Wyoming's inventoried roadless areas and provide recommendations that our congressional delegation might choose to include in legislation. The Task Force recognizes that:

- Roadless areas are important to many stakeholders who value undeveloped, wild landscapes.
- There is a need to ensure that Wyoming's roadless areas are accurately mapped.
- Management actions may be needed in existing roadless areas to reduce the risk of wildfire to communities and municipal water supply systems.

THE TASK FORCE RECOMMENDS THE FOLLOWING ACTIONS:

- 8.1 *Create a structure for local collaborative working groups to review and assess roadless areas, forest by forest. If there is interest, determine which areas are appropriate for wilderness designation, which areas should be released from roadless, and areas that should remain roadless. Working groups will present recommendations to the Governor, and with his approval, ask the Wyoming delegation to bring legislation.*
- 8.2 *Encourage local collaborative working groups to recommend appropriate management activities that should occur in roadless areas within the guidelines of Roadless Area Conservation Rule.*
- 8.3 *Maintain the recreational, economic, and ecological values and opportunities for solitude inherent in backcountry areas.³*

MAKING IT HAPPEN

The State of Wyoming could submit a letter to the Secretary of Agriculture explaining the Task Force and its recommendations regarding roadless areas and request guidance on how the State should proceed in its review of inventoried roadless areas. The State will then work in partnership with the Department of Agriculture/USFS on the Task Force's recommendations and execute changes as requested prior to the formation of any collaborative working groups.

The Governor could initiate a comprehensive statewide review of the state's roadless areas that includes the following:

- Establishment of local collaborative working groups composed of stakeholders who represent the various interests related to roadless areas. A committee could be established for each National Forest under review.
- Development of a shared understanding of the Roadless Rule including its restrictions and exemptions related to forest health.
- On-the-ground assessment of the areas under consideration.
- A procedure for gathering and using data for making recommendations.
- Consultation with local government land use boards.
- A procedure for gathering public comment.
- Formation of a statewide review team that ensures statewide consistency and adds an additional level of collaborative involvement.

RECOMMENDATION 9: Work with federal, state and private landowners to identify, maintain and enhance important wildlife corridors and habitats, and other preservation and conservation opportunities.

Wyoming is internationally known for its scenic beauty, outdoor recreational opportunities and abundant wildlife. Maintaining the healthy wildlife populations the people of Wyoming have come to expect requires abundant high quality habitat. Species and age diversity within vegetative communities generally provides for productive and resilient landscapes. However, many species of greatest conservation need in Wyoming depend on older aged forests with corridors available for movements from one patch to the next. Wyoming is fortunate to have relatively unfragmented habitat, critical for numerous wildlife species including ungulates along migration corridors. In many cases allowing natural processes to predominate a landscape is the best management option. When active management

³ Backcountry areas are defined as geographical regions that are remote, undeveloped, isolated or difficult to access.

is preferred, Wyoming's Forest Action Plan identifies the following activities as particularly valuable for the diverse needs of wildlife dependent on functioning forest ecosystems:

- Where appropriate, manage to enhance the health, vigor and extent of aspen stands.
- Where appropriate, manage to preserve older aged forests and corridors between stands that allow older aged dependent wildlife to move freely.
- Enhance headwater stream water retention through management of willow and aspen communities, management of herbivory and reintroduction of beaver in systems where they are absent or at low numbers.
- Enhance age class diversity of cottonwood gallery forests along major river corridors.
- Enhance land management decisions through improved inventory and mapping of forest resources.
- Protect and enhance ungulate migration corridors.
- Enhance coordination of habitat management efforts in Wyoming.

