

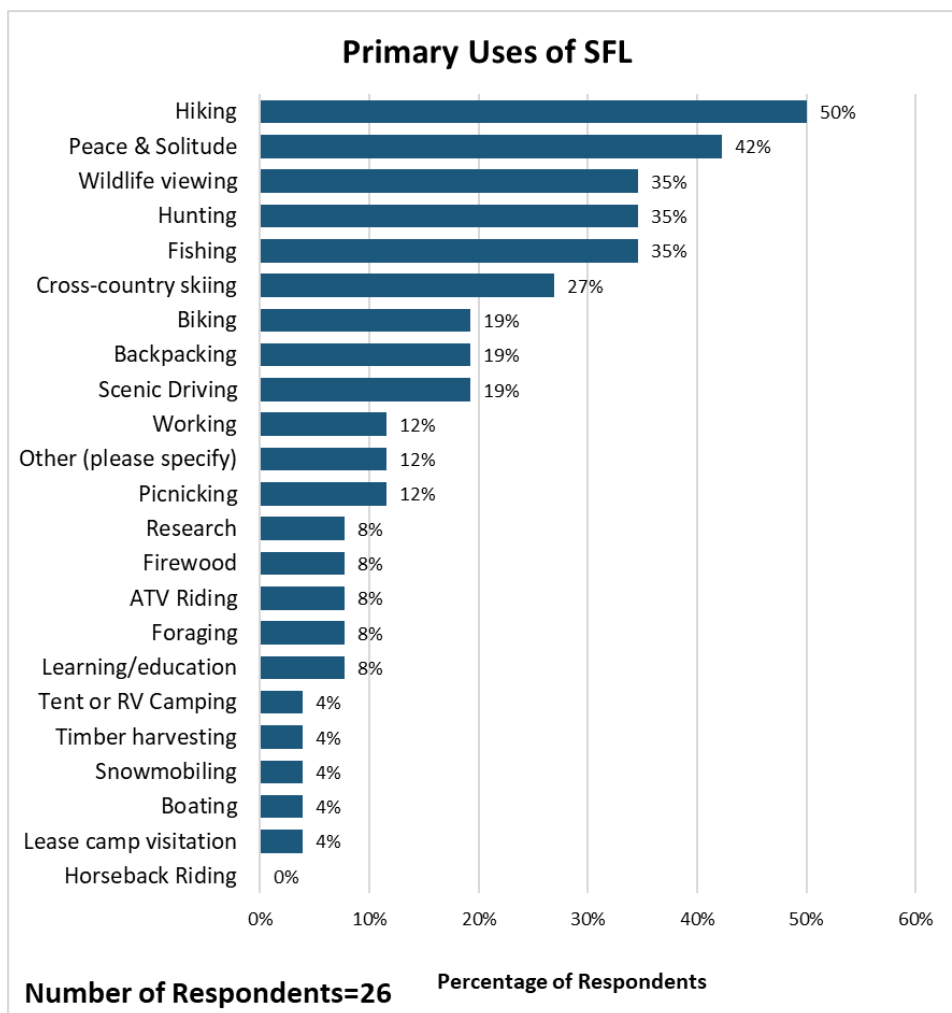
2020 Forbes State Forest Resource Management Plan

Public Survey Data and Response to Public Comments

This document presents public survey data and responses to the public comments received by the Bureau of Forestry (bureau) on the Forbes District State Forest Resource Management Plan (DSFRMP). The public survey data is based on online poll results as well as paper comment forms received during the public comment period on the Forbes DSFRMP. The public comment period was open for two months following the date of the Forbes DSFRMP public meeting, which was held on August 22, 2018. The public survey data is not a statistically valid public poll, but rather the opinions of interested stakeholders that chose to fill out the online or paper survey. The bureau received 26 responses to the survey.

State Forest Uses

In Question 1, survey respondents were asked to check their primary uses of state forest land. The figure below displays the responses from those that took the Forbes DSFRMP survey. It shows that hiking, peace & solitude, wildlife viewing, hunting, and fishing are the five most common uses of state forest land amongst survey respondents.



