



Retardant drop on the Jim Howard Road fire. Photo by Mike Hayes (WRFT III) Kenai/Kodiak Area.

Top: Seaton Roadhouse Fire. Photo by Steve Nickel, Forestry. Bottom: Pioneer Peak Crew at Bolgen Creek Fire.





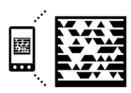
Alaska Department of Natural Resources Division of Forestry

Annual Report 2015

The Alaska Department of Natural Resources Division of Forestry:

- Manages a wildland fire program on public, private and municipal land
- Encourages development of the timber industry and forest products markets
- Conducts timber sales for commercial use, personal use and fuel woods
- Protects water quality, fish and wildlife habitat, and other forest values through appropriate forest practices and administration of Forest Resources and Practices Act
- Manages the Southeast, Haines and Tanana Valley state forests, which cover a total of 2.1 million acres
- Administers Community Forestry, Forest Health and Forest Stewardship programs
- Gives technical assistance to owners and managers of forested land.

The State Forester's Office is located in Anchorage. In addition, the division has two regional offices and nine area offices responsible for program support and field work. In 2015, the Division had 61 full-time employees, 171 part time/seasonal positions, and 5 non-permanent positions.



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STATE FORESTER COMMENTS

As you might imagine after our second worst wildfire year in terms of acreage burned (5.1 million acres) and a record number of individual fires (766) there would be plenty of topics to write about or reflect on in this annual letter, but I simply want to say to all of you, thank you and job well done! This was a very challenging year for many reasons and the Division and individuals rose to the occasion and made a difficult year one that we can all be proud of in terms of the response. The protection of life and property is a key tenant of our Division mission and I'm proud that we accomplish this task to the best of our ability and returned all our firefighters safely to their families and homes.



Governor Walker was both supportive of and impressed with the scope and size of the response operation and at the conclusion of the season penned a note that included a certificate to thank the 44 states, the District of Columbia, two Canadian provinces and the country of Australia whom all provided assistance at some point during the fire season. An example of the Alaskan certificate thanking our staff is shown here and I received many favorable comments from state foresters around the country for this recognition.

While much of the year seemed to be focused on wildland fire issues, the other part of our core mission, sustainable forest management, was moving ahead with a number of initiatives. The Division continues to provide state timber sales to the forest products sector in support of in-state manufacturing, export opportunities and to help address energy needs for heating in many communities around the state. The scale of these efforts change with the size of the community, and nature of the project, but we are doing our part to ensure projects have a sustainable wood supply.

At the same time, we have faced some major challenges with the ongoing budget reductions in our organization. The Division has worked hard to minimize impacts to both the public and our customers, but the simple fact remains that at the end of the FY2016 budget cycle, our budget for the Forest Management and Development Component is 42 percent smaller than it was in FY2014. The division has responded to this challenge in a number of ways, including a major reorganization that reduced our ranks from field staff up through the management team. The Division is still making adjustments and additional changes as we learn what is and isn't working well, but again, I want to recognize all our employees for stepping up during this time of challenge to help get the job done to the best of our abilities.

While I'm not sure what 2016 will bring us in terms of a fire season or additional budget challenges, I do know that we will continue to stay focused on our core mission of serving Alaskans through sustainable forest management and wildland fire protection. These two tasks are linked tightly together as both depend on the staff and leadership from the entire division to be successful.

ohn 'Chris' Maisch Alaska State Forester

ALASKA'S BUDGET CRISIS AND FORESTRY IMPACTS

As Alaska faced a fiscal crisis largely resulting from falling oil prices, the immediate result was significant budget cuts to state agencies which affected Forestry significantly, primarily in Undesignated General Funds (UGF).

At A Glance

- 35 Forestry positions cut (9 PFT, 16 seasonal, 10 non-perms) – 76 total cut in DNR
- 20% Travel cut (\$24.0 Forest Resources, \$34.5 Fire Preparedness)
- \$2,308.7 Total UGF cut in Forestry
 \$1,186.8 in Forest Management & Development with a
 \$16.1 CIP cut = 31.6% cut and
 \$1,121.9 in Fire Suppression Preparedness = 6% cut

Impacts

- The Division responded to these reductions by restructuring our organization dramatically, with consolidation of two Regional Offices into one and eight Area Offices into four. Layoffs were felt by all segments of the Division and ranged from the management team thru middle management, to positions that had boots on the ground.
- The Division has not been able to maintain roads and other infrastructure in state forests to an appropriate standard, timber sale inspections on state lands are less frequent, and managers are spending more time in the field.
- The Haines Area Office is closed for three months during the winter and the one partially funded position may be eliminated, thus closing the office. Commercial timber sales, permits and personal use activities on the Haines State Forest will be managed from the one-man Juneau office. This is a major decrease in service levels to the Haines community. Service levels have also decreased in Soldotna, Mat-Su, Ketchikan and Delta as a direct result of the cuts.
- Eliminated coordination of agency input to Tongass Planning and Timber Sales Projects.
- Reduced timber sales program and eliminated intern program.

Fire Suppression Preparedness Component

Reductions

This portion of the Division lost \$1,121.9 in UGF or about a six percent reduction in FY16. When you add in reductions from FY14 and FY15, the program is down 10 percent in UGF. A total of 16 PCNs were cut in FY16.

Impacts

- Since many of our management positions have a foot in both programs, the reductions in the Forest Management and Development Component also hit this component hard. The Area and Regional Forester positions are key positions for overall management of the wildland fire season and the Division's span of control has been severely stretched with the reductions in the number of these positions. To maintain a safe and effective wildland fire response, we have relied heavily on short-term emergency hires of retirees, made use of "acting" assignments with L-48 fire managers and have filled the gaps however we can; in a season like 2015 this was not easy!
- The division downsized our McGrath Area to a Forward Operating Base and combined it with the Mat-Su Area Office. This change resulted in 16 layoffs of seasonal staff. As the fire season unfolded, it became clear that we needed to retain at least two of the cooks to run the mess hall and an aviation position. As other PCNs became available due to turnover or retirement, they were transferred to the McGrath station to re-establish these positions, the rest of the positions were filled with EFF hires.
- The budget reduction also necessitated the curtailment of the Fire Academy that had been training 30-35 individuals from rural and urban communities each year. Per budget language, the Division has been actively seeking substitute funding for the academy, since this was a very successful program that served as a recruiting and career development tool.

2015 AT A GLANCE

Resource Management

Forest Stewardship

- Three Alaska Native Corporations were awarded grants to begin Forest Stewardship plans.
- Four Alaska Native Corporations completed Forest Stewardship plans for their land.
- Forest Stewardship plans were prepared for and signed by 36 individual Alaska forest landowners.
- Wildfire fuel reduction projects were completed by 66 Alaska homeowners.
- A third year of trials of planting poplar cuttings for biomass reforestation has been completed under an Alaska Energy Authority competitive grant.

Board of Forestry

In 2015, the board held hearings in Fairbanks, Juneau, and Anchorage. The Board meeting in Fairbanks included a field visit to state and private timber harvest areas, reforestation sites, and forest roads on Nenana Ridge.

Key issues in 2015 included:

- Impacts of budget cuts on FRPA implementation and alternative funding options.
- Compliance monitoring and road condition survey results; at current levels of
 activity, FRPA is effective in protecting fish habitat and water quality from potential
 impacts of forest operations.
- Southeast forest management, including Tongass National Forest plan revisions, shortages in the Tongass National Forest timber supply and efforts to convert to young growth harvesting, the proposed Mental Health Trust-US Forest Service land exchange, litigation on implementation of the Roadless Rule in Alaska, the Big Thorne timber sale in the Tongass National Forest, appeals of state timber sales, and the Southeast State Forest Management Plan.
- US Fish and Wildlife Service reviews of petitions to list the Alexander Archipelago wolf and Alaska yellow-cedar as threatened or endangered species. The Service determined that the wolf does not merit listing; the yellow-cedar petition is still under consideration.
- Road and infrastructure needs to support forestry in Southeast and DOF road and engineering projects statewide.
- Alaska Energy Authority projects to assess, design, and construct wood energy facilities.
- Reforestation standards for Interior and Southcentral Alaska.
- Proposed legislative and regulatory changes to broaden options for negotiated state timber sales.
- Wetlands permitting, including Section 404 permits.
- Options for the state to certify sustainability of wood production in Alaska.

The Board also hosted a Forest-Fisheries Forum to review recent research on management of riparian areas and protection of fish habitat in Coastal Alaska.

ALASKA STATE FORESTERS

Earl Plaurde October 1959 to June 1968

William Sacheck
July 1968 to June 1974

George Hollett July 1974 to June 1976

Theodore Smith July 1976 to April 1982

John Sturgeon May 1982 to June 1986

George Hollett (acting)
July 1986 to February 1987

John Galea March 1987 to May 1988

Tom Hawkins (acting)
June 1988 to December 1988

Malcolm "Bob" Dick January 1989 to November 1992

Dean Brown (acting)
December 1992 to February 1993

Tomas Boutin March 1993 to January 1997

Dean Brown (acting) January 1997 to July 1997

Jeff Jahnke July 1997 to July 2005

Dean Brown (acting)
July 2005 to October 2005

John "Chris" Maisch October 2005 to present

Community Forestry Assistance

- Provided technical assistance and/or training to local governments, agencies, organizations, businesses and individuals in 20 communities: Anchorage, Fairbanks, Girdwood, Homer, Joint Base Elmendorf-Richardson, Juneau, Ketchikan, King Salmon, Kodiak, Metlakatla, North Pole, Palmer, Salcha, Seward, Sitka, Soldotna, Tok, Valdez, Wasilla, and Willow.
- Provided 27 educational presentations and classes to 444 individuals for a total of 1,301 seat hours.
- Volunteers donated 1,381 hours to community forestry work.
- Awarded grants to Ketchikan, Metlakatla, and Sitka.
- Secured a \$295,000 Forest Service grant for Campbell Creek restoration and recreational access in Anchorage.

Fire Management

- Alaska's 2015 wildland fire season was the secondlargest on record for acres burned.
- More than 5.1 million acres burned, ranking behind only the record season of 6.6 million acres in 2004.
- A total of 768 fires and 5,111,452 acres burned.
- A total of 138 structures were either destroyed or damaged by wildfires, including 71 primary residences that were lost from 12 fires.
- The Sockeye Fire started near Willow on the Parks Highway on June 14 and was Alaska's most devastating fire in more than two decades. The fire was initially attacked at just 2 acres but due to dry conditions, grew to more than 6,500 acres on the first day and destroyed dozens of homes. All totaled, 55 homes were destroyed in the Sockeye Fire and another 44 structures were damaged. It was the most destructive fire in Alaska since the Miller's Reach Fire in 1996, which burned more than 360 structures near the community of Big Lake.
- Alaska experienced a record lighting bust during the week of June 19-25 with over 61,000 lightning strikes recorded around the state. The lightning bust produced 295 new fire starts in seven days, including 62 new fires on both June 20 and June 22.
- Several rural villages were threatened by lightning-caused fires. At one point, both the Yukon River villages of Tanana and Nulato were surrounded by fires. Many of the residents in those two villages were evacuated for an extended period of time. Residents in several other villages in Southwest Alaska, including Chauthbaluk, Upper and Lower Kalskag, Aniak, and Red Devil were also evacuated due to fires encroaching on their villages.
- The dry conditions and high fire activity kept Alaska at Preparedness Level 5 – the highest level – for 24 straight days from June 20 to July 14. Fires were staffed



Tom Kurth, Alaska Fire Program Manager, and Tom Tidwell, Chief of USFS, at the White House Climate Change Roundtable where Tom Kurth made a presentation.

- continuously from May 16 to September 10. The peak of the season was June 29, when there were 45 fires staffed by 3,174 personnel. There were 42 days with more than 20 staffed fires in a day.
- The AWFCG MAC Group met for 27 consecutive days to prioritize fires for resource allocation.
- The large number of fires required significant resources to be imported from the Lower 48 and Canada. All totaled, more than 2,800 firefighting personnel were brought up to Alaska from 44 different states and two Canadian provinces. For the season, about 48 percent of the resources used to fight fires were based in Alaska and 52 percent came from other state, federal and Canadian sources.
- All available Alaska crews 3 hotshot crews, 5 Type 2IA crews and 42 Type 2 crews were utilized during the fire season. The Alaska crews were complimented by more than 100 crews 33 hotshot, 49 Type 2IA and 22 Type 2 imported from the Lower 48.
- The state also utilized a record number of incident management teams (IMT) in 2015. There were 13 IMTs deployed in Alaska, two from Alaska and 11 from the Lower 48. Most of the teams 11 were Type 2 while one was a Type 1 team and another was a Type 3 team. DOF-managed fires that employed IMTs included Aggie Creek, Anaconda Creek, Card Street, Healy Lake, Rex Complex and Sockeye.
- Of the total number of wildfires in 2015 in Alaska, 54 percent (354) were human caused and 46 percent (416) were started by lightning. Lightning-caused fires accounted for the biggest chunk of the acreage burned (5.1 million acres) compared to the acreage burned by human-caused fires (27,000 acres).
- For the season, there were 68 fires estimated at more than 20,000 acres and 10 that were estimated at more than 100,000 acres.

FOREST RESOURCES AND PRACTICES

Forest Practices Compliance Monitoring

Background

The Alaska Forest Resources and Practices Act (FRPA, AS 41.17) governs how commercial timber harvesting, reforestation, and timber access occur on state, private, and municipal land.

The FRPA balances economic concerns for the timber industry with water quality and habitat protection needs. The FRPA framework provides certainty and credibility for landowners, operators, and the public, and establishes one-stop shopping for compliance with state and federal clean water standards. This practical approach helps the timber and fishing industries continue to provide long-term jobs.

FRPA Effectiveness

The Board of Forestry affirms that the Alaska Forest Resources and Practices Act (FRPA) continues to be an effective means of protecting fish habitat and water quality in a practical manner. The finding is based on the following considerations:

- Excellent results across the state from the State's strong ongoing compliance monitoring program on private, trust, municipal, and state lands.
- Commitment by agencies and landowners to implementation of FRPA standards.
 For example, in 2015 landowners on Kodiak and Afognak islands eliminated their reforestation backlog. This was a major multi-year effort to address challenges that arose in early operations in this area.
- Twenty years of effectiveness monitoring in Southeast Alaska conducted by Sealaska
 in cooperation with state agencies and federal agencies have documented that fish
 streams remain healthy after logging conducted under the FRPA regulation.
- Forest road condition surveys jointly conducted by the departments of Natural Resources (ADNR) and Fish and Game (ADF&G), and remediation work on sites where problems are identified.
- The Alaska Department of Environmental Conservation (ADEC) maintains the list
 of waterbodies that do not meet state water quality standards. There are no
 waterbodies listed as impaired due to forest operations under FRPA.

In addition, the ADNR Division of Forestry, ADF&G Division of Habitat, and ADEC Division of Water all report that the Act is effective in protecting fish habitat and water quality from impacts of forest operations. The Board commends the agencies on their continued efforts to effectively and efficiently implement the FRPA. However, for the first time, the 2015 agency reports document increasing impacts of budget cuts on core FRPA implementation work. All three agencies have lost positions that conduct this work. Loss of staff and travel funding caused ADEC and ADNR to conduct fewer field inspections in 2015, and to be unable to address research needs for effectiveness monitoring.

FRPA is important to forest industry operations, and to protection of fish habitat and water quality. Effective implementation depends on agency field presence. Without a credible FRPA program, administrative and legal challenges to timber harvesting on private, municipal, trust, and state land will increase, and the landowners' ability to meet those challenges will weaken. The ADNR report to the Board predicts increased forestry activity on Sealaska land now that their land entitlement issues have been resolved. This will increase inspection needs in 2016 and 2017. Adequate state funding for the state FRPA program is essential.

Board members emphasize that the FRPA represents an agreement between the state and

The Alaska Forest Resources and Practices Act is designed to protect fish habitat and water quality and ensure prompt reforestation while providing for an economically viable timber industry.