THE TASK FORCE RECOMMENDS THE FOLLOWING ACTIONS:

9.1 *Support the development and utilization of conservation tools for mitigation in forest management.*

9.2 *Facilitate coordination between federal and state agencies and private landowners to identify important forest migration corridors, determine the threats to those corridors, and take action to mitigate those threats.*

9.3 *In the Governor's efforts to support active management he should encourage agencies to ensure that decisions:*

- *incorporate the best available science;*
- *utilize best management practices (BMPs) to minimize impacts of roads on soil and stream integrity;*
- *consider impacts to wildlife habitats and migration corridors, and how it affects species diversity; and*
- *promote the provision of ecosystem services, e.g., nutrient recycling, clean water and air, carbon sequestration, etc.*

MAKING IT HAPPEN

What is happening

Many conservation tools currently exist. A partial list includes: The Wyoming Game and Fish Department (WGFD) has developed a Strategic Habitat Plan, Habitat priority areas and maps, Guidelines for grazing and prescribed burning, the Mule Deer Initiative, Wyoming's Bird Conservation Plan, Nongame Bird Best Management Practices and the State Wildlife Action Plan (SWAP). The Western Association of Fish and Wildlife Agencies developed Habitat Guidelines for Mule Deer in the Intermountain West Ecoregion. Several publications are available on aspen management such as: Guidelines for Aspen Restoration on the National Forests in Utah, Western Aspen Alliance, Utah State University, Logan, UT, and Aspen Ecosystems: Objectives for Sustaining Biodiversity. Robert B. Campbell, Jr.1 and Dale L. Bartos, USFS Proceedings RMRS-P-18. There are several pertinent publications on the management of older aged forests and native wildlife. The USFS has developed numerous BMPs for forest management as well as allocated forest resources through their individual forest plans. The University of Wyoming Cooperative Research Unit has led the way in developing the Wyoming Migration Initiative. The overarching goal of this initiative is to advance the understanding, appreciation, and conservation of Wyoming's migratory ungulates by conducting innovative research and sharing scientific information through public outreach.

Existing and foreseeable challenges and gaps

Currently, State, Federal, and non-governmental organization (NGO) conservation plans are not well coordinated. Much is happening on the ground but, in general, these actions are not as well coordinated between Federal and State Agencies, NGOs and private landowners as they could or should be. When actions are proposed for federal lands, other federal priorities may take the lead during the NEPA process. And finally, in many instances Wyoming National Forests are not fully utilizing the Stewardship Contract opportunities to improve wildlife habitat.

Suggested next steps

Migration corridors

Migration corridors are critical to the long-term sustainability of some of Wyoming's wild ungulate herds and many of our breeding birds and nongame mammals that migrate well beyond our state boundaries. Further fragmentation of these corridors could easily result in compromised populations of many types of wildlife.

- Support the Mule Deer Initiative. This collaborative process is being guided by the Department but driven by Wyoming citizens interested in mule deer conservation and enhanced populations. Many of the ideas generated during this process highlight the need to manage forest habitats in summer as well as transitional ranges.
- Support the Migration Initiative, the Atlas of Ungulate Migration and completion of the Migration database and tools. Then support projects identified through the use of these tools that enhance or preserve migration routes. Beyond the utility of the tools themselves for project siting, prioritizing conservation easement work and habitat projects, the migration viewer has great potential to capture the imagination of the public.
- Encourage forest management practices designed to enhance bighorn sheep migration from low elevation winter ranges to high elevation summer range. In many places these seasonal migration routes are being precluded by encroaching conifers. WGFD and NGOs interested in bighorn sheep have identified several routes in Wyoming where active forest management would be beneficial.
- Support the “Path of the Pronghorn” and project work designed to maintain this unique Wyoming migration. The migration route has been identified and on National Forest there are areas where the route is being precluded by encroaching conifers.
- Major River Corridors: River corridors are important habitat for many Tier 1 and 2 Species of Greatest Conservation Need migratory birds listed in Wyoming's SWAP that in Wyoming. Other migratory birds breed further north but use these same corridors for their spring and fall migrations. Some of these species, both Wyoming residents and seasonal migrants from elsewhere, are likely to be petitioned for listing under the Endangered Species Act. There are three corridors that are specifically important for wildlife: Green River, Big Horn River and the North Platte River Corridors. Although a majority of these river stretches are not on National Forest System Lands, the State Land Board, BLM and NRCS as well as NGOs may be able to join in on a strategy. Specific actions could include:
 - *reestablishment of cottonwood stands;*
 - *removal/eradication of non-native plants, and*
 - *building incentives for alternative winter livestock feeding sites.*

Aspen

Develop a strategy for increasing sustainable aspen acreage in important transitional habitat and areas that are important for water management in several headwater areas. The WGFD Strategic Habitat Plan (SHP) describes the value and high priority of aspen for wildlife and associated priority areas and identifies locations across Wyoming where actions can be taken to enhance aspen stands.