The Forbes State Forest features over 100 trails and gated roads, totaling over 277 miles, open to many forms of non-motorized recreation such as hiking, mountain biking, horse riding, cross-country skiing, snowshoeing, backpacking, and many other forms of non-motorized recreation. Shared used trails (red blazed), cross-country ski trails (blue blazed), foot-travel only (yellow blazed), and gated state forest

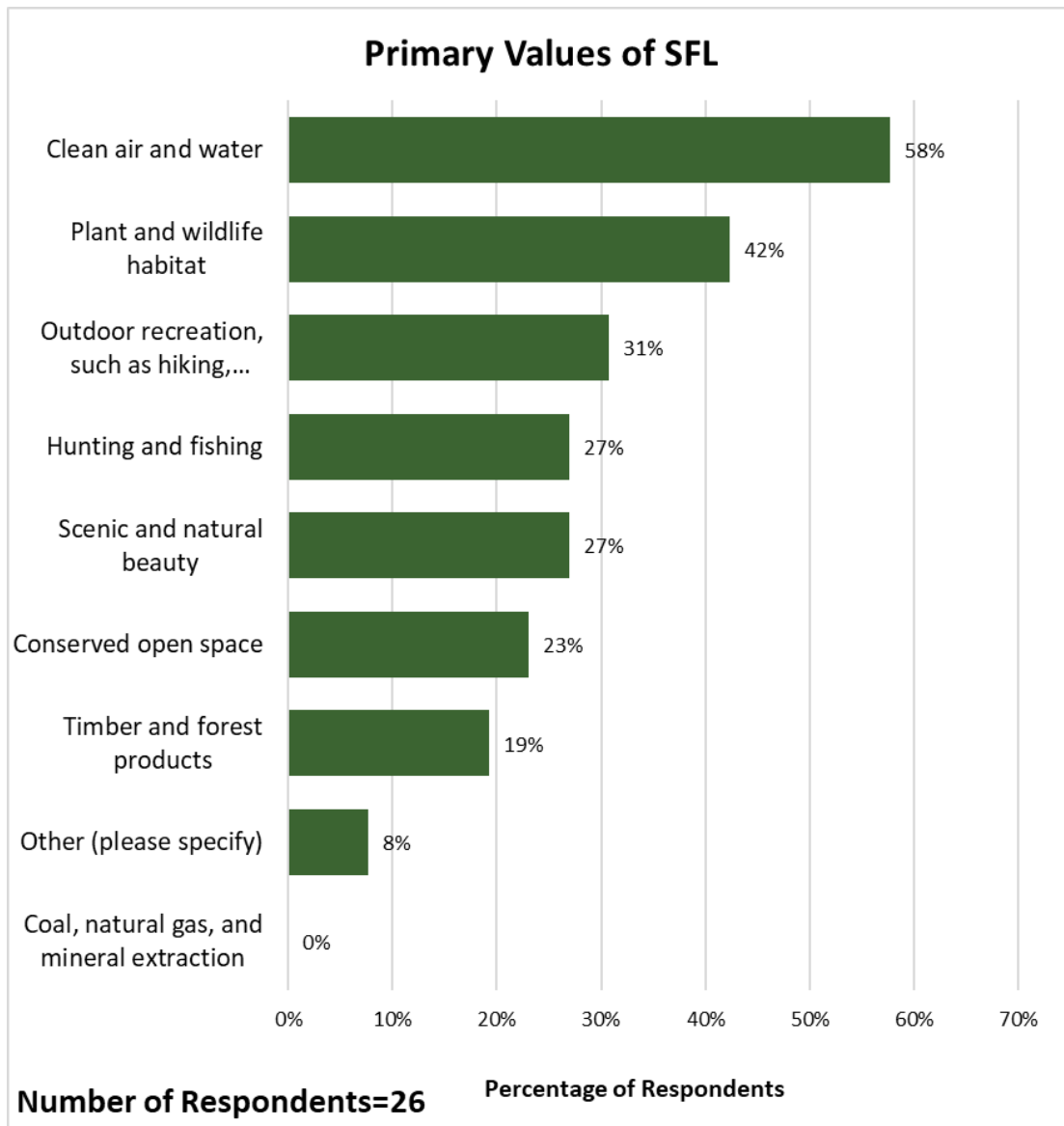
roads are popular for hiking. The 277 miles includes 176 miles of District Local Use (Shared-Use) trails, 15 miles of the Laurel Highlands Hiking Trail on the Forbes State Forest which is part of the Potomac Heritage National Scenic Trail and is administered by the Bureau of State Parks, and 86 miles of gated administrative roads.