Loading logs in Delta. Photo Al Edgren.

other landowners under which private owners agreed to forgo millions of dollars in revenue from streamside timber to protect public fish and water resources. In return, the State agreed to fund the FRPA program for plan reviews, field inspections, and enforcement. The agencies need to be adequately funded and staffed to fulfill this agreement. Members note that FRPA helps maintain salmon production which is a service to other industries, including fishing and tourism.

Alaska Forest Management Issues

Land management issues continue to threaten the survival of the timber industry in Southeast Alaska. The industry is an important part of the Southeast economy, particularly in rural areas. Further decline will lead to increased losses of jobs, schools, and services in small Southeast communities. Success will require dogged advocacy in litigation, land use planning, timber management, endangered species, and land ownership issues, including the following:

Land Use Planning

- Tongass Land Management Plan: The Tongass National Forest dominates forest ownership in Southeast Alaska. Any sustainable long-term timber supply must include National Forest timber. The State participates in the Tongass Advisory Committee on young-growth management, and supports the focus by the State and the TAC on ensuring that any transition to young-growth management is done in a way that sustains a viable timber industry and wildlife habitat.
- Southeast State Forest Management Plan: The adoption
 of the state plan and the underlying timber inventory are
 in the final stages of adoption. These documents provide
 the framework for sustainable management of state
 timber resources in Southeast.

The State is engaged in litigation to maintain a sufficient commercial timber supply from Tongass National Forest land, including the Roadless Rule and Big Thorne cases. The federal Roadless Rule, if applied to the Tongass National Forest, would reduce the average annual harvest level by more than 60%. Application of the Rule would undercut all other efforts to ensure a sustainable supply of commercial timber from the Tongass. The Big Thorne Timber Sale is the largest timber sale currently proposed on the Tongass and is essential to near-term industry operation.

State Timber Management

State timber sales have been critical to maintaining a timber supply while Tongass timber sales are under siege. This year, state timber sales have also been routinely appealed. We are pleased that the Baby Brown timber sale appeal was resolved in the State's favor, and was not litigated. The Vallenar appeal recently remanded parts of the best interest finding to ADNR to complete the Southeast State Forest management plan and timber inventory. Those two documents have now been adopted. The upsurge in appeals indicates that legal challenges may result, and we encourage the State to defend its program in court if necessary.

Land Ownership

In 2015, Sealaska entitlement legislation passed Congress, and the corporation received interim conveyance to new timber land. This is a welcome contribution to efforts to keep Southeast timber operators in business. The proposed land exchange between the Mental Health Trust and the US Forest Service is progressing. The Board is on record in support of this exchange and notes that State actions are needed for successful completion of the exchange, including legislative approval of the final exchange.

Endangered Species Act

In late 2015, the US Fish and Wildlife Service declared that the Alexander Archipelago wolf does not merit listing under the Endangered Species Act (ESA). The listing would have had major negative effects on timber management in Southeast. The Board is closely watching the process to evaluate whether Alaska yellow-cedar deserves listing. An ESA listing for this species would also create challenges for the industry, and the departments of Fish and Game and Natural Resources have submitted information that shows listing is not merited, nor would it be effective in addressing issues of yellow-cedar decline.

Wood Energy

2015 FRPA ACTIVITIES ON PRIVATE, MUNICIPAL AND TRUST LANDS

	2012	2013	2014	2015
CCE	0.272	0.250	1 724	1020
SSE	8,373	8,350	1,724	1820
NSE Mat-Su/SW	6,379	707 131	0 554	0 160
Kenai-Kodiak	8,918	836	3,826	2831
COASTAL	23,670	10,024	5,020 6,104	4811
COASTAL	23,070	10,024	0,104	4011
Fairbanks	161	174	238	299
Delta				
Tok	3,685			
Copper R.				
NORTHERN	3,846	174	238	299

	2012	2013	2014	2015
SSE	32	28	14	16
NSE	3	5	0	0
Mat-Su/SW		2	2	1
Kenai-Kodiak	13	7	9	6
COASTAL	48	42	25	23
Fairbanks	5	12	4	5
Delta	0	0	0	0
Tok	4	0	0	0
Copper R.	0	0	0	0
NORTHERN	9	12	4	5
TOTAL	57	54	29	28

TEN-YEAR RECORD OF TIMBER VOLUME SOLD (MBF) Northern # Sales Sold Coastal: Coastal: State Southeast Southcentral Region Total Statewide FY 06 10,777 1,703 12,478 24,959 63 24,437 30,110 65 FY 07 6,420 60,967 4,059 FY 08 4,316 7,163 15,538 67 11,036 FY 09 5,597 1,451 18,084 91 5,445 FY 10 4,626 2,460 12,531 69 FY 11 12,865 3,913 7,281 24,053 71 FY 12 8,556 7,739 17,555 50 1,260 FY 13 4,976 1,918 2,662 9,556 50 379 FY 14 8,512 19,621 28,512 58 20,914 39

FY 15	6,171	438	14,305
NUMBER	OF PERSON	AL USE PE	RMITS
Fiscal Year	State To	otal	
Fiscal Year FY 12	State To	otal	
		otal	
FY 12	1325	otal	

FY 06	502.5
FY 07	661.9
FY 08	1260.5
FY 09	617.0
FY 10	521.9
FY 11	371.9
FY 12	601.7
FY 13	860.9
FY 14	753.1
FY 15	717.2
small perce	er program revenue is primarily from timber sales; a ver entage comes from other sources including the sale of and seedlings, reclamation bonds, and document fees

Units of measurement:

Board foot (bf) is the unit used to measure lumber.

One board foot = the volume of a board 12 inches by 12 inches by one inch.

MBF = thousand board feet

State Fiscal Year runs from July 1 through June 30

Wood energy projects are a bright spot in timber management. Across the state, and particularly in rural areas, wood energy projects are reducing costs for schools and village services, providing local jobs, and reducing dependence on imported oil. Many of these projects have benefitted from feasibility analyses, project design, and project construction help through the AEA Renewable Energy Fund. The fund deserves continued support.

Anticipated Changes

The Board is charged with informing the Governor of changes needed to the FRPA or its regulations. We would like to highlight two initiatives for 2016:

- Sustainability Certification: The Board of Forestry and ADNR are considering options for a voluntary sustainable forestry certification program under the oversight of the Division of Forestry. Certification can open opportunities for timber owners to sell carbon sequestration credits under the California cap-and-trade system, sell ecosystem services credits, and where applicable, to participate in wood markets that require certification. The voluntary Alaska program could be an alternative to existing third-party certification programs that are costly. A program could fit within existing DOF authority under FRPA and is within its expertise.
- Reforestation Regulation Amendments: The Board is responsible for ensuring that FRPA and its regulations are effective. The FRPA requirements for reforestation for Interior and Southcentral Alaska were adopted in 1993 when reforestation research for this area was scarce. Better data is now available, and the Board has charged ADNR and ADF&G with reviewing the new information and determining whether the existing standards need updates. The agencies worked with a Science and Technical Committee to compile and synthesize an extensive annotated bibliography of relevant information, review the existing standards, consider changing potential impacts of changing climatic conditions, and recommend changes where needed. The Committee has completed its tasks, and the agencies are now reviewing their recommendations with a stakeholder group that includes forest landowners and operators, service foresters, wildlife biologists, and interest groups to determine how to implement the scientists' recommendations in a practical manner. The Board anticipates working with the agencies to propose appropriate updates to the regulations in 2016.



Birch deck on Quartz Lake Road.

Board of Forestry

The Board of Forestry provides a forum for forest practices issues and management of forests on state land. The Board monitors the implementation and effectiveness of the Forest Resources and Practices Act and reports its findings to the Legislature and Governor. Board members represent the following constituencies:

- State Forester, Chris Maisch
- Native Corporations, Ron Wolfe
- Timber Industry, Eric Nichols
- Professional Forester, Vacant
- Fishing Industry, Mark Vinsel
- Recreation, Erin McLarnon
- Environmental Interests, Chris Stark
- Mining, Denise Herzog
- Fish & wildlife biologist, Matt Cronin

2015 BOARD OF FORESTRY

Chris Maisch, Chair

State Forester

Ron Wolfe

Alaska Native Corporations

Eric Nichols

Forest Industry Trade Association

Chris Stark

Environmental Organization

Erin McLarnon

Recreation Organization

Mark Vinsel

Commercial Fisherman's Organization

Denise Herzog

Mining Organization

Matt Cronin

Non-governmental Professional Fish/Wildlife Biologist

Vacant

Non-governmental Professional Forester

DOF Gets Kudos for Repairing Potholes in Two Rivers Road



Two Rivers Road Repair. Photo Kevin Meany.

The Division of Forestry and Alaska State Parks teamed up with the Fairbanks North Star Borough's Rural Service Department to help repair a short section of Two Rivers Road off Chena Hot Springs Road. A story appeared in the Sunday, Oct. 25 edition of the *Fairbanks Daily News-Miner* decrying the poor condition of the road, which was filled with a maze of potholes that were impossible to avoid. A teacher at Two Rivers School, located about a half mile off Chena Hot Springs Road, tried unsuccessfully to find out who was responsible for maintaining the short stretch of road. Officials at both the Department of Transportation and the Borough initially told the teacher the road was not in their jurisdiction. The road was in such bad shape that the possibility of dropping kids off at Chena Hot Springs Road was raised to prevent damage to school buses.

When State Forester Chris Maisch saw the article he was disappointed in the lack of response by the two government agencies and called the school to tell school officials that DOF would try to fix the road, even though the agency does not have maintenance responsibilities for the road. DOF often uses the road to get to logging operations and timber sales it conducts on the northern end of the road, several miles beyond the school. "I was really frustrated when I read that article," Maisch told the *News-Miner*. "Government can do better than this."

The Borough's Rural Services Department realized that it did have maintenance responsibility and contracted for repair. Even so, the DOF/DOP employees joined those efforts and hauled and spread four loads of D-1 from Brown's Hill Quarry. Fairbanks Area Resource Forester Kevin Meany said DOF employees got a lot of "Thank you's" from residents and the school office. A *News-Miner* editorial also gave kudos to DOF saying, "It's a great example of a state agency acting as a member of the Interior community, going above and beyond its mandate and helping out other residents who are in a jam."

RESOURCE MANAGEMENT

As of July 1, 2015, the Division of Forestry (DOF) forest resources program received a reduction in state general funds that resulted in the loss of eight full time positions, 10 student interns and one position that was split funded with the forest fire program. Over the past three years the cumulative impact to the forest resources program has been nearly 40%.

DOF has endeavored to maintain historical levels of service in Southern Southeast Alaska, Fairbanks and Delta while reducing, but not eliminating, production in all other areas of the state. Our cooperative USDA-Forest Service federally funded forestry programs (Forest Heath, Forest Stewardship and Community Forestry) remained at historic levels; however funding reductions to these programs will take effect in 2016.

The one bright spot for the resources program is that the USDA-Forest Service Forest Inventory and Analysis Program is expanding into Interior Alaska in partnership with DOF, UAF and Tanana Chiefs.

Federal Land Activity & Tongass Management

There were several changes in leadership on the Tongass National Forest in early 2015. In February, Deputy Forest Supervisor Patricia O'Connor left the Tongass for a position with the USFS in Colorado. In April, Forrest Cole retired from the Forest Supervisor position he had held for over a decade. In May, Earl Stewart assumed the leadership role for the Tongass and Tawnya Brummett was named Deputy Forest Supervisor.

DOF continued its involvement with the US Forest Service in the implementation of the Tongass National Forest Land and Resource Management Plan during 2015; although in a greatly reduced manner when compared to the previous eight years due to reductions in workforce and funding.

During 2015 a Landowners Group was formed to address ways to improve overall forest management within southeast. Members of the group include the Division of Forestry, the Alaska Mental Health Trust Land Office, the Tongass National Forest, USFS Region 10, Sealaska and the University of Alaska Lands Office. Currently the group is working on an agreement to share infrastructure without charging fees for usage.



State Forester Chris Maisch testifying in Washington, D.C. Photo Robert Dillon, Sen. Murkowski's office.

The State Forester, Chris Maisch, was a member of the Tongass Advisory Committee (TAC) which was appointed by the USDA Secretary to advise the USFS on the Tongass Forest Plan revision process, particularly the transition from old growth to young growth management. The TAC provided the USFS with draft recommendations on how to transition from a timber sale program based on old growth timber harvest to one predominately composed of young growth in May 2015. Their recommendations were used by the USFS during the development of alternatives for the Environmental Impact Statement (EIS) for the Tongass Land and Resource Management Plan Amendment. The Draft EIS for the Plan Amendment is currently out for public review.



Washington D.C. Senate Resources Hearing (L to R): John Wyss, Senator Lisa Murkowski and State Forester Chris Maisch. Photo Robert Dillon, Sen. Murkowski's office.

FISCAL YEAR	TTRA VOL. (MMBF)	TIMBER VOL. OFFERED (MMBF)	TIMBER VOL. SOLD (MMBF)	TIMBER VOL. HARVESTED (MMBF)	TIMBER VOL. UNDER CONTRACT (MMBF)
2001	119	68	50	48	282.6
2002	110	57	24	34	295.8
2003	151	89	36	51	193.3
2004	153	73	87	46	148.5
2005	143	110	65	50	103.7
2006	143	24	85	43	110.5
2007	116	32	30	19	114.1
2008	99	42	5	28	96.9
2009	146	36	10	28	84.4
2010	173	46	46	36	98.4
2011	110	43.5	37.5	32.6	104.9
2012	127	53	53	21	130.5
2013	143	115	16	36	109.9
2014	142	105	105	39	154.5
2015		43	48	57	118.2

Alaska State Forests

The Alaska State Legislature has designated three state forests in Alaska and the Department of Natural Resources manages these forests for a sustained yield of many resources. The main difference between state forests and other areas set aside by the legislature is that state forests provide timber harvesting for commercial and personal use (AS 41.17.200) while allowing other beneficial uses. These other benefits include fish and wildlife habitat, clean water, minerals, and opportunities for recreation and tourism. A DNR management plan guides the use of each state forest. Plan guidelines determine how to manage different uses to complement each other while minimizing the possibility of conflict.

In addition to the three designated state forests, much of the state's public domain land is available for multiple use including forest management.

Haines State Forest Established in 1982, 286,208 acres

The Haines State Forest in southeast Alaska includes the watersheds of some of the major tributaries to the Chilkat River. Located in a transition zone between the moderate, wet coastal climate and the dry, cold interior, the forest provides suitable conditions for a diversity of vegetation. The rugged topography ranges from sea level to 7,000 feet.

The forest is composed mostly of two forest types – western hemlock/Sitka spruce, and black cottonwood/willow. Lodgepole pine and paper birch occur as minor species throughout the forest. About 15 percent of the state forest (41,652 acres) is dedicated to timber harvest, which has occurred in the forest since the 1960s. The annual allowable harvest is 5.88 million board feet. Although natural regeneration occurs readily, all large commercial sales have been replanted since the 1970s to accelerate reforestation.

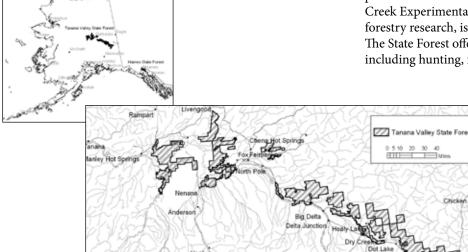
The forest surrounds the 45,000-acre Chilkat Bald Eagle Preserve, which is managed by the Alaska Division of Parks and Outdoor Recreation.

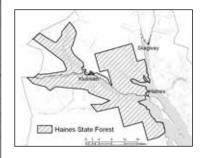
Tanana Valley State Forest Established in 1983, 1.78 million acres

The Tanana Valley State Forest lies almost entirely within the Tanana River Basin located in east-central Alaska. The forest extends 265 miles, from near the Canadian border to Manley Hot Springs. About 85 percent of the forest is within 20 miles of a state highway. It varies in elevation from 275 feet along the Tanana River to over 5,000 feet in the Alaska Range. The Tanana River flows for 200 miles through the forest.

