State and Private Forestry programs provide technical, educational, and financial assistance to landowners, resource managers, cities, and communities with a primary goal of maintaining and improving the health, sustainability and productivity of Alaska's urban and rural forests and related economies. These programs are delivered to our customers through a partnership between the State of Alaska and the USDA Forest Service, in cooperation with many private and other government entities.

### Program Goals

- Increase cost-effectiveness through the use of partnerships in delivery.
- Increase values through sustained productivity of urban and rural forests.
- Utilize voluntary and non-regulatory approaches.

### Key Issues

- Invasive and exotic species are a growing threat to Alaska's forested ecosystems and many invasive species are established in the state. Partnerships increase our ability to detect and respond to new infestations. Collaborative partnerships and grant programs focus on efforts to remove invasive chokecherry trees, Prunus padus and Prunus virginiana, as well as to monitor the state for invasive forest insects and manage those already established.
- As communities expand so does the need to manage their natural resources. However, Alaska communities lack public and private sector arborists and urban foresters to manage public trees and forests. Providing technical and financial assistance helps communities maximize the environmental, social, and economic benefits of trees, including clean air and water, stormwater treatment, enhanced aesthetics and property values, and habitat for wildlife.
- Climate-related forest health problems have already been documented in Alaska (i.e., spruce beetle outbreaks, yellow-cedar decline, and record wildfire seasons). More applied research on climate change is needed so forest managers can develop strategies to help Alaskans adapt and prepare.
- Alaska’s villages need renewable energy opportunities to supplement heating and power. Woody biomass, which could be used as a source of energy, is readily available from milling residues in Southeast and as a by-product of hazardous fuel and other treatments in Southcentral and Interior. Cost effective reforestation after timber harvest in the boreal forest is a challenge and will need to be addressed as harvests for wood energy are conducted.
- A spruce beetle outbreak occurring in Southcentral has affected over 1.6 million acres since 2016. The outbreak has impacted the Matanuska-Susitna and Kenai Peninsula Boroughs and Anchorage most severely and is now expanding in the Denali Borough as well. The resulting multitude of dead trees on the landscape is affecting infrastructure, recreation, tourism, public safety, and fire behavior.
Mitigation efforts include hazard tree removals and hazard fuels reduction in high priority areas.

- Wildland fire continues to present significant threat to Alaskan forests, communities, and infrastructure, particularly surrounding the Wildland Urban Interface (WUI). Spruce beetle has magnified this threat in Southcentral Alaska by increasing the mortality rate causing available dead and downed trees to pose substantial risk involving wildland fire. The 2021 wildland fire season resulted in 254,414 acres burned from a total of 388 fires.

### Selected Facts

<table>
<thead>
<tr>
<th>Selected Facts</th>
<th>Value</th>
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<tbody>
<tr>
<td>Population</td>
<td>710,231</td>
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<tr>
<td>Acres of Forest Land</td>
<td>128,577,000</td>
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<tr>
<td>Acres of Nonindustrial Private Forest Land</td>
<td>35,875,000</td>
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<tr>
<td>Number of NIPF Landowners</td>
<td>82,000</td>
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<tr>
<td>Acres of Federal Land Under State Fire Protection</td>
<td>88,700,000</td>
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<td>Acres of Private Land Under State Fire Protection</td>
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<td>Number of Rural Fire Departments</td>
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<td>Cities and Towns</td>
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<td>Forest Based Employment</td>
<td>2,000</td>
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<td>Economic Impact of Forestry (by rank)</td>
<td>5</td>
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<tr>
<td>State Forestry Budget (All Sources)</td>
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### FY 2021 Accomplishments

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<thead>
<tr>
<th>FY 2021 Accomplishments</th>
<th>Value</th>
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<tbody>
<tr>
<td>Landowners Receiving Educational or Technical Assistance</td>
<td>43</td>
</tr>
<tr>
<td>Acres Covered by New or Revised Forest Stewardship Plans</td>
<td>23,359</td>
</tr>
<tr>
<td>Acres in Important Forest Resource Areas Covered by New or Revised Stewardship Plans</td>
<td>22,740</td>
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<tr>
<td>Volunteer Fire Departments Assisted</td>
<td>54</td>
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<td>State Fire Communities Assisted</td>
<td>78</td>
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<td>Coop Forest Health Acres Protected</td>
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<tr>
<td>Forest Legacy Project Acquisitions</td>
<td>0</td>
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<tr>
<td>Communities Provided Urban Forestry Program Assistance</td>
<td>7</td>
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<tr>
<td>Population Living in Communities Provided Urban Forestry Program Assistance</td>
<td>388,055</td>
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<td>Urban Forestry Volunteer Assistance</td>
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### Program Highlights

#### Alaska Forest Stewardship Self Study Guide

A major initiative in FY21 was the development of a Stewardship self-study guide, which is an interactive PDF that landowners can use to learn about their forest by describing their land and developing their own Forest Management Plan, which can be certified by Stewardship Foresters to become a Stewardship Plan.