Mountain biking and horse riding is permitted on 152 miles of trails and 86 miles of gated roads. Only state forest natural areas and the Laurel Highlands Hiking Trail are closed to this activity. Some trails are not suitable for horse riding due to limited clearance and steep or rocky terrain. Horse riders are generally directed to gated dirt and gravel roads. Cross-Country Skiing is permitted on 191 miles of trails with 32 miles specifically maintained for this purpose.

Peace and solitude and good opportunities for wildlife viewing can be found throughout Forbes State Forest District, but in particular, there are wildlife viewing opportunities at Spruce Flats Bog. Hunting and fishing are permitted on all state forest land, subject to applicable regulations.

State Forest Values

In Question 2, survey respondents were asked to select the top three values they perceive for Forbes State Forest. The figure below displays the responses from those that took the Forbes DSFRMP survey. It shows that clean air and water, at 58%, is the top-rated value amongst survey respondents. Plant and wildlife habitat was the second most common response at 42%.



Water is one of the most valuable resources on the Forbes State Forest. Water, like timber, is a renewable resource when properly managed. Through careful planning and management, forests can produce clean water while at the same time providing many other resources. The Forbes State Forest is home to plentiful springs and is the headwaters to many waterways with many unique water resources including Spruce Flats Bog, Cole Run Falls, Patterson Spring, Christner Bog, Roaring Run, and Camp Run.

Several high quality and exceptional value streams flow through the Forbes State Forest that are protected with special rules, regulations, and streamside buffers. Forbes Forest District is adding large woody material to two of these high quality streams to improve fish and other aquatic life.

Unfortunately, several streams in the Forbes State Forest have above normal acidic pH levels due to legacy acid precipitation. The Forbes Forest District is helping outside organizations treat Linn Run's high pH level. Acid mine drainage (AMD) has also contaminated a few streams on the Forbes State