Nearly 90 percent of the state forest is forested, mostly with paper birch, quaking aspen, balsam poplar, black spruce, white spruce, and tamarack. About half of the Tanana Basin's productive forest land is located within the state forest. A Citizens' Advisory Committee, authorized in the Tanana Valley State Forest Management Plan, provides recommendations to the Division of Forestry on forest management issues on these lands and is a conduit of information between the division and the public.

The forest is open to mining, gravel extraction, oil and gas leasing, and grazing, although very little is done. Timber production is the major commercial activity. The Bonanza Creek Experimental Forest, a 12,400-acre area dedicated to forestry research, is also located within the state forest. The State Forest offers many recreational opportunities, including hunting, fishing, trapping, camping, hiking, dog





mushing, cross-country skiing, wildlife viewing, snow machining, gold panning, boating, and berry picking.

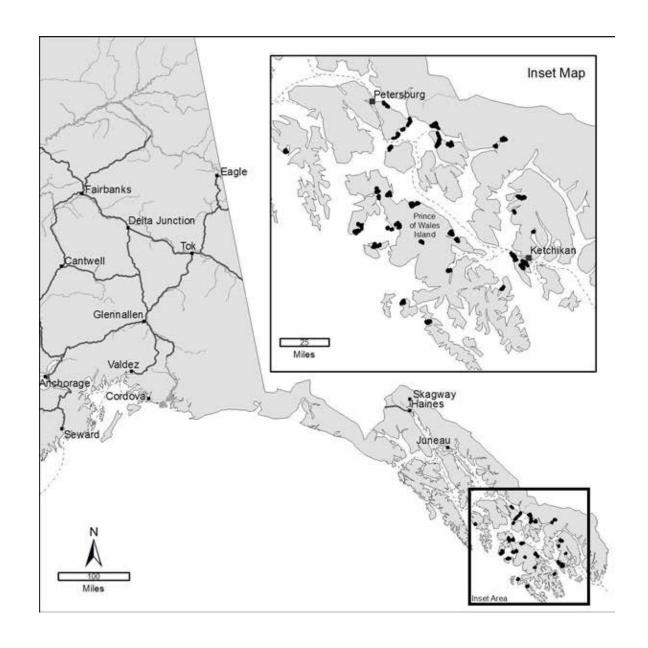
Southeast State Forest

Established in 2010, 48,472 acres

In 2010, the Alaska Legislature designated 25,291 acres of land in 20 parcels as the Southeast State Forest. In 2011, the Legislature added an additional 23,181 acres to the forest. The state forest includes land on the mainland and the islands of Prince of Wales, Gravina, Hecata, Kosciusko, Revillagigedo, Tuxekan, Suemez, Dall, Mitkof, Kuiu, Zarembo, and Wrangell.

The lands were previously designated as General Use, which allowed for forestry activities but were susceptible to change of management intent or transfer to other ownerships, both of which inhibit long-term forest management. By inclusion in the Southeast State Forest, the lands can now be managed for long term forest productivity. The division is in the process of preparing a Forest Management Plan and until it is adopted, applicable area plan guidelines are being followed.

In addition to the three designated state forests, much of the state's public domain land is available for multiple use, including forest management. DNR manages the state forests for a sustained yield of many resources.



Forest Health Protection Program

DOF's cooperative forest health survey program with the U.S. Forest Service – Forest Health Protection (USFS-FHP) continues to be a key component in the forest health protection strategy in Alaska, and includes both aerial and ground survey components. Aerial detection surveys in the state take place across all ownerships and cover about 25-35% of the approximately 127 million forested acres in the state in a given year. Aerial detection mapping is an indispensable tool in documenting the location and extent of many active forest insect infestations and some disease damage. The damage numbers recorded from the annual aerial detection surveys offer a snapshot of statewide conditions though they generally do not represent the acres affected by pathogens, many of which are not visible by aerial survey.

Though DOF Forest Health personnel are involved in all facets of forest health in the state, focus is directed towards forest insects and aerial detection surveys. More detailed information pertaining to surveys and monitoring efforts for forest insects, tree diseases, invasive plants, and abiotic disorders is included in the annual Forest Health Conditions in Alaska report published by USFS-FHP in collaboration with DOF and other key cooperators.

Program Highlights

- Outreach and Information Delivery: In addition to the survey results outlined in this report, DOF Forest Health staff were active in outreach and education events in 2015. Events included visiting local elementary schools to teach students about bark beetles, leading a forest health-related trail walk, and fielding numerous forest health-related inquiries from cooperators and the public. Staff also presented information on forest health surveys and invasive forest insects at multiple conferences and meetings, including the Alaska Forum on the Environment and the Alaska Invasive Species Workshop.
- Surveys Overview: In 2015, DOF and USFS-FHP staff collectively mapped nearly 575,000 acres of forest damage on the 32.9 million acres surveyed (Table 1). The acreage of damage observed is 55% lower overall than in 2014 and includes damage from insects, diseases, and abiotic agents. The birch crown thinning that was observed across much of the state in 2014 was not commonly observed in 2015, contributing to the decrease in damage acres being reported this year. Less defoliation of cottonwood, willow, and hemlock also contributed to the overall decrease.

State Forest Survey Updates

Each year, the annual aerial detection surveys cover portions of the Tanana Valley, Haines, and Southeast State Forests. In 2015, roughly 18,000 acres of damage was noted within or partially within the three forests, with the majority of that in the Tanana Valley State Forest (14,100 acres). The top three damage types (in terms of acres affected) for each forest are listed below (all acreages are rounded):

- Tanana Valley State Forest: Aspen leaf miner (11,100 acres), willow leafblotch miner (750 acres), and large aspen tortrix (600 acres). Northern spruce engraver beetle damage was also observed (500 acres). For more detailed information about NSE activity and monitoring efforts in Interior Alaska, see the bark beetle summary below or refer to the Forest Health Conditions in Alaska 2015.
- Haines State Forest: Spruce beetle (1,700 acres), shore pine damage (900 acres), and alder defoliation (350 acres). The shore pine damage is primarily caused by Dothistroma septosporum needle disease and the outbreak appears to have started recently. The outbreak of this disease in Haines was brought to the attention of USFS-FHP pathologists by Haines DOF staff. The spruce beetle activity in the Haines State Forest has been ongoing for several years.
- Southeast State Forest: Yellow-cedar decline (310 acres), spruce aphid (90 acres), and flooding-caused tree damage (15 acres). Yellow-cedar decline continues to be prevalent in Southeast Alaska; in addition to the standard survey in July, a more concentrated survey covering Prince of Wales Island was conducted in the fall.

Spruce Bark Beetles

Spruce beetle continues to be the leading non-fire mortality-causing pest of spruce in Southcentral, Southwest, and Southeast Alaska. Spruce beetle activity was observed on about 33,000 acres in 2015, slightly more than double that observed in 2014. Despite the increase in spruce beetle activity in 2015, observed spruce beetle-caused mortality continues to be relatively low overall when compared to historical survey records. Spruce beetle activity in the areas of increasing activity will be closely monitored in 2016, accessibility permitting.

Northern spruce engraver (NSE)

NSE activity was mapped on about 9,300 acres in 2015, a slight increase over the 7,300 acres observed in 2014. About 900 acres of primarily low intensity NSE damage was observed scattered along the Tanana River Valley between

Forest insect and disease activity detected during aerial surveys in Alaska in 2015 by land ownership¹ and agent.

All values are in acres². Excerpted from the report "Forest Health Conditions in Alaska 2015" which was published in early 2016.

Agent	TOTAL ACRES	National Forest	Native Lands	Other Federal	State & Private
FOREST DISEASES					
ALDER DIEBACK	12,000	354	5,013	3,021	3,655
DOTHISTROMA NEEDLE BLIGHT	2,800	223	196	642	1,783
WILLOW DIEBACK	1,200		142	323	782
SPRUCE BROOM RUST	490		185	69	238
PINE DIEBACK	550	531	20		3
HEMLOCK CANKER	200	96	101		3
DEFOLIATORS, MINERS, AND APF	IIDS				
HARDWOOD DEFOLIATION	190,000	68	53,668	76,123	56,444
ASPEN LEAF MINER	82,000		26,461	17,018	38,109
WILLOW LEAFBLOTCH MINER	38,000		22,296	12,403	2,990
BIRCH DEFOLIATION	39,000		7,534	14,921	16,083
ALDER DEFOLIATION	26,000	26	5,871	14,158	6,324
WILLOW DEFOLIATION	29,000	10	10,772	13,109	5,604
LARGE ASPEN TORTRIX	20,000		773	6,932	12,772
ASPEN DEFOLIATION	16,000		1,768	7,091	6,901
COTTONWOOD DEFOLIATION	9,200		3,510	3,694	1,989
SPRUCE NEEDLE APHID	6,600	3,365	738	166	2,293
CONIFER DEFOLIATION	3,100	2,398	108		582
SPRUCE DEFOLIATION	1,700	1,536	202		
BIRCH LEAF ROLLER	1,600		15	243	1,344
BIRCH APHID	630			620	10
BIRCH LEAF MINER	540			20	519
DWARF BIRCH DEFOLIATION ³	190				189
HEMLOCK DEFOLIATION	120	116			6
INSECT MORTALITY					
SPRUCE BEETLE	33,000	1,493	4,999	5,244	21,365
NORTHERN SPRUCE ENGRAVER	9,300		2,533	3,292	3,495
HEMLOCK MORTALITY	250	71			176
WESTERN BALSAM BARK BEETLE	24	1			23
ABIOTIC AND ANIMAL MORTALIT	Υ				
YELLOW-CEDAR DECLINE	39,000	34,143	3,472	46	1,816
FLOODING/HIGH-WATER DAMAGE	9,700	445	2,446	1,819	5,007
PORCUPINE DAMAGE	1,000	131	799		95
WINDTHROW/BLOWDOWN	820	768		19	35
DROUGHT	320		23		298
LANDSLIDE/AVALANCHE	110	44	19		51
TOTAL DAMAGE	574,444	45,818	153,666	180,974	190,984

^{1.} Ownership derived from the 2014 version of Land Status GIS coverage, State of Alaska, DNR. 2. Acre values are only relative to survey transects and do not represent the total possible area affected. Table entries do not include many diseases (e.g. decays and dwarf mistletoe), which are not detectable in aerial surveys. 3. Defoliation of birch trees and dwarf birch has been reported separately. "Dwarf birch defoliation" primarily represents defoliation of dwarf birch, but also includes defoliation of woody shrubs by several external leaf-feeding insects. 4. Acres represent only areas with actively dying yellow-cedars. More than 400,000 acres of cedar decline have been mapped over the years in Southeast Alaska.

Delta Junction and Tok, roughly doubling the damage observed in 2014 in this area impacted by the 2012 windstorm event. Work to monitor and mitigate damage from NSE in the Interior is ongoing in several locations.

Defoliating Insects

In 2015, approximately 506,000 acres of insect damage was observed during the aerial detection surveys. Of this, nearly 90% of the damage was attributed to a variety of hardwood defoliating pests, including aspen leaf miner, willow leafblotch miner, large aspen tortrix, and many others. Some softwood defoliation on spruce and hemlock was also observed.

Notable hardwood defoliation (190,000 acres) was observed this year in various locations in the western Matanuska-Susitna Valley in and around the upper Yentna River and in areas of Western Alaska including around Lake Clark National Park and in Wood-Tikchik State Park. This defoliation is being caused by a generalist defoliator, the identity of which was unable to be confirmed in 2015. The damage observed is consistent with past reports of damage caused by the native defoliator Sunira verberata and ground checks will be completed in 2016 to confirm the causal agent.

Invasive Insects

Also of significance in 2015, the non-native spruce aphid (Elatobium abietinum) was observed causing damage on over 6,500 acres in the state. This pest has long been established in Southeast Alaska, where it has been causing damage to coastal Sitka spruce in several locations, including Sitka and Juneau. This year marked the first time, however, that this pest has been documented on the western Kenai Peninsula. Extensive aphid-caused defoliation of Sitka spruce was observed at Halibut Cove on the south side of Kachemak Bay and to a lesser degree in the Homer area. The aphid infestation on the Kenai will be closely monitored in 2016.

The non-native Sitka spruce weevil was detected by University of Alaska Fairbanks Cooperative Extension Service (CES) staff in a recently planted Colorado blue spruce in Anchorage this year. CES alerted the Alaska Division of Agriculture and the DOF about the detection, and together these agencies created a Pest Alert which was mailed to consumers who had purchased susceptible trees originating from the same shipment as the infested blue spruce. The Sitka spruce weevil, a pest of young spruce and pines, has been detected multiple times in Anchorage over the last two decades or so but is not thought to be established.

Increasing Spruce Beetle Activity

- Lower Susitna River Valley
- Skwentna/Puntilla Lake area
- Northwestern Kenai Peninsula
- Kuskokwim River near Napaimiut and Deacons Landing
- · Haines area

Decreasing Spruce Beetle Activity

- Katmai National Park
- · Lake Clark National Park
- · Chitina River near McCarthy

Areas and Severity of Notable Northern Spruce Engraver Damage in 2015

- 2012 Tanana River Valley windstorm area:
 Delta Junction to Tok
 LOW
- Nunivak Bar on the Kuskokwim River LOW
- Denali National Park: Birch Creek/McKinley River
 LOW
- Koyukuk/Alatna River Valleys: approx. Evansville west to Akoliakruich Hills
 MODERATE TO HIGH
- Yukon River: Beaver to Deadman Island MOSTLY LOW

Questions pertaining to overall coordination of DOF's Statewide Forest Health programs and activities on state and private lands should first be directed to:

State of Alaska
Dept. of Natural Resources
Div. of Forestry, State Office
550 West 7th Avenue, Suite 1450
Anchorage, AK 99501-3566
tel: (907) 269-8463
fax: (907) 269-8931

Forest Stewardship Program

The purpose of the Forest Stewardship Program is to provide private landowners with information for making decisions about forest resources. At the request of landowners, Division staff prepares Forest Stewardship plans which include field reconnaissance and the best available forest resources information. Alaska Native Corporations are provided grants for resource professionals to prepare Forest Stewardship plans. Limited financial assistance is available for implementation of projects consistent with Forest Stewardship plans and best management practices. The Forest Stewardship Program is a federally funded program administered by the Division of Forestry.

2015 Highlights

- Three Alaska Native Corporations were awarded grants to begin Forest Stewardship plans.
- Four Alaska Native Corporations completed Forest Stewardship plans for their land.
- Forest Stewardship plans were prepared for and signed by 36 individual Alaska forest landowners.
- Wildfire fuel reduction projects were completed by 66 Alaska homeowners.
- A third year of trials of planting poplar cuttings for biomass reforestation has been completed under an Alaska Energy Authority competitive grant.

Planning by Alaska Native Corporations

Native corporations and reservations are the largest private landowners in Alaska, and providing grants to Alaska Native Corporations for forest planning is an important part of the Forest Stewardship Program. In FY15, Forest Stewardship planning grants were awarded to 3 ANCSA Corporations: Huna Totem, Afognak Native Corporation, and Sealaska covering 424,864 total acres. Four Forest Stewardship Plans were completed by ANCSA Corporations: Tyonek, Long Island Trust, Port Graham, and Eyak for a total 274,301 forested acres. Second growth forest management was primary objective of these plans with biomass energy development also considered. ANCSA Corporation plans are in-progress for Tetlin Village Council, CIRI, Haida, and Tatitlek. Since the program began in 1992, a total of 55 Forest Stewardship plans have been prepared and signed by ANCSA Corporations.