- This would require close coordination to identify the priority areas with WGFD, local conservation districts and the land managers.

Mapping

Although the USFS has accomplished some habitat type and forest stand inventory mapping, the quality and detail is often not to the level needed to accurately delineate and quantify habitats important to forest dwelling species of greatest conservation need, federal sensitive species or those being considered or are listed under the ESA. This is particularly true for older aged dependent wildlife.

- There are a few key areas where additional mapping is needed to accurately determine the amount and quality of habitat.

Coordination of habitat improvement efforts

There is a great deal of money being spent on habitat improvement projects. Some coordination would likely prove a synergistic effect, increasing the effect of any single action.

- Support regional coordination meetings between agencies and NGO's working on separate but related habitat initiatives. Example - Coordination between the WGFD's Strategic Habitat Plan and the WSFD's Forest Action Plan; Coordination among Forest Action Plan, WGFD Strategic Habitat Plan and Forest Plans (i.e. Shoshoni NF Plan which is being currently developed).
- Support coordination of the WWNRT with all major habitat initiatives occurring state-wide. (While the WWNRT board is the major funder of habitat projects statewide, they are not informed of the agency and NGO habitat related initiatives - need better communication.
- Incorporate habitat enhancement strategies promoted by Wyoming's conservation organizations into project proposals.



ECONOMIC OPPORTUNITIES AND INNOVATION

RECOMMENDATION 10: Explore opportunities to attract and develop a more robust and diverse forest products industry that provides economic opportunities and jobs.

A predictable, dependable supply of forest products is critical to retaining the forest products industry in the state. The development of non-traditional markets, such as those for biomass, could become important to the state, particularly when located with existing mills to minimize biomass transportation costs.

THE TASK FORCE RECOMMENDS THE FOLLOWING ACTIONS:

10.1 *Attract and develop a biomass industry in Wyoming by:*

- *Working directly with the Wyoming Legislature to diversify the energy sources to include woody biomass in the state of Wyoming.*
- *Asking the University of Wyoming to develop a Bioenergy Research Program*
- *Convening a bio-energy summit to entice entrepreneurs to engage in the discussion*
- *Providing mechanisms such as construction loans, guarantees, tax credits, etc.*
- *Promoting small application biofuel energy production for heating and co-generation production.*

10.2 *Ask the governor to encourage the use of the Business Ready Community program for assisting in establishment of wood product industries.*

10.3 *Recommend the governor collaborate with the Western Governors' Association to seek federal legislation allowing woody biomass from federal lands to be eligible for Renewable Identification Number (RIN) credits.⁴*

⁴ Consensus with two major reservations.

10.4 Create a professional or contracted position, with expertise in forest products and biomass utilization who can work with entrepreneurs and government agencies to expedite forest products and biomass development.

MAKING IT HAPPEN

Developing biomass energy facilities in Wyoming would create opportunities to use timber byproducts that are not currently utilized (limbs, tops, small diameter, cull, etc.). A biomass industry could complement existing forest products companies by providing alternative outlets and markets for such by-products, which would increase employment and economic benefits. Development of biomass utilization would require careful coordination with the USFS and BLM to ensure that expansion of biomass outputs would not detract from existing programs and the companies that depend on those programs.

Once those concerns have been addressed, an effective approach to developing a biomass utilization industry in Wyoming would be to create a market by legislating specific biomass targets based on annual consumption. Legislation is needed to require the purchase of biomass power, which would be bid competitively within the state.

Using a base biomass removal quantity necessary to fuel a plant over a 20 year period, conduct an assessment to determine potential locations where biomass fuel, water, labor, and utility offtake are available, as well as to identify fuel hauling routes, interconnection points and other geographic data necessary for efficient plant siting. Make these data available to potential developers.