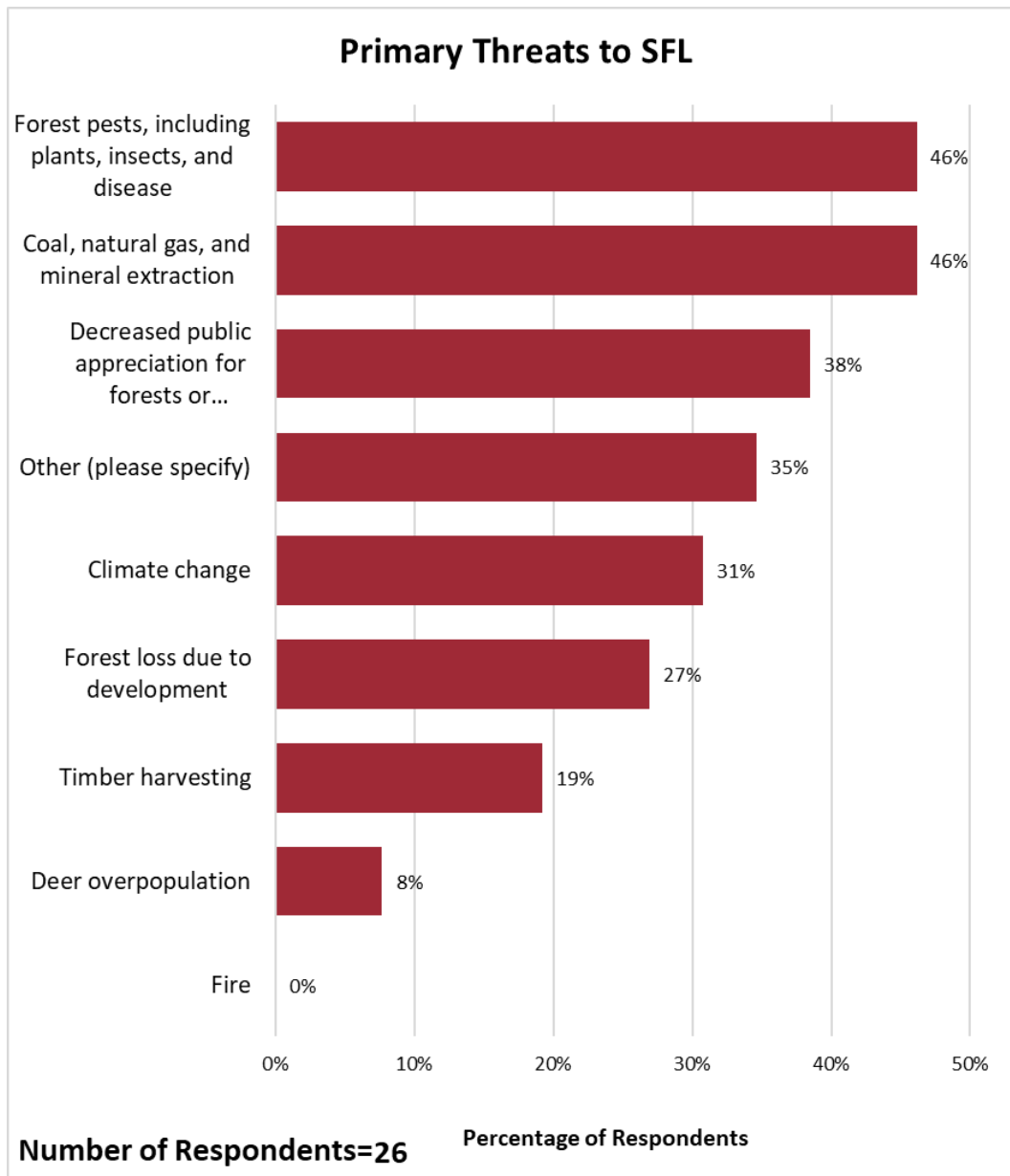
Forest leading to two abatement projects. An abatement pond was constructed on Laurel Run, along Felgar Road in the Laurel Mountain LMU, in 1997. Also, in the 1990's, a series of five AMD mitigation ponds were constructed in the Mt. Davis LMU to improve the quality of Elk Lick Run.

Trees help clean our air in a number of ways. Possibly their most significant effect is that forests absorb about a third of worldwide carbon dioxide emissions every year. Carbon dioxide is a greenhouse gas that contributes to climate change, and so in this way, forests are helping to mitigate the effects of climate change. In addition, trees filter other gaseous pollutants out of the air, such as ozone, nitrous oxides, and sulfur oxides. Lastly, the leaves of trees can be a good place for particulate air pollutants, such as dust, to settle out of the air, another way trees help purify our air.

The Forbes Forest District emphasizes sustainable management of the forest resources which include a wide range of habitats from open wetlands to continuous forests to recently harvested stands. This variety is necessary for both diverse wildlife species and plant species, some of which are rare, endangered and threatened. Yearly work plans take into consideration opportunities to protect, enhance, and develop habitats like planting pollinator seed mixes in openings, creating brushy early successional habitats, daylighting rattlesnake basking areas, and protecting rare plants species with fencing from deer browse.

State Forest Threats

In Question 3, survey respondents were asked to select the top three threats they perceive for Forbes State Forest. The figure below displays the responses from those that took the Forbes DSFRMP survey. It shows that forest pests and coal, natural gas, and mineral extraction are viewed as the top two threats amongst survey respondents.