Planning by Individual Landowners

For private lands in individual ownership, plans were prepared and signed by 36 landowners covering 552 forested acres. Wildfire defensible space and fire wood are common goals in these plans. Since the program began in 1992, a total of 896 plans have been prepared and signed covering 46,185 forested acres. Participation is greatest on the Kenai Peninsula with the Matanuska-Sustina Borough and Tanana Valley also having many participants. Private landowner assistance on the Kenai Peninsula has been aided by funding from the Kenai Peninsula Borough Spruce Beetle Program. Many participating landowners have strong interest in aesthetics and wildlife. Defensible space from wildfire is a growing concern.

Cost-Share Assistance

Forest Stewardship Program personnel continued to implement components of the National Fire Plan (NFP). Cost-share funding for practices has come from Wildland Urban Interface (WUI) fuels reduction grants from the Western States Fire Managers, and also the Kenai Peninsula Borough. Accomplishments reported here are home inspections, written defensible space plans, and cost-share grant agreements. Acres treated for fuels reduction are reported elsewhere as NFP accomplishments. In 2015, Wildland Urban Interface (WUI) pass-through grants for fuels reduction were approved to begin for 58 landowners. Final inspections were performed for 66 landowners paying \$115,221.

2015 FOREST STEWARDSHIP COMMITTEE

Daniel Consenstein

USDA Farm Service Agency, Palmer

Tom Dearlove

Kenai Peninsula Borough, Soldotna

Clare Doig

Consultant and Forest Industry Representative, Anchorage

Jim Durst

Alaska Department of Fish and Game, Fairbanks

Jeff Graham

Alaska Division of Forestry, Palmer

Jeff Hetrick

Landowner Representative, Moose Pass

Glen Holt

University of Alaska, Palmer

George Matz

Kachemak Conservation Society, Homer

Dan Parrent

USDA Forest Service, Anchorage

Will Putman

Tanana Chiefs Conference, Fairbanks

Mitch Michaud

USDA Natural Resources Conservation Service, Kenai

Phil Shephard

Great Land Trust, Anchorage



Kenai landowner Jeffrey Smith being interviewed by Stewardship Program Forester Judy Reese. Photo Jeanne Smith

Forest Stewardship Plan Monitoring

To comply with federal requirements, monitoring of past Forest Stewardship Plans continued in 2015. Foresters monitored 21 plans and found 90% were being followed adequately. For aggregate forested acreage, 99% percent were being managed according to their plan. Most landowners had performed one or more recommended management activities. Sealaska Native Corporation completed 1,700 acres of pre-commercial thinning, road maintenance and closure, and installed signage, all actions in its plan.

Competitive Grant Projects

The grant titled Program Development for Training Rural Forest Technicians will help train personnel in rural communities that work to supply biomass to wood energy systems. The initial target community is Fort Yukon but other communities are also sought. The training program is needed as the wood energy facility nears operation. By 2015 four training session were organized by the Council of Athabascan Governments and held in Fort Yukon.

Regeneration, Nurseries, and Genetic Resources

Regeneration, Nurseries, and Genetic Resources (RNGR) funding has enabled progress in reforestation. Efforts continued to develop low cost regeneration methods for wood energy biomass. RNGR funds enabled success with additional grant funds from Alaska Energy Authority to develop poplar cuttings of biomass reforestation. In 2014 approximately 2,000 cuttings were planted on 12 sites in Mat-Su and Delta areas. In 2015, second year survival was assessed. Preliminary results show a hybrid poplar used in Canadian prairies has best survival and growth.

Additional Accomplishments

Stewardship staff also participated in a variety of pubic information events offering forestry and landowner assistance information. Events included tree sales, Firewise public meetings, Arbor Day events, Student presentations, and fairs. Noteworthy efforts on the Kenai Peninsula were to develop and hang posters for outreach to local elders, disables citizens, and Alaska natives for participation in cooperative land stewardship & defensible space programs. In the Fairbanks area Stewardship staff prepared a successful proposal for new WUI funding.

Forest Stewardship Staff

Jeff Graham continued as the Stewardship Program Coordinator, located in Palmer. The other staff members are Jim Smith in Fairbanks, Judy Reese on the Kenai Peninsula, and Stephen Nickel, part-time, in Mat-Su. Stephen works in both the Stewardship and Community Forestry programs.

Forest Stewardship Committee

The Division of Forestry receives guidance from the Forest Stewardship Committee. The committee is comprised of representatives from a broad range of Alaska private landowner interests. Areas of discussion include grant and cost-share rates, eligibility criteria, and Forest Stewardship plan requirements. The committee met twice in 2015. Important topics of consideration in 2015 were wood energy development and forest planning on private lands including reforestation.



Sandra Zirnheld, Fairbanks landowner, sits by spruce felled to reduce the risk of wildfire on her property. Photo Jim Smith

Alaska Community Forestry Program

Trees growing in communities require care to be healthy, safe and beautiful but they reward this attention with economic, environmental and social benefits. The Division of Forestry helps communities maximize these benefits through effective management.

The program manager and community assistance forester offer technical and educational assistance to local governments, agencies, tree care and landscape professionals and non-profit organizations. A partnership with the US Forest Service provides federal funds to administer the state's program.

The Alaska Community Forest Council helps set priorities for the program and provides expertise and advice to the division. The 15 members represent the diversity of the state and a broad spectrum of interests and experiences. Members are also valuable partners and leaders in local community forestry efforts.

Supporting community forestry is an important and appropriate role for state government because:

- Community forests provide essential benefits we cannot live without.
- A healthy community forest doesn't happen by chance; it is the result of proper planning, management, and community investment.
- Healthy community forests can help solve community problems.
- Community forests and rural forests are connected; good management of one helps the other.

Community Assistance

In 2015, the Community Forestry staff provided technical assistance and/or training to local governments, organizations, businesses and individuals in 20 communities: Anchorage, Fairbanks, Girdwood, Homer, Joint Base Elmendorf-Richardson, Juneau, Ketchikan, King Salmon, Kodiak, Metlakatla, North Pole, Palmer, Salcha, Seward, Sitka, Soldotna, Tok, Valdez, Wasilla, and Willow.



Alaska Community Forest Council at UAA in May. (Left to right standing) Pat Leary, Anchorage; Brent Hove, Anchorage; Isobel Roy, Anchorage; Laura Charlton, Ketchikan; Patrick Ryan, Anchorage; Jud Kirkness, Sitka; Catherine Shenk, UAA; Nancy Mundy, Juneau; Dan Rees, Fairbanks; Gino Graziano, Anchorage; Hansel Klausner, Kodiak. (sitting) Nathan Lowjewski, Anchorage; Stephen Nickel, CF Program. Photo Patricia Joyner.

2015 ALASKA COMMUNITY FOREST COUNCIL

Ranya Aboras

King Salmon

Laura Charlton, chair

Ketchikan

Maria D'Agostino

Anchorage

Gino Graziano, secretary

Anchorage

Jud Kirkness

Sitka

Hans Klausner, treasurer

Kodiak

Pat Leary

Anchorage

Ed Leonetti

Anchorage

Nathan Lojewski

Anchorage

Nan Mundy

Juneau

Steve O'Sullivan

Wasilla

Dan Rees

Fairbanks

Isobel Roy

Anchorage

Patrick Ryan

Anchorage



The University of Alaska Anchorage successfully competed for a \$500 Tree Campus USA grant from the Arbor Day Foundation. The grant funded three fruit trees - an apple, cherry, and pear, which they planted in celebration of Arbor Day. Photo Patricia Joyner.

Highlights

Chena River Watershed Restoration: The Community Forestry Program began work in July on this two-year project funded by a \$135,000 grant from the Forest Service. Project partners: the Tanana Valley Watershed Assn., City of Fairbanks, and Department of Environmental Conservation, led a walking tour of green infrastructure that has been installed, is underway, or is proposed for downtown Fairbanks. Participants saw how the city and local businesses are reducing runoff and capturing pollutants before they reach the river by using dry wells, redirecting downspouts to flow-through planters, and giving trees space to become large enough to reduce runoff.

Fairbanks: The Fairbanks Soil & Water Conservation District planted native and ornamental shrubs along Chena Slough behind North Pole City Hall to prevent erosion and protect the shoreline while maintaining views. Plans are underway to demonstrate green infrastructure preserving vegetation and protecting water quality in North Pole's Memorial Park to be completed in 2016.

Anchorage: The Community Forestry Program secured a \$295,000 Forest Service grant for Campbell Creek restoration and recreational access in Anchorage. Work will begin in 2016 in partnership with the Anchorage Parks Department, Anchorage Parks Foundation, Alaska departments of Environmental Conservation and Fish & Game, and the US Fish & Wildlife Service.

Metlakatla: The community assistance forester spent four days in Metlakatla to train staff and assist in completing an inventory of public trees. The inventory updated and expanded an inventory done 10 years ago. Data was recorded using TreeWorks software, which adds the location and data collected on each tree to the city's GIS. It can also create graphics showing the different fields of data

collected, such as trees' species, size, condition, value, and maintenance needs. They will complete a community forestry management plan in 2016.

Tok: Tok School kindergarten through 4th grade students planted birch seedlings and learned about the variety of foods and products we get from trees. The seedlings, which they had planted in pots the year before, were planted on the school grounds where spruce have been removed to reduce wildfire danger.

Education

The Community Forestry Program provided 1,301 seat hours of training for 444 people in 2015. Training included:

- Landscaping with Trees Best Management Practices workshop for designers, planners, contractors and arborists in Anchorage
- Managing Landscape Trees covered tree planting and care, and pest and disease management for landscaping and yard care companies, held in Anchorage in partnership with the Cooperative Extension Service
- Assisting Cooperative Extension Service in two classes on evergreen and deciduous tree pests
- Community Tree Steward Course in Fairbanks
 consisted of five 3-hour sessions and hands-on planting
 and pruning classes in borough parks. The 16
 participants will volunteer time to community forestry in
 exchange for the training
- A class on trees and shrubs for the Anchorage Master Gardener course
- Two classes held in Fairbanks and Anchorage, Site Planning & Construction with Trees in Mind and Techniques for Diagnosing Structural Problems in Trees, taught by Scott Baker of Tree Solutions in Seattle



The Fairbanks Community Tree Stewards planted two trees at Snedden Park as part of the course held in May. (left to right) Kyra Moser, Carol Ann Lovejoy, Gail Frank, Anita Maas, Annette Nauheim, Abbie West, Robin Harlow, Jim Smith, Nancy Wood, Mary Jane Owens, Chandra McGee, Carol Lokken, Cory Whiteley. Photo Patricia Joyner.

- Presentation to the Willow Garden Club and tree planting demonstration at the Willow Community Center
- A boreal forest walk at the Alaska Botanical Garden in Anchorage
- Partnered with the Division of Agriculture and Cooperative Extension Service to develop and distribute a brochure on the invasive Prunus padus – identification, threats, treatment, and alternatives
- Organized the judging committee for the Envirothon, a natural resource education competition for high school students. Urban Forestry was the theme in 2015
- Funding tuition for Sitka's Parks and Recreation arborist to attend the Society of Municipal Arborists' week-long institute in Oregon.

Arbor Day

The Community Foresry Program distributed a calendar of Arbor Day activities statewide and participated in nine celebrations over the course of a month in Anchorage, Fairbanks, Valdez and Tok.

The Community Forestry Program and the Alaska Community Forestry Council began planning the 50th anniversary celebration of Arbor Day in Alaska in 2016. The Cooperative Extension Service created a logo and other materials to promote events and the benefits of trees. A Community Forestry grant to the council will fund community activities statewide.

Community Forestry Organizations

In 2015, volunteers donated 1,381 hours for community forestry projects in Alaska. Citizen groups around the state organized volunteers, raised funds, supported tree planting and care, and offered educational programs. Chugach Electric Association donated \$1,000 to the Community Forest Council for public education.

Council Activities

The council met at UAA in May and enjoyed a tour of the many species of trees on this Tree City USA campus. In August, members learned about Soldotna community forestry program during a tour and presentations by the Parks and Planning departments. The Kenai Watershed Forum showed how green infrastructure is being used to protect the Kenai River and Soldotna Creek. The council also visited areas burned by the Funny River Fire and heard how state and federal agencies are managing the forest to protect communities from wildfire.



City of Wasilla Ketchikan Gat

Tree Cities USA

- Ketchikan Gateway Borough
- Joint Base Elmendorf-Richardson
- Eielson Air Force Base
- Fort Wainwright
- City & Borough of Sitka
- Municipality of Anchorage
- City & Borough of Juneau

Tree Lines USA

- Chugach Electric Association
- Golden Valley Electric Association
- Matanuska Electric Association.

Tree Campuses USA

- University of Alaska Anchorage
- · University of Alaska Fairbanks.

Fairbanks Community Tree Stewards Cory Whiteley and Jim Smith remove a broken branch during the pruning class at Weeks Field Park. Photo Patricia Joyner



















Captions (left to right, top to bottom):

Dave Matheny, Robert Schmoll and Martin Maricle at Delta helibase. Photo Tim Mowry.

David Muth and Jessica Blydenburgh working in Palmer warehouse. Photo Jerri Webster.

2015 National Christmas Tree, from Alaska, in front of the Capital in Washington, D.C. Photo Chris Maisch. PIO Tim Mowry after passing the pack test! Photo Sam Harrel.

Elsie Norback, McGrath, and Doug Albrecht, MatSu during village red card training. Photo Mike Simon. Caribou on helibase at Kenai Area Office. Photo Don Govoni.

Members of the Prevention Education Team.

 $Darla\ The isen\ with\ Lance\ Mackey\ at\ Iditarod\ Race\ start-dog\ handling.\ Photo\ Nancy\ DeWitt.$

Jerri Webster, Palmer Warehouse Manager and Martin Maricle, Statewide Fire Support Forester. Photo Tim Mowry.







Captions (top to bottom, left to right):

Cameron Winfrey, WFRT III Initial Attack in Fairbanks Area. Photo Tim Mowry.

Kelsa Shilanski, Kenai-Kodiak dispatcher – balancing priorities! Photo Tim Mowry.

Kevin King, Fairbanks Initial Attack WFRT III with pump. Photo Tim Mowry.

Nate Skinner, Communications, installing radio. Photo Tim Mowry.

Forestry Admin staff at Palmer office for IRIS training. Photo Amanda Mathews.

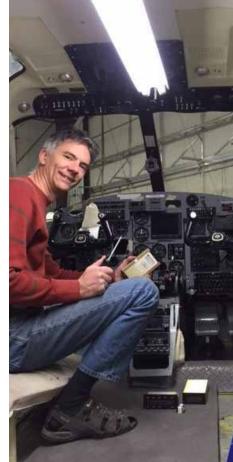
Alaska IMT IC Tom Kurth high fiving military members.

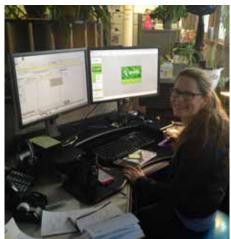


















 $Captions\ (top\ to\ bottom,\ left\ to\ right):$

Robert Schmoll (far left) and Tom Kurth (far right) with Northwest Compact Members. Photo Buffalo Airways. Gilbert Frank, WFRT III and Tom Kurth. Photo Tim Mowry.

Aviation Mechanic Wes Walker, who worked in Palmer hangar 17 years. Photo Steve Edwards.

AICC Intel Coordinator Gabriella Branson, WFRT IV – IRIN guru. Photo Tim Mowry. Jim Eleazer, Cost Unit Leader.

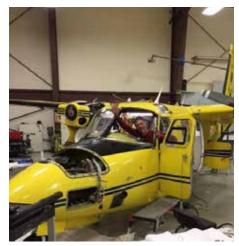
Pete Buist blowing on fire. Photo UAF School of Natural Resources and Extension.

Brian Homan, WFRT III, Tok Initial Attack. Photo Tim Mowry

Tom Kurth handing Dave Parsley a radio. Photo Jack Hoch.