Explore how to initiate bio-energy production in Wyoming by convening a bio-energy summit. Summit participants should include entrepreneurs and experts who have already developed plants or sites in other states (Colorado, Oregon, California, and Washington), and who are knowledgeable about the issues related to the development of a biomass industry. In addition, include members of the Wyoming Legislature, appropriate state and federal agencies, and other business and nonprofit organizations that would have a role in its development. The purpose of the summit should be to explore how to create a biomass industry in Wyoming within a short but realistic time frame. Create a working group within 30 days of the summit to put into place the mechanisms developed that are both short term and long term.

Below are examples of specific actions that could be taken to establish a biomass-to-energy project that are within the state's scope of authority. These examples are meant to illustrate ways to approach financing and siting such a project, and are not necessarily specific actions recommended by the Task Force.

- 1) Provide short-term construction bonding authority (e.g., up to \$80M per loan), with capacity to enable two projects simultaneously. Underwriting should be streamlined to be achievable within three months and be based a long-term financing takeout agreement from a financial institution such as a bank or other lender.
- 2) Provide 20-year property tax abatement. Ensure sales tax relief for capital intensive projects
- 3) Encourage federal legislation for special tax credits for new capital intensive projects that utilize timber from federal forests in areas designated for insect and disease and disease treatment programs. Encourage federal legislation to provide grid parity for the federal Production Tax Credit (2.2 cents/kwh for geothermal, solar, wind vs. 1.1 cents/kwh currently for biomass).

- 4) Arrange fuel supply commitments (access and funding) from federal and state land management agencies, and pass through these commitments to developers in the form of a biomass fuel guarantee.
- 5) Endeavour to co-locate biomass facilities with higher-value sawmill products facilities such that the full value of the timber is utilized.

Creating a professional or contracted position to shepherd forest products and biomass development is a critical component of this recommendation. When a new program is being developed, typically there is no one to assist developers in working with local state government agencies such as in permitting, economic incentives, interagency environmental coordination, federal communication, etc. Experience with other state and national biomass utilization projects has shown that a “lead” person in that position is a critical incentive for entrepreneurs to take on such projects.

RECOMMENDATION 11: Develop a comprehensive plan to expand on the outdoor recreation programs and frameworks that currently exist in Wyoming’s forests to support Wyoming’s travel and tourism sector and the outdoor recreation economy.

Outdoor recreation, as a key component of the travel and tourism, is both a significant economic driver in Wyoming and an important part of life for Wyomingites and visitors alike. Not only are there a wide variety of natural resources and recreational opportunities, but there are a large and varied number and type of service providers. Providers are guided by legislative mandates and guidelines, market prices and/or agency goals and objectives. Given the number and variety of recreation providers in Wyoming, the risk of duplication of services, missed opportunities and lack of coordination is a threat to the quality presentation of the state’s recreation opportunities. By developing a comprehensive plan, communications and efficiencies between agencies and providers could be improved. Incentivizing growth of the sustainably recreation economy can help diversify Wyoming’s economic portfolio.

THE TASK FORCE RECOMMENDS THE FOLLOWING ACTIONS:

- 11.1 Provide leadership in bringing together local, state and federal agencies, commercial operations, and non-profits to develop and market responsible forest recreation opportunities.*
- 11.2 Provide leadership in bringing together local, state and federal agencies, commercial operators, and non-profits to maintain and enhance responsible outdoor recreation infrastructure.*
- 11.3 Encourage citizens to take advantage of outdoor programs that currently exist.*
- 11.4 Encourage continuation of Wyoming Recreation Action Team (REACT) for input on recreation amenity fees on federal lands and provide guidance on recreation opportunities.*
- 11.5 Work with federal agencies to streamline the process for hosting an event, processing special use permits and the outfitter and guide permits, on federal lands.*
- 11.6 Work with federal partners to encourage responsible mechanized recreation use.*
- 11.7 Seek assurances that recreation fees are used for onsite enhancements of recreational opportunities, amenity sites, and permitting administration.*

MAKING IT HAPPEN

What is happening

The Wyoming Department of State Parks and Cultural Resources is responsible for drafting and administering the State Comprehensive Outdoor Recreation Plan. This document attempts to bring together the wants and needs of recreation users and providers statewide and is an information source and guidance tool for recreation providers.