The Self-Study Guide is an effort to expand the outreach of forest stewardship education to as many landowners as possible across the state. With increased settlement in the wildland urban interface and an ongoing spruce beetle infestation, there is an urgent need for Alaskans to learn how to best care for their forested land. A landowner can now learn more about forestry and draft a Forest Stewardship plan for the Division of Forestry to finalize. The Self Study Guide utilizes links and QR codes to connect landowners to other natural resource websites and online publications. The Self Study Guide also enables the small number of Stewardship staff to create numerous stewardship plans for landowners dealing with similar issues such as fire protection, insect and disease mitigation and reforestation, increasing the reach of our limited staff.

#### Conservation Education

The Alaska Forest Stewardship Program provides partial funding for the Alaska Project Learning Tree (PLT) program. 2021 highlights include: two separate college credit classes on outdoor education partnering with Project WET (Fairbanks Soil and Water Conservation District), Project WILD (Alaska Department of Fish and Game) and Alaska Natural Resources and Outdoor Education, reaching a total of 36 educators; three field-based workshops in Denali National Park reaching 18 educators; and partnering with the local PBS station for PLT activities with local PBS television personalities.

AK PLT continues to promote and introduce foresters and natural resource professionals to the most recent work from National Project Learning Tree, such as the Forestry Literacy Framework developed with funding from the US Forest Service; Green Jobs: Exploring Forest Careers, a guide which engages...
youth ages 12-25 in researching forestry jobs, and practice managing and monitoring forest resources; and the NGSS-aligned Explore Your Environment K-8 Activity Guide.

**Cooperative Fire Protection**

The Alaska Division of Forestry protects the majority of the WUI and road-accessible areas in the state; approximately 40% of forested lands. The USFS provides the Division assistance through State Fire Assistance (SFA) and Volunteer Fire Assistance (VFA). In FY21 $1,535,001 (SFA & VFA) was allocated to help hire, train, and equip approximately 1,500 firefighters for statewide and national deployments. SFA funds fire prevention/education programs, and fire management focusing on partnerships and interagency coordination and cooperation. Correspondingly in 2021 $450,916 funded 2 competitive Western WUI grant projects; “Take Time to LEARN Before you Burn Phase II” and “Statewide Project Learning Tree/Firewise Education Project.” SFA program dollars funded 97 prevention/education programs for schools, civic groups, youth organizations, homeowners, etc. The Division updated 6 Community Wildfire Protection Plans (CWPP), conducted 120 consultations and/or fire risk assessments, and conducted 12 follow-up home inspections. Volunteer Fire Assistance (VFA) funds are used to increase wildland firefighting safety, improve firefighting capabilities of rural fire departments, and enhance protection in the wildland-urban interface. VFA funds provided $154,247 to assist 33 rural fire departments. 421 volunteer firefighters received training from DOF. The Federal Excess Property Program (FEPP) and Firefighter Property Program (FFP) continues to provide excess property toward the Division's efforts in fire suppression statewide. The FEPP/FFP program, between the State and Cooperators has enabled the re-utilization of Federal surplus to the tune of over $2.9 million through the FEPP program and $1.9 million through the FFP program.

**Forest Health Protection**

The Division of Forestry Forest Health (DOF) program provides a wide range of assistance to forest landowners, resource managers, and others, and is a primary source of forest health expertise in the state. The program focuses on monitoring native and invasive forest pests, pest management, technology development, and technical assistance. In a typical year, the main way Alaska’s forests are monitored is through cooperative DOF and USDA Forest Service Forest Health Protection (FHP) aerial pest detection surveys. These surveys returned on a limited scale in 2021 after being cancelled in 2020.

In 2021, aerial surveyors from the DOF and FHP mapped approximately 1.2 million acres of forest damaged by insects, diseases, and abiotic agents within about 15.7 million acres surveyed. 1.2 million acres of forest damage observed is slightly higher than that mapped in 2019, the last time the surveys were flown, albeit on far fewer acres flown (24.4 million in 2019). The top three damage agents noted during the 2021 surveys were: western blackheaded budworm and hemlock sawfly-caused topkill in Southeast (about 520,000 acres and 186,000 acres, respectively) and spruce beetle, almost exclusively in Southcentral (193,500 acres). The spruce beetle outbreak in Southcentral has now impacted at least 1.6 million acres since its initial detection in 2016.