Captions (left to right, top to bottom):

Fairbanks DOF Price is Right Halloween costumes Sarah Burnett, Jim Smith, Betsy Torres, Jacquelyn Bailey. Photo Heather Fetters.

McGrath meeting (L to R): Tom Kurth, Fire Program Manager, Rick Jandreau, Mat-Su/McGrath Area Forester, Tim Dabney, Northern
Region Forester, Chris Maisch, State Forester, Robert Schmoll, Fire Operations Forester, Mike Roos, McGrath FMO. Photo Tim Mowry.

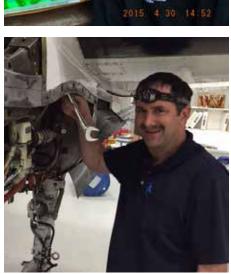
Aviation Tech.

Virtual Prevention Team (L to R): Avi Shalom, Mike Goyette, Doug Albrecht,, Judy Reese. Crews at UAF Mobilization Center.

 $Tree\ Hugger,\ Don\ York,\ Wildland\ Fire\ and\ Resource\ Tech\ III,\ at\ Eagle\ Trail\ Salvage\ Sale\ near\ Tok.\ Photo\ Peter\ Talus.$













Captions (left to right, top to bottom):

Chris Maisch (on right) at the Fire Hearing, Washington D.C.

Al Edgren retired after 30 years as Delta Area Forester. Photo Chrischal Lyon.

Dan Whitlow, Initial Attack Equipment Operator - Fairbanks Area, passed March 8, 2015 and is missed by all. Photo Tasha Shields.

Tim Whitesell, Air Attack, and Doug Burts, pilot.

Steve Edwards has been a DOF aircraft maintenance inspector since 2004. He also has experience as the lead aircraft mechanic for the Alaska State Troopers. Photo Wes Walker.

Incident Commander Tom Kurth.

Measuring ice thickness on the Tanana River.









Captions (left to right, top to bottom):

 $Tom\ Kurth\ and\ Russ\ Long\ holding\ jars$ of jam sent to Alaska Type I team by grateful Washington State homeowner. Photo Tim Mowry.

Thorne Bay School greenhouse and boiler.

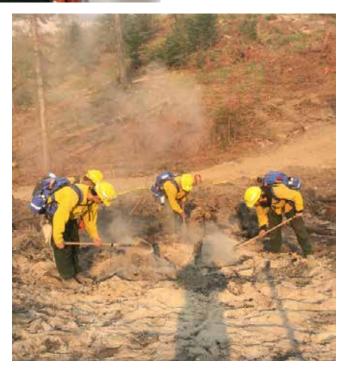
Peter Talus, Forester II, on winter road used for Eagle Trail Salvage Sale near Tok. Photo Don York.

Martin Maricle, Statewide Fire Support Forester.

Tammatha Whitmer and Mike Sterling in Fairbanks warehouse. Photo Tim Mowry.

Fairbanks 2 Crew on the Big Lost Fire near Potlach, Idaho. Photo Mike Goyette.





WILDLAND FIRE MANAGEMENT

2015 Fire Season: One for the Record Books

When the smoke finally cleared – with emphasis on finally – Alaska's 2015 wildland fire season burned its way into the record books as the second-largest fire season since 1959 in terms of the number of acres burned.

More than 5.1 million acres is estimated to have burned in the summer of 2015, ranking behind only the record season of 2004 when nearly 6.6 million acres went up in smoke. The official totals for the 2015 season, as of Dec. 1, were a total of 768 fires and 5,1111,452.5 acres burned.

In addition to the large number of acres burned, the 2015 fire season stood out for the destruction it wrought. A total of 138 structures were either destroyed or damaged by wildfires, including 71 primary residences that were lost. There were 12 fires that claimed some kind of structure.

For a while, it looked like 2015 was going to easily surpass 2004 as Alaska's worst fire season on record. At the end of June, the 2015 season was more than 1 million acres ahead of the 2004 acreage totals but rain in late July and much of August put a damper on the fire season by the third week of August, allowing Alaska firefighters to pack up and head south to help with suppression efforts in the Pacific Northwest, which was also experiencing a devastating fire season.

The Alaska season unfolded with a very dry and warm spring that cured the fuels and set the stage for a significant fire event. Many fire/fuel indices were at record or near-record levels around the state in late May and early June. Sure enough, lightning struck on the last day of May, igniting a pair of tundra fires – the Whitefish Lake 1 and Bogus Creek fires – in Southwest Alaska on May 31. While neither fire posed an immediate threat, they set the tone for what would be a long, drawn-out fire season based on their resiliency and persistence. Firefighters were still battling both fires in late July as they refused to succumb to suppression efforts by man and nature. The Whitefish Lake 1 Fire burned nearly 68,000 acres while the Bogus Creek Fire scorched more than 25,000 acres by summer's end.

As crews were contending with those two fires in rural Alaska, a pair of human-caused, urban-interface fires – the Sockeye Fire near the Mat-Su Valley community of Willow and the Card Street Fire on the Kenai Peninsula near the town of Soldotna – took center stage.



The Sockeye Fire started near Mile 77 of the Parks Highway on June 14 and turned out to be Alaska's most devastating fire in more than two decades. The fire was initially attacked at just 2 acres but due to strong winds and dry conditions, grew to more than 6,500 acres on the first day and destroyed dozens of homes. While an Alaska Type 1 Incident Management Team was brought in to manage suppression efforts on the second day of the fire and the fire only grew another 720 acres, the damage had been done. All totaled, 55 homes were destroyed in the Sockeye Fire and another 44 structures were damaged. It was the most destructive fire in Alaska since the Miller's Reach Fire in 1996, which burned more than 360 structures a few miles south near the community of Big Lake.

A joint investigation by the Division of Forestry and Alaska Fire Marshal's Office determined the Sockeye Fire was started as the result of an illegal debris burn, resulting in charges being filed against two Anchorage individuals. The two people charged in the case pled not guilty in court and the judicial process is still ongoing.

The Card Street Fire, meanwhile, was reported on June 15, a day after the Sockeye Fire started. The Card Street Fire was reported at 1 acre and grew to 1,000 acres on the first day. It was estimated at 9,000 acres by the second day. While not as destructive as the Sockeye Fire, the Card Street Fire destroyed three primary residences and eight outbuildings before it was brought under control. A Type 2 Incident Management Team from Oregon was brought in to manage the Card Street Fire.



In 2015, 1.24 million acres burned on state land. Statewide, 5.1 million acres burned. This was the second largest fire season since 1959 in terms of the number of acres burned.

An investigation was conducted to determine the cause of the fire but as of press time that investigation had not revealed how the fire started or who was responsible.

The severity of the Sockeye and Card Street fires illustrated the fire danger in Alaska and was a sign of things to come for the summer of 2015.

Just as the threat posed from the two human-caused fires began to diminish, Alaska experienced a record lighting bust. During the week of June 19-25, over 61,000 lightning strikes were recorded around the state, with almost 15,000 strikes on June 23 alone. Given the dry, volatile conditions statewide, the flurry of lightning produced an outrageous 295 new fire starts in seven days, including 62 new fires on both June 20 and June 22.

One of those fires, the 31,705-acre Aggie Creek Fire, along the Elliott Highway about 40 miles north of Fairbanks, threatened the trans-Alaska oil pipeline. Firefighters were able to conduct a burn-out operation along the pipeline to reduce that threat.

Several rural villages were also threatened by lightning-caused fires. At one point, both the Yukon River villages of Tanana and Nulato were surrounded by fires. Fortunately, losses were kept to a minimum in both villages with the help of timely action by DOF's key interagency partner, the Alaska Fire Service. However, many of the residents in those two villages were evacuated for an extended period of time. Residents in several other villages in Southwest Alaska, including Chathbaluk, Upper and Lower Kalskag, Aniak, and Red Devil were also evacuated due to fires encroaching on their villages.

The lightning bust produced so much fire on the landscape that it was more than Alaska's firefighting force could handle, requiring resources to be imported from the Lower 48 and Canada. All totaled, more than 2,800 firefighting personnel were brought up to Alaska from 44 different states and two Canadian provinces. On June 17, there were 999 firefighting personnel assigned to fires. That number increased to 2,000 by June 23 and 3,174 on June 29. By July 13 that number had dropped below 2,000 and on July 28 personnel staffing Alaska fires was less than 1,000. On Aug. 2 there were less than 500 personnel assigned

Social media provides non-traditional ways for the Division of Forestry (DOF) to share information and visuals and engage with an online community of public and media.

DOF Pages

Facebook:

http://www.facebook.com/AK.Forestry

Twitter:

http://twitter.com/ak_forestry

Youtube:

http://www.youtube.com/alaskadnrdof

Additional VOST Information: http://vosg.us/

For more information, contact tim.mowry@alaska.gov, (907)-356-5511

to fires in Alaska. Roughly speaking, about 48 percent of the resources used to fight fires were based in Alaska and 52 percent came from other state, federal and Canadian sources.

As the season progressed and fires grew in size, over 90 fires grew together and merged. The largest fire of the season was the 312,918-acre Big Creek Two fire, which eventually merged with four other fires that totaled 433,685 acres. For the season, there were 68 fires estimated at more than 20,000 acres and 10 that were estimated at more than 100,000 acres. At one point, the smoke was so thick around the village of Tanana that barges and boats had to be used to get food and equipment to firefighters working along river corridors because planes were unable to fly.

The Alaska Interagency Coordination Center issued four Fuels and Fire Behavior Advisories at different times during the summer:

- May 15-31: North of the Alaska Range along the Tanana Valley for early, unseasonably warm and very dry weather, combined with pre-green fuels.
- May 22-31: Tanana Valley, Upper Yukon Valley and Copper River Basin for early, unseasonably warm and very dry weather, combined with pre-green fuels.
- June 21-28: Much of the Interior boreal forest of Alaska for peak season conditions, pushed by above normal temperatures and low humidities, combined with fuels exposed to early season drying.
- July 3-15: West and Central Interior Alaska for peak season conditions aggravated by above normal temperatures and lack of wetting rain.

8K+ 11.2K+
13.9K+

4K+

2.9.5 fire starts in 7 days

STARTS 36 62 47 62 40 22 26

DATES 6/19 6/20 6/21 6/22 6/23 6/24 6/25

Given the extremely dry conditions and high fire activity, Alaska was at Preparedness Level 5 - the highest level – for 24 straight days, from June 20 to July 14. Fires were staffed continuously from May 16 to September 10. The peak of the season was June 29, when there were 45 fires staffed by 3,174 personnel. There were 42 days with more than 20 staffed fires in a day.

The Alaska Multi-Agency Coordinating Group, of which DOF Deputy Director Dean Brown is a member, was activated from June 17 to July 14 to prioritize response efforts and resource allocation to fires around the state.

Due to the fire activity, the Alaska Interagency Coordination Center in Fairbanks activated the Joint Information Center (JIC) at Fort Wainwright from June 15 to July 26, a period of 42 days. It was the fifth time in the last 11 years the JIC was activated, which occurs only when Alaska reaches Preparedness Level 4.

For the first time in recent memory, all available Alaska crews – 3 hotshot crews, 5 Type 2IA crews and 42 Type 2 crews – were utilized during the fire season. The Alaska crews were complimented by more than 100 crews – 33 hotshot, 49 Type 2IA and 22 Type 2 – imported from the Lower 48.

The state also utilized more incident management teams (IMT) than ever before. A total of 26 IMTs – one Type 1, 11 Type 2 and 15 Type 3 – were employed in Alaska, in addition to 14 wildand fire modules. Nine Type 2 and two Type 3 crews were imported from the Lower 48 to manage fires in Alaska. DOF-managed fires that employed IMTs included Aggie Creek, Anaconda Creek, Card Street, Healy Lake, Rex Complex and Sockeye.

The last major fire of the season was on Kodiak Island, another wind-driven fire that reached 5,000 acres in just two days. The Twin Creeks Fire started on Aug. 27 near the village of Chiniak, about 40 road miles south of Kodiak, and burned all the way to the ocean. Its final size was estimated at 5,280 acres and it burned down the village library, two homes and one outbuilding.

Just as the threat posed from the two human-caused fires began to diminish, Alaska experienced a record lighting bust. During the week of June 19-25, over 61,000 lightning strikes were recorded around the state, with almost 15,000 strikes on June 23 alone.









The AWFCG Multi-Agency Coordination Group met an unprecedented 29 straight days in 2015 to allocate resources from across the nation to the record number of fires burning across Alaska. Members of the Multi-Agency Coordination Group (Left to right)

Doug Alexander, USFWS, AWFCG and Mac Group member in Galena. Photo Dean Brown.

Dean Brown, Deputy State Forester, with BLM PC12 on tour of type I and II fires. Photo Tom Hudson.

Tom Hudson, USFS, Chair AWFCG Mac Group in Galena. Photo Dean Brown.

 $Norm\ MacDonald,\ FMO,\ placed\ in\ charge\ of\ all\ of\ SW\ Alaska\ out\ of\ McGrath\ to\ meet\ unprecedented\ fire\ occurrences.\ Photo\ Dean\ Brown.$

State Forester Chris Maisch made presentations and congratulated the following Division of Forestry employees:



Arlene Weber-Sword, Fire Staff Officer



Danny Newby, Delta Dispatcher



Martin Maricle, SLC Manager, State Fire Support



Tom Kurth, Fire Program Manager



Darla Theisen, AICC State Logistics Coordinator



Jack Hoch, State Warehouse Manager

All photos by Sue Rodman, ADF&G

Of the total number of wildfires in 2015 in Alaska, 54 percent (354) were human caused and 46 percent (416) were started by lightning. As is usually the case, lightning-caused fires accounted for the biggest chunk of the acreage burned (5.1 million acres) compared to the acreage burned by human-caused fires (27,000 acres).

For the season, the Division of Forestry's protection zone saw 482 fires that burned approximately 1 million acres while the Alaska Fire Service protection zone had 262 fires that burned approximately 4 million acres. There were 26 fires in the U.S. Forest Service protection zone that accounted for 700 burned acres.

The AFS's Tanana Zone accounted for the most acres burned of any area with more than 2.5 million acres burned by 94 fires, followed by the Galena Zone, also with 94 fires and 1.2 million acres burned, and DOF's Southwest Area with 126 fires and approximately 900,000 acres burned.

Ironically, while heavy rain in late July and August pretty much brought a halt to Alaska's fire season by the third week in August, the fire season in the Lower 48 was just heating up, allowing Alaska to reciprocate for the help it received from the Lower 48 while also extending the work season for Alaska firefighting personnel and crews.

Alaska sent more than 1,100 firefighting personnel south to the Lower 48 to help with suppression efforts in California, Idaho, Oregon, Montana, Utah, Washington and Wyoming. That number included one Type 1 IMT, three hotshot crews, six Type 2IA crews, 25 Type 2 crews and more than 400 overhead personnel. In addition, Alaska also sent five air retardant tankers, one air tactical platform and four helicopters south to work in the Lower 48.

The Alaska Type 1 IMT under the command of DOF Fire and Aviation Program Manager Tom Kurth spent a month (Aug. 15 – Sept. 15) in eastern Washington managing the Kaniksu Complex, a group of seven fires burning in the Idaho Panhandle and Colville national forests along the Washington/Idaho border. The biggest of those fires was the 24,194-acre Tower Fire.

As part of the assignment, the Alaska IMT was tasked with incorporating more than 200 U.S. Army soldiers from Joint Base Lewis-McChord's 17th FA Brigade into the suppression effort, as well as dozens of members of the Idaho National Guard. Army troops were split into 20-person crews and received basic firefighter training before joining firefighters on the fireline. National Guard soldiers helped man road checkpoints set up to keep the public out of danger. It marked only the second time in the past decade that Army troops have been called on to fight wildfires in Washington and the effort was deemed a success by all involved.



DOF provided this surplus rescue vehicle to the Houston Fire Department through the Federal Firefighter Program.