The Wyoming Office of Tourism currently has statutory authority to promote the state and focus its efforts on marketing and advertising. The Tourism Office coordinates with federal and state land management partners and represents Wyoming's forests and the recreation opportunities throughout its marketing materials. It works closely with the USFS, as well as specific forests in Wyoming, on enhancing interpretation through the Sign Grant program.

Wyoming's Recreation Action Team, REACT, is a consortium of state and federal land management agencies that addresses issues related to recreation and recreation access. The team weighs in on issues that are important to visitors and visitor services. It relies on public input regarding proposed fee increases on federal lands and identifies opportunities to address issues affecting recreation and tourism in Wyoming. State agencies making up REACT are Wyoming Game and Fish Department, the Department of State Parks and Cultural Resources, Department of Transportation, Division of Travel and Tourism, and the Wyoming Department of Agriculture. Federal entities involved are the BLM, National Park Service, Fish and Wildlife Service and the USFS.

Existing and foreseeable challenges and gaps

REACT was formed as the Wyoming version of a Recreation Advisory Council (RAC) as mandated by the Federal Lands and Recreation Enhancement Act (FLREA), which became law in 2004 and is now up for reauthorization. The reauthorization version will likely not have language that perpetuates RACs, preferring a different reporting method.

Suggested next steps

The Governor can support REACT by expressing interest in its perpetuation, regardless of what happens with FLREA. The Wyoming REACT team does significantly more than the limited mandate specified under FLREA, especially in the realm of coordinating opportunities and issues affecting Wyoming recreation and tourism.

Currently, fees collected under the authority of FLREA are required to be reinvested back in the areas from which they were collected. These fees are an important source of revenue for federal land management agencies to provide safe and high quality recreational opportunities in Wyoming. The law is up for renewal in the current Congress and there is the potential for these fees to be diverted to other government needs. The Governor could engage with the Wyoming congressional delegation as this legislation moves forward.

The outdoor recreation providers in Wyoming have expressed concern with the difficulty in getting federal *special use permits and the outfitter and guide permits on federal lands*. The Governor can coordinate efforts among outdoor recreation providers and provide more streamlined communication between recreation providers and federal agencies.

RECOMMENDATION 12: Support forestry, natural resource, and environmental education programs.

Fostering educational programs aimed at young people as well as students looking for forestry careers can lead to long-term responsible recreation users, respect towards conservation efforts and support for protecting and managing Wyoming's forests for future generations.

THE TASK FORCE RECOMMENDS THE FOLLOWING ACTIONS:

- 12.1 Request the University of Wyoming designate Wyoming designate graduate level "Forest Resource Assistantships", and provide undergraduate and graduate scholarships to study forestry.*
- 12.2 Support outdoor activity-based natural resource, forestry and environmental educational programs for youth.*
- 12.3 Request that the University of Wyoming recognize the benefits of the Wyoming Conservation Corps and fully implement the program.*
- 12.4 Consider natural resource tours that include forest issues and promote successes in resource management.*

MAKING IT HAPPEN

What is happening

The University of Wyoming offers a Forest Resources minor whose primary goal is to provide students with a working knowledge of the processes that influence the provision of key products derived from forest lands.

The WSFD supports Project Learning Tree, Provider Pals, and several scouting programs. In addition, the Wyoming Game and Fish Department provides programs such as the Forever Wild Family Program, which is designed to teach families hunting and angling related skills through a yearlong program. It also sponsors Wild Works, which is a volunteer program designed to provide partnerships to help complete department programs with the help of adults or family units. The WGFD also partners with many NGOs, schools, organizations, citizen groups, and other state/federal agencies to provide a wide array of educational programs to teach people about the wildlife, ecology, conservation, and general outdoor skills. It hosts annual free fishing days and volunteer programs such as the Pole Mountain Fish Stocking, which utilized more than 60 volunteers, most of whom came in family units to help stock over 20,000 fish in mountain streams and ponds. The WGFD is also a part of a statewide coalition "WyOutside" that focuses on youth and adults in the outdoors.