In 2020, DOF initiated a Western Bark Beetle Initiative (WBBI) cost-share program to assist non-federal landowners with bark beetle prevention, suppression, and restoration efforts. Grant awards within this program were made to multiple landowners in 2021.

Additional efforts included a study focused on protecting trees from spruce beetle attack and several outreach endeavors. Outreach was somewhat limited in 2021, however, due to the continued impacts of Covid-19. DOF Forest Health Program staff provided forest health assistance or information to about 400 individuals in 2021.

**Forest Legacy**

The Alaska Division of Forestry assumed administration of the Forest Legacy Program from the Alaska Division of Parks and Outdoor Recreation in late 2020 and is working to transition and update program information.

**Forest Stewardship**

The Forest Stewardship Program--delivered by the Alaska Division of Forestry--uses 100% federal funding from US Forest Service to deliver technical forestry assistance to Alaskan landowners. Goals include increasing economic & environmental benefits of forest land, reducing fire risk across the wildland urban interface, increasing energy independence of remote communities through bioenergy, and helping
landowners restore degraded or damaged forests. Stewardship Plans qualify landowners for management practice implementation funding through the Natural Resources Conservation Service (NRCS). Plans are written for private individual landowners and Alaska Native corporations, which are the largest landowners in the state. In FY2021, one private landowner with more than 50 acres of forest land used their Stewardship Plan to apply for cost-share funding for wildlife habitat enhancement and timber stand improvement. In total, 39 individual landowners received plans for 1,012 acres in FY2021. One Alaska Native corporation received a Stewardship Plan for 22,346 acres, with NRCS cost-sharing and pre-commercial thinning prescriptions as the primary goals. Since the program began in 1992, more than 7.4 million acres in Alaska have been sustainably managed under Forest Stewardship Plans. Administration of wildfire defensible space sub-grants (CWSF competitively funded) led to completion of over 32 home safety improvements (spruce thinning and removal). These grants allow the Stewardship foresters and fire technicians to reach more homeowners, focusing on wildfire prevention through effective forest management.

Landscape Scale Restoration
In June 2021 three project interpretative panels, constituting the final deliverable for the Landscape Scale Restoration Fish Need a Forest: Campbell Creek Restoration Project grant, were completed and installed in Campbell Creek Park in Anchorage. The panels were a collaboration between the Anchorage Park Foundation, the MOA Parks and Recreation Department and Alaska UCF.

Urban and Community Forestry
The mission of the Alaska Community Forestry program is to help communities build effective, self-sustaining community forestry programs with strong local support. This is the only agency in Alaska that exists to provide technical and financial assistance and educational opportunities that develop and support local community forestry.

Program staff provided grants, technical assistance and training to local governments, agencies, organizations, businesses and individuals in 24 communities: Anchorage, Joint Base Elmendorf Richardson, Eielson Air Force Base, Fort Greeley, Fort Wainwright, Ketchikan, Big Lake, Butte, Cantwell Juneau, Homer, Fairbanks, Palmer, Wasilla, Talkeetna, Eagle River, Peters Creek, Houston, Sitka, Sterling, Ninilchik, Goodnews Bay, Kasilof, and Soldotna.

Staff organized the new Prunus Working Group. This is a cooperative, interagency group with members from city, state, and federal government, conservation districts, academia, and private industry. The goal of this group is to share information, coordinate management, and identify gaps in knowledge related to management of invasive chokecherries.

The Community Forestry program initiated a large-scale public education and outreach campaign to inform the public about invasive chokecherry trees in Alaska. Staff created educational material including pamphlets, fact sheets, and Public Service Announcements which aired on local radio. As part of this effort, Community Forestry launched the "Remove & Replace" program, which incentivized Municipality of Anchorage residents to remove chokecherries from private property by providing $100 vouchers for the purchase of a non-invasive replacement tree. The program met with an enthusiastic public response, and staff were interviewed by local media.

Seven communities attained Tree City USA status. The state's 3 major electric utilities were certified for Tree Line USA, and the University of Alaska-Anchorage was certified as a Tree Campus USA.
## Contact Information

| Alaska Division of Forestry | US Forest Service  
<table>
<thead>
<tr>
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<tbody>
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<td>Chad T Davis</td>
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<td><em>Director, State, Private and Tribal Forestry</em></td>
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<td><a href="mailto:chad.davis2@usda.gov">chad.davis2@usda.gov</a></td>
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