Fire Training Program

The division provides training to maintain a qualified and safe workforce, ready to respond to wildland fires and other emergencies as needed. Interagency courses are open to federal cooperators, structure fire departments, local governments, other state agencies, emergency firefighters, other geographic areas, and Canadian fire agencies.

National Level Training

Training offered in the Lower 48 by other geographic areas, the National Advanced Fire and Resource Institute, and the National Prescribed Fire Training Center help the division meet the need for advanced level training. The training prepares personnel to serve on Alaska's Incident Management Teams, become instructors, and provides advanced leadership training for employees and participants sponsored by the division. Thirty-four students attended the following 20 courses:

- Air Tanker Base Manager
- Leadership in Action
- Public Information Officer
- National Fire Management Leadership
- · Backyards and Beyond
- Fire Prevention Education Team Leader
- Lead Plane Refresher
- · National Prescribed Fire Training Center
- Support/Aviation Dispatcher
- Extended Attack Incident Commander
- E-ISuite
- Division/Group Supervisor
- Resource Unit Leader
- Supply Unit Leader
- Communications Unit Leader
- Wildland Fire Behavior Calculations
- · Advanced Incident Management
- Complex Incident Management
- Air Operations Branch Director
- Single Engine Air Tanker

Instate Training

Most training in state is provided through cooperation between the Division of Forestry, the Alaska Fire Service, US Forest Service, fire departments, and local governments. The University of Alaska Fairbanks partners with DOF to conduct the Advanced Wildland Firefighter Academy in even numbered years as long as partnership funding continues.

The division uses webinars to deliver the Fire Prevention Education Team Member training. Online courses offer students the opportunity to complete a portion of the course work online and the remainder through instructorled training. Academies made possible through Interagency cooperation and support from Lower 48 instructors covered dispatch, finance, and the Incident Command System. Training was provided to fire departments, local governments, DOF personnel, federal cooperators, emergency firefighters, Division of Homeland Security, Alaska Railroad and military students. The training helps to meet national standards in the Incident Command System, suppression, aviation, dispatch, logistics, leadership, prevention and wildland fire investigation positions. These cooperators are a valuable source of trained and experienced firefighters who support responses to fires and other emergencies both in and out of Alaska.

Division of Forestry Area Offices delivered many basic firefighter courses, fire line safety refreshers, fitness tests, and other training for local fire departments. Forestry also supports Native Corporation crews through agreements with the Tanana Chiefs Conference and Chugachmiut Corporation. A new University of Alaska Fairbanks crew was organized in 2015. DOF provides training, issues red cards, tracks training and experience records, and assists with mobilization.

A new edition of the Wildland Fire Qualification System Guide was released in October. The new guide is a significant advancement towards accomplishing national goals for wildland fire incident response capability and sustainability.

Additional information is available at:

- http://training.nwcg.gov/sect_transition_information.html
- http://training.nwcg.gov/online.html –Online NWCG courses
- http://training.fema.gov/is/- FEMA Independent Study (IS) courses
- https://www.iat.gov/- Interagency Aviation courses
- http://www.nationalfiretraining.net –National Interagency Training

Priority Trainee Program

The mission of the Priority Trainee Program is to develop an interagency workforce by sending trainees to incidents, assisting them in gaining critical experience for fire management positions, and succession planning for the Incident Management Teams. There is a shortage of qualified applicants for fire management and incident management positions. This program trains employee to ensure a sufficient workforce in the future.



 $DOF\ and\ US\ Forest\ Service\ conducting\ a\ prescribed\ fire\ on\ Joint\ Base\ Elmendorf-Richardson\ to\ reduce\ hazardous\ fuels.$



Dock is installed to aid in initial attack. Photo Trevor Fulton.

2015 EFF PAYROLL

Aniak	\$ 45,409
Chevak	\$ 523,191
Copper River	\$ 282,210
Delta	\$ 645,618
airbanks	\$ 3,257,519
Haines/Juneau	\$ 284
Homer	\$ 15,532
Hooper Bay	\$ 358,027
Kenai/Soldotna	\$ 439,373
_ower Kalskag	\$ 402,163
McGrath	\$ 476,355
Vikolai	\$ 207,176
Nondalton	\$ 318,385
Palmer	\$ 1,609,712
Гok	\$ 1,116,669
Jpper Kalskag	\$ 71,802
Scammon Bay	\$ 13,409

TOTAL \$9,799,834

2015 WILDFIRES BY CAUSE

	Α	LL FIRES	STA	TE PROTECTION	AFS PROTECTION		USFS PROTECTION	
	Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres
Campfire	64	386.3	61	368.0	0	0	3	0.3
Children	13	3.4	13	3.4	0	0	0	0
Debris Burning	89	37,421.9	87	34,556.2	1	2,865.4	1	0.3
Equipment	24	500.9	23	500.8	0	0	1	0.1
Incendiary	4	3.3	4	3.3	0	0	0	0
Lightning	414	5,055,209.1	187	995,266.1	223	4,059,231.9	4	711.1
Miscellaneous	74	5,908.3	73	5,980.2	1	0.1	0	0
Railroad	0	0	0	0	0	0	0	0
Smoking	8	2.9	8	2.9	0	0	0	0
Under Investigation	55	11,954.7	2	8,876.1	38	3,014.8	15	63.8
Undetermined	23	7.7	21	7.4	0	0	2	0.3
TOTALS	768	5,111,452,5	479	1,045,564.4	263	4,065,112.2	26	775.9

10 LARGEST FIRE SEASONS ON RECORD

YEAR	FIRES	ACRES
2004	701	6,590,140
2015	768	5,111,452
1957	391	5,049,661
1939	200	5,000,000
2005	624	4,649,597
1940	130	4,500,000
1969	685	4,231,820
1941	138	3,654,774
1990	750	3,189,079
2009	516	2,934,608

ACRES BURNED BY OWNERSHIP

LANDOWNER	FIRES	ACRES
Bureau of Indian Affairs	6	13,490.2
Bureau of Land Management	80	1,620,313.9
Borough	0	845.4
Department of Defense	36	5,747.6
Native Claims Act Lands	110	589,553.6
National Park Service	26	114,023.7
Other Federal Lands	0	12,983.4
Private	174	9,883.6
State	249	1,244,980.1
U.S. Fish & Wildlife Service	13	773.9
U.S. Forest Service	74	1,498,857.1

5,111,452.5 *Number of fires reflects land ownership at origin. Data compiled from submitted fire perimeters.

768



TOTALS*

EFF crews departing on fire assignment. Photo Tim Mowry.

State Wide Totals by Protection Level

CRITICAL	FULL		MODIFIED	LIMITE		TOTALS			
Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres
231	26.087.2	197	963,484.0	66	763.033.9	274	3.358.847.4	768	5.111.452.5

STATE PROTECTED AREAS

	CR	ITICAL	F	ULL	MC	DIFIED	LI	MITED		TOTALS	
Area	Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres	
Anch/Mat-Su	78	74.8	21	7,304.6	1	0.1	2	4.1	102	7,383.6	
Copper River	14	2.8	12	26.2	5	12.3	10	931.4	41	972.7	
Delta	7	1.8	12	17,239.6	2	1,001.9	0	4,846.7	21	23,090.0	
Fairbanks	44	12.1	23	12,480.0	2	36,746.2	10	1,388.6	79	50,626.9	
Haines	1	1.0	0	-	0	-	0	-	1	1.0	
Kenai/Kodiak	60	11.6	8	13,739.5	0	-	1	335.0	69	14,086.1	
Southwest	3	1.7	36	231,435.7	30	173,692.5	56	462,294.8	125	867,424.7	
Tok	17	1,497.4	15	22,964.8	0	5,567.5	9	51,949.7	41	81,979.4	
TOTALS	224	1,603.2	127	305.190.4	40	217.020.5	88	521,750,3	479	1.045.564.4	

USDA FOREST SERVICE- PROTECTED AREAS

	CRIT	ΓΙCAL	FUI	L	MOD	FIED	LIM	TED	TC	TALS
Area	Fires	Acres								
Chugach N.F.	2	129.1	5	0.5	1	61.6	2	580.3	10	771.5
Tongass N.F.	2	0.4	11	1.8	3	2.2	0	-	16	4.4
TOTALS	4	129.5	16	2.3	4	63.8	2	580.3	26	775.9

BLM ALASKA FIRE SERVICE -PROTECTED AREAS

	CF	RITICAL	F	ULL	MC	DIFIED	L	IMITED		TOTALS
Area	Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres	Fires	Acres
Galena	1	7,986.2	18	163,607.5	11	298,803.0	65	795,696.7	95	1,266,093.4
Military	2	0.2	12	72.3	1	0.1	22	40,944.2	37	41,016.8
Tanana	0	16,368.1	15	491,273.7	4	189,182.8	76	1,818,420.6	95	2,515,245.2
Upper Yukon	0	-	9	3,337.8	6	57,963.7	21	181,455.3	36	242,756.8
TOTALS	3	24,354.5	54	658,291.3	22	545,949.6	184	2,836,516.8	263	4,065,112.2

^{*}Data current as of December 31, 2015 and may differ from previously published numbers.

Advanced Wildland Firefighter Academy Program

2015 Academy Funded Positions

Alaska Division of Forestry funded 22 short term non-term positions for 12 weeks. (90 day positions, regular wages; with an option for extension to 7/15/2015). Of the 22 positions, four were Advanced Academy Graduates.

- FY15 Wages for 22 STNP: \$158,000;
 STNP Coordinator: \$15,000
- Position funding available 4/1-6/30/2015. STNP were able to take advantage of statewide interagency training
- Positions were divided up amongst the areas with the larger offices receiving 4 positions and the more rural offices 2 positions.
- Positions were filled as Wildland Fire & Resource
 Technician I, Wildland Fire Dispatcher I and Office
 Assistant I as needed for each area. STNP had opportunities to work at DOF Area Offices to assist with the
 Initial Attack workload. Other opportunities in Dispatch,
 Finance/Administrative functions were available.
- Target audience for STNP: past Advanced Wildland Firefighter Academy graduates, Single Resource EFF that have completed stand-alone NWCG classes.

Training Opportunities for the STNP *Interagency Training (13 classes, 30 students):*

- Alaska Crew Boss Academy-1
- Fire Behavior CFFDRS-2
- Dispatch Recorder-1
- Aviation Dispatcher-2
- EISUITE-1
- IFM-3
- IQS-3
- L280 Followership to Leadership-1
- ROSS-4
- S215 Fire Operations in the WUI-3
- S230 Crew Boss-1
- S271 Helicopter Crewmember-5
- S290 Intermediate Fire Behavior-3



Fire department cooperators assist the Division of Forestry in fire suppression.

Area Training (31 classes, 103 students):

- Online Aviation Training-45
- ATVO-3
- CEVO-2
- CPR/1st Aid-6
- Defensive Driving-3
- FI110-1
- ICS100-2
- ICS200-3
- IS700-4
- IS800-3
- OSHA-3
- Fireline Safety Refresher-20
- S131 Squad Boss-3
- S133-3
- S212 Saws-2

Task Books Issued (40):

- 1-Support Dispatcher
- 1-Initial Attack Dispatcher
- 3-Aviation Dispatcher
- 2-Dispatch Recorder;
- 2-Air Base Radio Operator
- 2-Radio Operator
- 1-Equipment Time Keeper
- 1-Staging Area Manager
- 1-Engine Boss
- 6-Helicopter Crewmembers
- 3-Basic Fallers
- 2-Intermediate Fallers
- 5-Advanced Firefighter
- 5-Incident Commander Type 5
- 3-Engine Operator
- 2-Crew Bosses

Task Books Completed (24):

- 4-Helicopter Crewmembers
- 3-Engine Operator
- 4-Incident Commander Type 5
- 2-Basic Faller
- 1-Intermediate Faller
- 1-Squad Boss
- 1-Initial Attack Dispatcher
- 2-Support Dispatcher
- 1-Dispatch Recorder
- 2-Personnel Time Keepers
- 1-Aviation Base Radio Operator
- 1-Equipment Time Keeper

Alaska Experience:

- 27 Initial Attack Assignments
- 38 Fire Assignments

Lower 48 Experience:

• 21 Fire Assignments



University of Alaska Fairbanks wildland fire crew.

2015 Area Comments

"The McGrath Non-Perm highlights include getting several task books signed off including HECM, IC 5, Crew Boss, and Line Safety. The non-perms stayed on as EFF throughout the SW layoffs. They filled crucial roles in dispatch, administration and operations. With the lack of resources they stepped into leadership positions during the fire season. The non-perms who took L-48 assignments came back with outstanding evaluations. Overall a lot of really good and motivated people helped us get through an extremely busy season. We honestly could not have done it without them."

Norm McDonald - McGrath Area

"Having the STNP's allowed the area to staff to appropriate levels and still support statewide needs with out of area assignments by providing consistency for the area & the employee. Overall this was a positive experience that had definite benefits to the area and state fire program as a whole while providing critical training and experience to entry level employees."

Phil Blydenburgh - Matsu Area

"Having a STNP in dispatch has been a step in the right direction and has allowed for work load to be spread out more efficiently, permitting my primary dispatcher and myself to have a little more much needed down time, rather than working to utter exhaustion. This program in my opinion has been a great success and I hope it continues". *Danny Newby- Delta Area*

"The non-perm program is a great program for developing our next cadre of dispatchers and operations technicians. The short term non-perm guarantees them employment through the fire season and allows managers to have dependent employees to fill these critical positions. It also allows them to receive compensation for their time to attend required classes in the spring."

Janet Ladd - Valdez/Copper River Area

2015 ADVANCED ACADEMY GRADUATE HIRES

Wade Johnson WFRT II- Tok

Ron Recckio WFRT II- Delta

Collin Morse WFRT I- Kenai

Ashley Dale WFRT I-Copper River

Short Term Non-Perm Hires:

Nan Llewellyn-Voorhees WFD II- Kenai

Rafael Rodriguez WFRT II- Fairbanks

Britany Stillie WFRT I- Delta

Joshua Sutherland WFRT I- Copper River

National Fire Plan/Wildland Urban Interface Projects Update

The National Fire Plan was adopted in 2000 to provide grants to states, some on a competitive basis, to reduce the threat of fire in wildland/urban interface areas. Funds are also available for wildfire prevention and education programs, mitigation, capacity building and homeowner and community assistance. The Division of Forestry continues to support a variety of educational and mitigation projects, which are described below. Funding comes to the Division of Forestry from the USDA Forest Service.

Initial Attack Fire Fighters

National Fire Plan funding continues to enable the Division of Forestry to retain 10 permanent seasonal initial attack firefighters in Palmer, Fairbanks, Soldotna, Delta, and Tok. These firefighters improve initial attack capabilities at the state, local government and volunteer fire departments in the urban interface areas. Effective initial attack of a fire reduces overall suppression costs and minimizes threats to private and public property from wildland fire.

Glennallen Hazardous Fuels Reduction

The cost share program was advertised at a Firewise booth at the local Farmer's Market weekly in June and July, at the 4th of July Parade/Picnic, and in a kiosk display at the local grocery store. There were no initial assessments in 2015 but 19 were finalized. Staff spent time during assessments educating homeowners. The woody debris disposal site for landowners established through the 2012 cost-share program, in partnership with Ahtna Inc., continues to be available. The division continued to host a Facebook page, Copper River Firewise, to offer educational information to communities. Staff participated in two Firewise Workshops in partnership with the volunteer fire department and UAF Cooperative Extension Service.

Eastern Copper River (McCarthy) Hazardous Fuels Mitigation

DOF presented the cost-share program and thinning project at the McCarthy Area Council meeting in May and presented updates at the July, August and September meetings. Forestry also completed four initial assessments in four subdivisions and finalized 28. The thinning along the Nizina and the Silver Mine Road using a local fuel crew was completed, the final step in the shaded fuel break project. A local fuels reduction crew was available four days a week to homeowners and the public. The community of McCarthy/Kennicott hosted their second annual Firewise Day and renewed their application; they continue to receive national Firewise status.