The Wyoming Conservation Corps (WCC) advances the understanding and resolution of complex environmental and natural resource challenges by inspiring young adults to become stewards of our natural resources through leadership training and service learning to benefit lands in Wyoming. Through projects focused on improving Wyoming's public lands, the WCC provides young adults important personal and technical skills and experience in natural resource and environmental career fields. Each summer, volunteer crew members and leaders gain experience working in Wyoming's complex landscapes, building real world skills and a deeper appreciation for the state's environmental challenges and riches.

WCC collaborates with agencies and companies working on public lands in Wyoming. Through this partnership, WCC provides low-cost conservation crews who accomplish tens of thousands of hours of labor each summer. In return, WCC participants get one-on-one interactions with environmental and natural resources professionals working on the ground.

Current or foreseeable challenges and gaps

Faculty within two University of Wyoming colleges, the College of Agriculture and Natural Resources and the College of Arts and Sciences, conduct research programs related to forest management and ecology. External research grants are the primary means of support for forest-related research at the University of Wyoming, much of it in the form of graduate student assistantships. However, external funding is scarce and is not often available to support research on questions that are pertinent to Wyoming stakeholders. University departments and programs often have to compete for a limited number of internally-funded assistantships, and there is no guarantee of receiving an assistantship over the duration of a graduate student's time at the university.

The Wyoming Conservation Corp was reduced in size and scope in 2013 when it was transferred out of the Haub School of Environment and Natural Resources and placed under the auspices of the Division of Student Affairs, Residence Life and Dining Services. Fewer work crews reduces the capacity of the WCC to work on needed forest management projects across the state.

Suggested next steps

Graduate assistantships provide dedicated funding for graduate student research and teaching, and help to offset the cost of a graduate education. Assistantships are funded either through research grants and contracts, or are part of the University of Wyoming's block grant provided by the state legislature. State-funded assistantships are allocated to departments and programs by their respective colleges as well as at the university administrative level. Designating "Forest Management Assistantships" provides certainty and continuity of funds to support research and teaching in this area. This may be accomplished by working with the University of Wyoming College of Agriculture and Natural Resources Advisory Board.

Creating a dedicated funding line to support Wyoming Conservation Corps activities will enhance the program and its partnerships with agencies and industry.

Partners like the National Outdoor Leadership School (NOLS), Outward Bound, and Teton Science Schools can help form and maintain outdoor activity-based natural resource, forestry and environmental educational programs for youth.

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APPENDIX A

ACRONYMS

BLM	Bureau of Land Management
BMP	Best Management Practices
CE	Categorical Exclusion
CRM	Coordinated Resource Management
CWPP	Community wildland fire protection plan
DOI	Department of Interior
EA	Environmental Assessment
EIS	Environmental Impact Statement
FLREA	Federal Lands and Recreation Enhancement Act
FRG	Fire Regime Group
FRNPA	Federal Natural Resource Policy Account
HFRA	Healthy Forest and Restoration Act
MMBF	million board feet
MOU	Memorandum of Understanding
NASDA	National Association of State Departments of Agriculture
NEPA	National Environmental Policy Act
NGO	non-governmental organization
NOLS	National Outdoor Leadership School
RAC	Recreation Advisory Council
REACT	Wyoming Recreation Action Team
RIN	Renewable Identification Number
RMP	Resource Management Plan
SHP	Strategic Habitat Plan
SWAP	State Wildlife Action Plan
USFS	US Forest Service
USFWS	US Fish & Wildlife Service
WCC	Wyoming Conservation Corps.
WDA	Wyoming Department of Agriculture
WGA	Western Governors' Association
WGFD	Wyoming Game & Fish Department
WSFD	Wyoming State Forestry Division
WUI	wildland-urban interface
WWNRT	Wyoming Wildlife and Natural Resource Trust



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The Ruckelshaus Institute, a division of the Haub School of Environment and Natural Resources at the University of Wyoming, advances the understanding and resolution of complex environmental and natural resources challenges and supports stakeholder-driven solutions to environmental challenges by conducting and communicating relevant research and promoting collaborative decision making.