Regarding the threat of forest pests, including plants, insects, and disease:

The Bureau of Forestry recognizes that the effects of invasive plants, insects, and disease threaten the overall health and sustainability of Pennsylvania's forests. Such effects may include alterations to nutrient cycling, hydrology, natural fire regimes, light levels, regeneration of native tree species and understory species, and physical habitat structure. The Bureau follows Integrated Pest Management (IPM) that utilizes a combination of prevention, monitoring, and control methods to deal with invasive forest pests. Strategies may include directly attacking an invasive pest population for eradication, using preventive measures for invasive pest introduction and spread, or mapping and evaluating invasive pest risks across the landscape.

As new invasive species continue to migrate into Pennsylvania, and existing species spread further, the impact of pests, coupled with the expense of controlling them, is a continuing challenge and requires a coordinated effort within the Bureau and with other agencies or landowners. Several examples of the Bureau's response to forest pests include:

- Early Detection and Rapid Response (EDRR) protocols to track novel populations of invasive plants and treat them promptly to slow their spread on state forest lands;
- Development of an Invasive Plant Species Management Plan;
- Aerial survey programs to detect tree dieback, mortality, and defoliation;
- Development of an Ash Management Plan and Eastern Hemlock Conservation Plan;
- Collaboration with the PA Department of Agriculture on addressing the recent invasion of spotted lantern fly; and
- Education, outreach, and assistance to private forest landowners and communities dealing with invasive pests.

Regarding the threat of coal, natural gas, and mineral extraction:

The Bureau of Forestry's mission statement identifies the *environmentally sound utilization of mineral resources*, which includes coal, natural gas, and other minerals extraction, as a key component of state forest management. There is presently an Executive Order prohibiting additional oil and gas leasing of state forest land, subject to future advice and recommendations made by DCNR. Management decisions related to currently permissible extraction activities are guided by many sources of information including: applicable laws and regulations; the 2016 State Forest Resource Management Plan; leases and contracts; and guidelines and procedures, such as the Guidelines for Administering Oil and Gas Activity on State Forest Lands. The Bureau's approach for managing negative effects of extraction activities is "avoid, minimize, mitigate, and monitor."

The Bureau of Forestry established a shale gas monitoring program in 2011 that consists of an integrated monitoring team, on-the-ground management activities, and research and external partner collaborations. The program monitors a suite of forest values to identify the effects of oil and gas development on state forest land, inform management decisions, and develop best management practices for administering oil and gas development. The shale gas monitoring program published its second comprehensive report in 2018. Information on the Bureau's oil and gas management can be found at this web address:

<https://www.dcnr.pa.gov/Conservation/ForestsAndTrees/NaturalGasDrillingImpact/Pages/default.aspx>

Other Comments from Public

Regarding Article 1, Section 27 of the Pennsylvania Constitution:

Forbes Forest District received several comments regarding the DSFRMP and its relation to Article 1, Section 27 of the Pennsylvania Constitution.

Article 1, Section 27 of the Constitution, the Conservation and Natural Resources Act, the Wild Resource Conservation Act, and Penn's Woods are all described in the 2016 state-wide SFRMP as "Planning Foundations" on which the SFRMP and all state forest management is based. The Preface to the District SFRMPs also acknowledges the importance of Article 1, Section 27 in defining the bureau's stewardship responsibilities for state forest lands. The bureau recognizes the people's right to "clean air, pure water, and to the preservation of natural, scenic, historic, and esthetic values of the environment." The bureau carries out the constitutional mandate by implementing it in both our long-term planning and every-day actions as trustee. The priority goals of this District SFRMP, as well as the policies, goals, and objectives of the 2016 state-wide SFRMP, serve to conserve and maintain these rights and will help the bureau

sustainably manage the state forest system for the benefit of all Commonwealth citizens, including generations yet to come. That sustainable management of state forest lands is verified every year by a third-party certification audit.