Using a roller/chopper to crush aspen regrowth that followed the 1990 Tok Fire. The goal is to diversity the age classes of the regrowth to improve habitat for grouse.

Anchorage Fire Department (AFD) Wildfire Mitigation

AFD ran 56 public service announcements (PSAs) between April and July addressing spring wildfires, evacuation and wood lots. In July AFD ran a special promotional PSA on "zero tolerance" on fireworks enforcement and distributed it to television and radio media. The successful campaign resulted in a dramatic reduction in the unlawful use of fireworks during a critically dry fire season within the municipality. AFD held numerous Firewise educational sessions for groups including the Anchorage Traffic Department, Homebuilders Association and several community councils. Twelve sessions were held for APD to reach all shifts and educate staff members on their role in wildfire. Presentations included basic fire behavior, tactics, evacuation and fire line safety. A refresher session is planned for 2016.

AFD purchased 500 spruce, birch, larch and lodgepole pine seedlings to distribute at the AFD open house in May. Fire danger levels signs were purchased and placed at five AFD stations located in the wildland urban interface. AFD completed 77 Firewise home assessments and 49 residents requested cost share tree removal assistance. A total of 38.55 acres were treated on the 49 properties.

Due to the high volume of requests for Firewise home assessments, AFD engine crews were trained to do the inspections under the guidance of the AFD Forester. This will help meet future demands from the community. Three wood lots were operated for homeowner disposal of woody debris in the Municipality during the summer and fall. Six thousand loads of woody debris were chipped and hauled to the regional landfill and recycled as daily cover for refuse.

Statewide Prevention and Safe Burning

The busy 2015 fires season precluded any work on this project by Forestry staff. In 2016 a PSA campaign will be developed featuring prominent Alaskans to serve as spokespersons for Firewise and wildfire safety in Alaska. DOF will also develop a statewide Firewise website in conjunction with prevention officers and stewardship foresters, work with prevention staff to develop a statewide elementary school curriculum featuring the Firewise program, increase DOF's presence at public events, and create a video on how to burn debris safely.

"Fire In A Changing Climate" Workshops

Formally titled "Fire in Alaska", in these workshops educators learn and practice key concepts of fire ecology, fire behavior, risk factors and participate in two home assessments. The Fire in a Changing Environment blends US Fish and Wildlife Service curricula (Role of Fire) with US Forest Service curriculum (Fireworks) with Division of Forestry adaptations. The workshops are sponsored by the Division of Forestry, delivered by Alaska Natural Resources Outdoor Education (ANROE) but hosted by individual school districts at central locations where educators gather. Each teacher then returns to his or her home site and teaches the curriculum to their students. Further updates were made in 2015 to the Fire in Alaska workshop series to reflect changes in the scientific knowledge base and current environmental conditions complying with state educational standards. Nine workshops were held in 2015 Anchorage, Soldotna, Homer, UAA, Igiugig, Glennallen, Nenana, Anderson and Palmer. A total of 130 educators and students attended the workshops. Over 1,200 educators have completed the course in Alaska. To date, 2016 workshops are planned for Dillingham, Tok and Kodiak.

Eklutna Lake Fuels Reduction

Scope of work includes a shaded fuel break along both sides of the 8 mile Eklutna Trail (193 acres). Fuel types and heavy public use make the area prone to fire starts. This will provide protection to the Eklutna watershed and its tributaries as well as safe access and egress from the remote camp sites. During the 2015 field season wildland fire and resource technicians thinned the hazardous fuels, cut and stacked usable firewood and burning and chipped woody debris. A total of 12 acres were treated and 128 piles disposed. Work will continue during the 2016 field season.

Mat-Su Hazard Fuel Mitigation - Butte Recreational Trails & West Lakes

Work included 110 acres of shaded fuel breaks and the installation of Firewise Educational kiosks. The Pioneer Peak Interagency Hotshot Crew and Gannet Glacier Type II Initial Attack Crew cut and piled hazard fuels 100 feet off the trail. A total of 10 acres were treated. Useable firewood was made free and available to the public. In the fall, 105 of the 573 piles were burned. Treatment and pile burning will recommence in 2016.

Mat Su Firewise and Prevention

Approximately 12 Firewise home assessments were conducted in the community of Willow as a response to the devastating Sockeye Fire. Mat Su Forestry staff met with organizers and leaders from the community of Tyonek to develop a Community Wildfire Protection Plan (CWPP). Staff at the fire prevention education booth at the Palmer State Fair reached thousands of citizens. Information was distributed and discussed about the Firewise program, hazard fuel reduction around homes and property, fire resistant plants and landscaping, fire prevention tips and safe yard and debris burning.

The National Fire Plan was adopted in 2000 to provide grants to states, some on a competitive basis, to reduce the threat of fire in wildland/ urban interface areas. Funds are also available for wildfire prevention and education programs, mitigation, capacity building and homeowner and community assistance.

The Division of Forestry continues to support a variety of educational and mitigation projects, with funding from the USDA Forest Service.

McGrath City Fuel Breaks

Due to the extremely busy fire season in Alaska and especially in Southwest Alaska, only a minor amount hazard fuel reduction took place. Work will resume in 2016.

Fairbanks North Star Borough Fuels Reduction Phase III

The project reduced hazardous fuels on 80+ acres and provided prevention education to approximately 5,000 residents living in Wildland Urban Interface areas in the Gilmore, Goldstream and Nordale subdivisions. Field work began in May with personnel using chainsaws to cut vegetation on five acres of public land. Fuel wood was left on site for public use. Slash piles will be allowed to cure for two seasons prior to burning. Test fires on the Gilmore Trail fuel break were used to evaluate fuel/moisture consumption and duff moisture content. Older sites were monitored to evaluate the vegetative response to treatments, fuels loading, road/trail condition and public use.

Olness & Cripple Creek

This project will reduce hazardous fuels on up to 80 acres by constructing shaded fuels breaks in the Olness East subdivision in Fox and Cripple Creek subdivision of Ester. The Division of Forestry met with local emergency service providers, fire suppression agencies and land management agencies. Site inspections were conducted to monitor pubic use (recreation, fire wood, hunting/trapping) assessment of road and trail conditions, identified critical infrastructure and documented general site conditions. Future public meetings will address issues that need to be resolved during the permitting process. A Forestry crew cut the shaded fuel breaks.

West Kenai Hazard Fuels Mitigation

This project removed 200 acres of hazardous fuels as determined by Community Wildfire Protection Plans. All fuel removal will be completed by hand including hauling slash from the site and chipping or burning in place if suitable conditions exist. Hand treatments are the preferred method of treatment; mechanical equipment would be limited by slope stability, access, and the proximity to surface waters. 100 of the 200 acres have been treated. Due to the long fire season, personnel were not available to work on this project. Work will resume in 2016 and be completed in December of 2016.

Kenai Peninsula WUI Hazard Fuels Reduction & Homeowner Education & Fairbanks Homeowner Hazard Fuel Removal and Education

These 2 programs provide for hazard fuel reduction with land owner cost share grants to non- industrial landowners. A Firewise Home Assessment is conducted, and defensible space is created around homes, reducing the fire hazard and improving forest health. Landowners work with contractors



Roller-chopping hazardous fuels in Mentasta.

to perform the treatments and remove any slash. Homeowners are reimbursed at 50%. The acreage treated is about one acre per grantee. Educational and outreach materials are provided to area residents and at community events.

In Kenai pass-through grants were prepared and funds obligated for 50 new grantees. In 2015 grants were completed for 41 grantees. All treated acres are in the Kenai Peninsula Borough. The project will be completed in July 2017.

In Fairbanks pass-through grants were prepared and funds obligated for 10 new grantees. In 2015, grants were completed for 13 grantees. All treated acres are in the Fairbanks North Star Borough, with many of grantees in the North Pole community. The project will be completed in July 2016.

Mentasta Hazard Fuels

As identified in their Community Wildfire Protection Plan, the project includes improving an existing fuel break and creating additional fuel breaks and a safety zone for the village, and Firewise the houses in the village. Meetings were held with allotment owners, homeowners and the village council to ensure consent and that homes received a Firewise assessment. Fuel breaks were roller chopped and a village safety zone has been completed for a total of 81 acres treated. Homes in the village core have had trees and brush thinned around properties. Larger trees removed were made available as free firewood. Materials too brushy to chip have been stacked and burned. The remaining trees have been piled and are ready to be hauled to the chip facility where it will be processed to provide chips to heat the Mentasta School.

Tok Escape and Safety Zones

In 2015 the Tanana Chiefs Type II IA crew (TCC) began with pile burning in the spring around the areas that had



Washing fire hose at the end of the

been piled in 2014 not designated to go to the Tok School for biomass. Trees were felled and bunched along Fales and Borealis accomplishing hazard fuel clearing on almost 1.25 miles 50 feet either side of the roads. These bunches will be skid during the winter of 2015/2016 once the ground freezes with a small amount of snow to protect the ground from damage. The crew started in October burning hazardous fuels slash piles remaining from decks skid from biomass processing by the Tok School and burned over 100 piles.

The Tok Forestry 518 Cat Skidder and a contract skidder worked for a week to skid piles from TCC crew work the fall of 2014. A contract feller buncher worked to fell and bunch trees along the Scoby Road south. One mile of road was widened nearly 100 feet.

Work also preceded on the four safety zones in key locations around Tok. These four safety zones are Scoby and Borealis on the south side of Tok, Fales on the west side, Sun Dog Trail and Red Fox on the north side of Tok. Approximately 15 acres were cleared and decked in the three safety zones. The fourth was roller chopped 10 acres in the 2001 Red Fox fire safety zone with Tok Forestry D5 dozer and the small roller chopper. This was a successful completion of phase 1 of the safety zones. The Tok School will haul the decked trees to the Tok School for processing.

New Projects Awarded National Fire Plan Funding

Community Wildfire Protection Planning in the Copper River Basin

If DOF receives USDA Forest Service funding in 2016 as expected, it will give a sub grant to the Copper River Ahtna Intertribal Resource Conservation District to develop a Copper River Basin Community/Landscape Wildfire Protection Plan. The organization and its contractors will develop three Community Wildfire Protection Plans and will work with the villages of Gulkana, Gakona, and Chistochina and local agencies to develop the plan. Teams will identify risks and create an action plan to address those risks.

Kenai Pennisula State Parks Fuels Reduction Phase 1

This project will reduce hazardous fuels in three state park parcels adjacent to or incorporated into communities rated extreme or high risk for wildfire and identified as high priorities in Community Wildfire Protection Plans. During Phase 1 hazardous fuels will be removed from an estimated 240 acres of 1,450 acres targeted for treatment. The priority sites include Scot Lake Recreation Site and Morgan's Landing State Recreation Area. Due to the funding being awarded in September and late season fires in the Lower 48, work will not begin until September 2016. The goal is to hand thin and remove a minimum of 50 acres of hazardous fuel by December 2016. Interpretive signs will be made and posted in the area identified for hazard fuel removal and free firewood will be left for the public.

2015 VOLUNTEER FIRE ASSISTANCE

The Volunteer Fire Assistance program provides funds to increase firefighter safety, improve the firefighting capabilities of rural volunteer fire departments, and enhance protection in the wildland urban interface. The funds come through the U. S. Forest Service and are administered by the Division of Forestry.

In 2015, the VFA Grant Program provided \$238,833.99 to rural fire departments. The division received requests from 30 Volunteer Fire Departments for equipment, training and prevention activities and funded 30 departments.

Aviation Program

Aviation played a huge role in the Alaska Division of Forestry's firefighting efforts in summer of 2015. State-owned, contracted, and rented aircraft, flew a record 5,936 hours during the season. That included more than 2,300 hours of helicopter time, almost 650 hours of retardant tanker time and more than 1,000 hours of DOF flight time. DOF-supported aircraft also delivered a record 1,177,820 gallons of retardant and more than 1 million gallons of water on fires during the 2015 season.

During the peak of the season, nearly 100 aircraft were deployed in Alaska, the majority of which were employed by DOF. All totaled, the Division spent \$14.2 million on aviation resources in 2015.

As always, safety was the top priority for DOF's aviation fleet. Even with the huge volume of aircraft activity, 2015 marked the 13th accident/incident free year in a row for DOF, which emphasizes the Division's commitment to safety from pilots Doug Burts, Steve Elwell, Randy Weber and Chuck Greer.

For the third year in a row, DOF utilized two Convair 580, type 2 air retardant tankers supplied by Conair of Abbotsford, British Columbia. One was based in Palmer and the other at Fort Wainwright in Fairbanks. The two air tankers, T-155 and T-52 flew 180 flight hours and dropped over 318,616 gallons of retardant on fires in Alaska.

Helicopters once again played a major factor in suppression efforts around the state. Erickson Helicopters provided two long-term, type 2 helicopters in Palmer and Fairbanks; Rogers Helicopters provided three type 2 helicopters in Soldotna, McGrath, and Delta; and Temsco provided a Type 2 helicopter in Tok. Those rotorcraft were used for both initial attack and logistical support, totaling 537 flight hours during the season.

The large volume of fire on the landscape in 2015 required the movement of massive amounts of cargo and personnel. For the season, DOF-hired fixed-wing aircraft hauled 507,691 pounds of cargo and 4,386 passengers to and from fires.

Air attack officers Jason Jordet and Tim Whitesell spent long hours in the cockpit mapping and detecting fires, as well as providing aerial supervision for multiple air retardant tankers on a daily basis.

Behind the scenes and long flight hours, DOF's two-man maintenance staff of Steve Edwards and Wes Walker were busy keeping Division aircraft in top shape and faced a



This RJ85 Aeroflite is a new generation air tanker, secured through a contract with the US Forest Service. It carries 3,000 gallons of retardant in a single load.

long list of winter maintenance tasks following the busy season. Administrative assistant Candy Simmons kept the paperwork flying smoothly in the office.

State Fire Support

State Logistics Center

The State Logistics Center provided support to approximately 80 fires in Alaska and numerous Lower 48 fires during the 2015 fire season. At the peak of the season we were providing full support for 5 Type 2 Incident Management Teams and support to many other fires simultaneously. This was accomplished through coordination with 2 warehouses, 2 Buying Teams, 2 Procurement Officers, 2 Transportation Units, 2 Mobilization Centers, 7 Area Dispatch Offices, Alaska Interagency Coordination Center, and many vendors. Through efficient utilization of workforce and workspace, operations remained within the State Logistics Center (SLC) rooms while managing this huge workload. This provided continuity of operations and a large cost savings over past scenarios requiring a temporary move to a larger rented space when the workload increased. In addition SLC was able to lend or reassign dispatchers from the SLC workforce to Initial Attack Dispatch Centers to immediately meet their critical needs for assistance while additional dispatchers were en route from the Lower 48.

Transportation/Ground Support Management

Coastal and Northern Ground Support Managers also had a busy fire season. The Ground Support Units provided transportation services in support of Area and project fire operations. This included inspecting numerous vehicles and pieces of heavy equipment, picking up and transporting rental vehicles, providing transportation for personnel and supplies (in support of fires and warehouse operations), filling out hiring packets and tracking a large volume of vehicles and equipment. Between 600-800 vehicles were hired

during peak fire activity in Fairbanks, and over 300 vehicles in the MatSu and Kenai Areas. Each vehicle and piece of heavy equipment was inspected prior to hire and upon release which created a tremendous workload for all Areas and both Ground Support Units.

Vehicles were in such high demand that all sources were tapped to provide vehicles including rental car companies, Emergency Equipment Rental Agreement vendors, and even other state agencies. The governor encouraged other Commissioners to "lend a hand to DNR" and the State Forester was able to get the Department of Public Safety- Alaska State Troopers (AST) to loan vehicles to the Division of Forestry. Many of their vehicles were taken from the disposal process but AST also loaned brand new "pursuit equipped" vehicles that had not even been assigned to troopers. The complexity of the incidents and high volume of personnel added to the challenge of meeting the vehicle and equipment needs of field personnel, and the processing of claims and payment packets went on far beyond the normal timeframes.



Wayne Sanborn and Kinlee Hawkins working in the Fairbanks warehouse. Photo Tim Mowry.

Fire Warehouse System

The State Fire Warehouse System processed over 4000 issues to fires for a total of \$20.5 million and supported 210 in-state Incidents. Fire activity was heavy from early May through July. At one point, DOF was supporting seven Type II incidents at the same time. The Division borrowed \$500,000 worth of supplies from federal cooperators at the Alaska Fire Service and brought \$1.5 million in supplies and equipment from the National Fire Cache system in the Lower 48. In return, Alaska provided \$2 million in support to Lower 48 caches during their busy fire season. The warehouse outfitted more than 90 crews. Gear and quantities issued included:

- 450 miles of fire hose
- 12,900 cubies (5-gallon plastic jugs of water)
- 12,000 gallons of pre-mixed oil/gas
- 3,700 Pulaskis
- 500 chainsaw kits
- 800 pump kits
- 270,000 AA batteries most for radios
- 8300 cases of Meals Ready to Eat (MREs), about 100,000 meals
- 10,900 rolls of toilet paper
- 3,700 sleeping bags

For the first time, this year the warehouse:

- Brought up 13 Lower 48 Cache personnel to help the warehouse effectively recondition and return gear so it could be sent out again.
- Brought a Cache liaison from the Lower 48 to expedite the return of unused and unneeded supplies from different fires.
- Used the Northwest Compact to send \$1.2 million worth of supplies to the Coeur D'Alene Fire Cache. With all of the fire activity down south creating shortages, warehouse supplies were in high demand. The Northwest Compact allowed expeditious aid to the Caches, especially in the Pacific Northwest. DOF will use this process in the future to borrow and loan supplies and equipment.

EMPLOYEE RECOGNITION



MARTIN MARICLE - 35 YEARS

Martin Maricle has worked for the Division of Forestry since 1980. He began his career as the Anchorage Area Foreman, which at the time was separate from the Mat-Su Area. He then became the Southcentral Regional Logistics Coordinator. He served for almost 20 years as the Valdez/Copper River Area Forester and was an integral part of fostering interagency cooperation in the Copper Basin. He became the State Fire Support Forester in 2004 when his position was moved to Fairbanks and he took charge of statewide Logistics, Warehousing, Transportation and Communications. Martin helped create and staff the State Logistics Center and provides leadership and direction in the Fire Support Section to provide for the myriad needs for the Areas and Incident Management Teams in fire and other hazard situations.

Martin is a primary member of a National Area Command Team and has served as an Assistant Area Commander-Logistics (ACLC) for over 10 years. He has also served since 1983 as a Logistics Section Chief on Incident Management Teams (Type 1 and Type 2). His all-risk/hazard experience includes responding to four hurricanes, two floods, the Denali fault earthquake, Exxon Valdez Oil Spill, World Trade Center attack, and numerous wildland fires.

He has been a Logistics Section Chief of 25 Type 2 incidents, 24 Type 1 incidents, and 14 Area Command assignments. One of his most complex Area Command assignments was when his team was responsible for managing six IMTs during the Hurricane Rita response.

Martin started his career in fire management on a Type 2 crew with the California Ecology Corps (a predecessor of the CCC) in 1973. He worked as a seasonal employee on the Mt. Baker-Snoqualmie, Apache-Sitgreaves, and Clearwater national forests. He first came to Alaska in 1977

to work for the BLM and served as the Chicken Station Manager (aka "Chicken Man") in 1978 and 1979. He graduated from Humboldt State University with a BS in Forestry in 1979.

Martin has taught incident logistics courses for UAF for four years and taught at Prince William Sound Community College in Glennallen prior to moving to Fairbanks. Martin has co-chaired the National Logistics Workgroup for over eight years and has helped organize and facilitate the past two National Logistics Webinars. He also keeps the National Logistics mailing list and handles networking and distribution of information to the wildland fire logistics community.

Martin met his wife, Gail, in 1988 through Alaska Men Magazine and without her support and hard work Martin would not have been able to go on fire assignments throughout Alaska and all over the United States. When asked to summarize his 35 years of service he said, "It has been an honor and a pleasure to have made a career with the Division of Forestry. The division's greatest assets are the employees' comradery and dedication to serving others!"

The following employees reached notable milestones in state service in 2015. The division thanks them for their dedication and hard work in serving the State of Alaska.

30 Years

Gary Mullen, Forester III, Glennallen

25 Years

Jeff Graham, Forester II, Palmer

20 Years

John Hoch, Wildland Fire Support Services V, Fairbanks Becky Metcalf, Wildland Fire Dispatcher III, Palmer Robert Schmoll, Forester IV, Fairbanks Darla Theisen, Forester II, Fairbanks

15 Years

Sue Braund-Clark, Accountant III, Anchorage Dave Parsley, Wildland Fire Support Services IV, Fairbanks Ed Sanford, Forester II, Fairbanks Dawn Sloan, Accounting Technician II, Palmer Jim Schwarber, Natural Resource Specialist III, Fairbanks Greg Staunton, Forester IV, Ketchikan NOTE: Dollar figures are in thousands (e.g., \$40.5 is \$40,500.00)

	FOREST MGMT			
FUNDING SOURCES	& DEVELOPMENT	FIRE PREPAREDNESS	FIRE ACTIVITY	TOTALS
General Funds	\$3,617.1	\$16,487.1	\$59,070.4	\$79,174.6
Federal Funds	\$930.0	\$1,664.0	\$28,337.6	\$30,931.6
Capital Improvement				
Receipts (Fed, GF, & SDPR)	0	0	0	0
Interagency Receipts	\$298.3	\$36.1	0	\$334.4
Timber Receipts	\$428.4	0	0	\$428.4
Other (SDPR)	\$22.7	0	\$724.0	\$746.7
TOTALS	\$5,296.5*	\$18,187.2	\$88,132.0	\$111,615.7
POSITIONS				
Permanent Full-Time	38	32	0	70
Permanent Part-Time /Seasonal	4	183	0	187
Interns	13	2	0	15

FOREST MANAGEMENT & DEVELOPMENT COMPONENT

RENEWABLE RESOURCE					
DEVELOPMENT & SALES	COASTAL REGION	NORTHERN REGION	STATEWIDE	TOTALS	
Board of Forestry	0	0	\$20.2	\$20.2	
Forest Practices	0	0	\$68.2	\$68.2	
Forest Management	\$1,201.9	\$577.0	\$861.7	\$2,640.6	
Anchorage School District Interns	\$37.9	0	0	\$37.9	
Interagency Receipts	0	0	\$298.3	\$298.3	
Stat. Desig. Program Receipts					
(SDPR)	0	0	\$22.7	\$22.7	
Federal Cooperative					
Forestry Assistance	0	0	\$983.8	\$983.8	
Capital Improvement Receipts					
(Other)	\$123.4	\$159.7	\$417.6	\$754.7	
Subtotals	\$1363.2	\$736.7	\$2,726.5	\$4,803.7	
Director's Office	0	0	\$492.8	\$492.8	
COMPONENT TOTALS	\$1,363.2	\$736.7	\$3,219.3	\$5,296.5*	

FIRE SUPPRESSION PREPAREDNESS COMPONENT

	COASTAL REGION	NORTHERN REGION	STATEWIDE	TOTALS	
Preparedness	\$3,941.0	\$3,468.6	\$9,077.5	\$16,487.1	
Interagency Receipts	\$20.3	\$10.5	\$5.3	\$36.1	
Federal Cooperative					
Initial Attack	\$98.7	\$169.9	\$1,395.4	\$1,664.0	
Capital Improvement Receipts					
(Other)	0	0	0	0	
COMPONENT TOTALS	\$4,060.0	\$3,649.0	\$10,478.2	\$18,187.2	

2015 BUDGET

NOTE: Dollar figures are in thousands (e.g., \$40.5 is \$40,500.00)

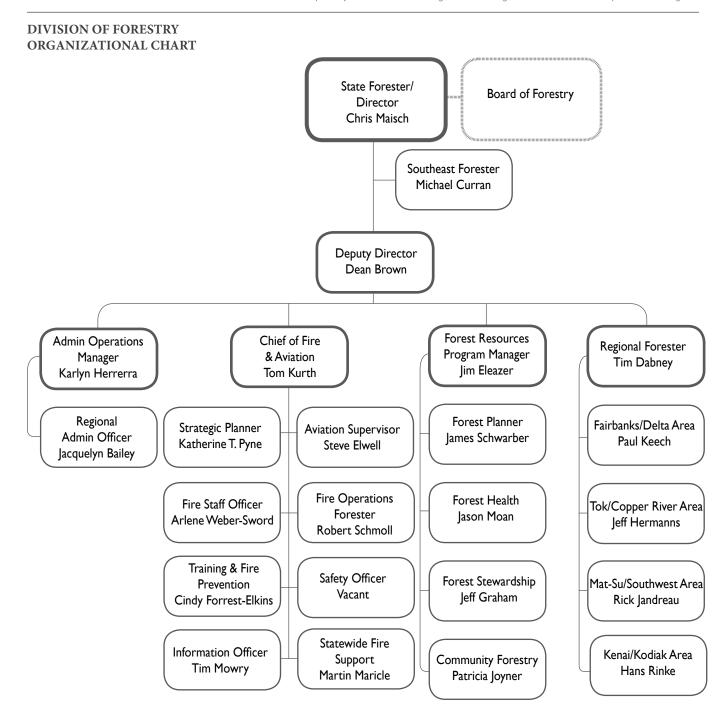
	FOREST MGMT			
FUNDING SOURCES	& DEVELOPMENT	FIRE PREPAREDNESS	FIRE ACTIVITY	TOTALS
General Funds	\$2,502.7	\$15,868.7	\$6,659.1	\$25,030.5
Federal Funds	\$1,222.0	\$1,467.0	\$11,960.4	\$14,649.4
Capital Improvement				
Receipts (Fed, GF, & SDPR)	\$255.5	\$840.9	0	\$1,096.4
Interagency Receipts	\$492.3	\$395.3	0	\$887.6
Timber Receipts	\$848.3	0	0	\$848.3
Other (SDPR)	\$30.0	0	\$1,500.0	\$1,530.0
TOTALS	\$6,594.7	\$19,696.9	\$20,123.7	\$46,415.3
POSITIONS				
Permanent Full-Time	32	29	0	61
Permanent Part-Time /Seasonal	4	169	0	173
Non-Permanent	3	2	0	5

FOREST MANAGEMENT & DEVELOPMENT COMPONENT

RENEWABLE RESOURCE				
DEVELOPMENT & SALES	COASTAL REGION	NORTHERN REGION	STATEWIDE	TOTALS
Board of Forestry	0	0	\$16.1	\$16.1
Forest Practices	0	0	\$69.9	\$69.9
Forest Management	\$1,280.0	\$748.1	\$783.6	\$2,811.7
Anchorage School District Interns	\$31.9	0	0	\$31.9
Interagency Receipts	0	0	\$492.3	\$492.3
Stat. Desig. Program Receipts				
(SDPR)	0	0	\$30.0	\$30.0
Federal Cooperative				
Forestry Assistance	0	0	\$1,222.0	\$1,222.0
Capital Improvement Receipts				
(Other)	0	0	\$290.8	\$290.8
Subtotals	\$1,311.9	\$748.1	\$2,904.7	\$4,964.7
Director's Office	0	0	\$386.1	\$386.1
COMPONENT TOTALS	\$1,311.9	\$748.1	\$3,290.8	\$5,350.8
	I	1		

FIRE SUPPRESSION PREPAREDNESS COMPONENT

	COASTAL REGION	NORTHERN REGION	STATEWIDE	TOTALS	
Preparedness	\$830.3	\$631.3	\$14,407.1	\$15,868.7	
Interagency Receipts	0	0	\$395.3	\$395.3	
Federal Cooperative					
Forestry Assistance	0	0	\$1,467.0	\$1,467.0	
Capital Improvement Receipts					
(Other)	0	0	\$840.9	\$840.9	
COMPONENT TOTALS	\$830.3	\$631.3	\$17,110.3	\$18,571.9	



2015 DIVISION OF FORESTRY DIRECTORY

State Forester's Office

550 West Seventh Avenue, Suite 1450 Anchorage, Alaska 99501-3566 269-8463 fax: 269-8931

State Forester

John "Chris" Maisch, 451-2666

Deputy State Forester

Dean Brown, 269-8476

Admin. Services Manager

Karlyn Hererra, 269-8477

Chief of Fire and Aviation

Tom Kurth, 451-2675

Forest Resources Program Mgr.

Jim Eleazer, 269-8473

Forest Planning

Jim Schwarber, 451-2704

Community Forestry Program

Patricia Joyner, 269-8465

Forest Health & Protection

(Insects and Disease) Jason Moan, 269-8460

Forest Stewardship Program

(Landowner Assistance) 101 Airport Road Palmer, Alaska 99645

Jeff Graham, 761-6309 fax: 761-6201

State Fire Operations

P.O. Box 35005

Ft. Wainwright, Alaska 99703 356-5850 fax: 356-5855

Robert Schmoll, Operations Forester

AICC Logistics: 356-5645 Intelligence: 356-5674

Training, Anchorage: 269-8441 AICC Coordinator: 356-5682

Planner: 356-5858 Fire Behavior: 356-5847

State Fire Support

3700 Airport Way

Fairbanks, Alaska 99709-4699

451-2608 fax: 451-2690

Martin Maricle, State Fire Support

Forester

State Logistics: 451-2680

State Fire Warehouse: 451-2640

Aviation Program

101 Airport Road Palmer, Alaska 99645 761-6271 Fax: 761-6273 Steve Elwell, Aviation Manager

Northern Aviation Mgmt.: 451-2691 Coastal Aviation Mgmt.: 761-6229

Northern Office

3700 Airport Way Fairbanks, Alaska 99709-4699 451-2660 fax: 451-2690 Tim Dabney, Regional Forester

Fairbanks Area Office

451-2600 fax: 458-6895 Paul Keech, Area Forester Fire line: 451-2626 Fire Ops. Fax: 451-2633 Logistics: 451-2627 Dispatch: 451-2623

Delta Office

P.O. Box 1149 Delta Junction, Alaska 99737 (Mi. 267.5 Richardson Hwy.) Paul Keech, Area Forester 895-4225 fax: 895-2125 Fire line: 895-4227

Tok/Copper River Area Office

Box 10 (Mile 123.9 Tok Cutoff) Tok, Alaska 99780 883-1400 fax: 883-5135 Jeff Hermanns, Area Forester

Fire line: 883-3473

Valdez/Copper River Area Office

P.O. Box 185

Glennallen, Alaska 99588 (Mi. 110 Richardson Hwy.) 822-5534 fax: 822-8600 Gary Mullen, Fire Management

Officer

Coastal Office

101 Airport Road Palmer, Alaska 99645 Reception 761-6200

Mat-Su/Southwest Area Office

761-6301 Fax 761-6319 Rick Jandreau, Area Forester

Dispatch: 761-6220 Fire line: 761-6311 Burn Permit: 761-6338

Southwest Area Office (Seasonal)

Box 130

McGrath, Alaska 99627 524-3010 fax: 524-3932

Fire Management Officer, Vacant

Fire line: 524-3366

Kenai-Kodiak Area Office

42499 Sterling Highway Soldotna, Alaska 99669 (Mi. 92.5 Sterling Hwy.) 260-4200 fax: 260-4205 Hans Rinke, Area Forester Fire line: 260-3473 Burn Permit: 260-4269 Dispatch: 260-4232

Haines Area Office

P.O. Box 263 (Gateway Building) Haines, Alaska 99827 766-2120 fax: 766-3225

Southeast Area Office

2417 Tongass Avenue, Suite 213 Ketchikan, Alaska 99901 225-3070 fax: 247-3070 Mike Curran, Regional Forester