



**Goal:** To address the findings and recommendations of the North Shore Kenai Lake Prescribed fire review report of July 8, 2001. To strengthen the Alaska Region's prescribed fire policies, standards and procedures. To insure that future burn plans are: based upon the best information available, coordinated with other agencies and local communities, reviewed for technical accuracy, and implemented with minimal risk to personal property and public and employee safety.

**Introduction:** Many actions to address the findings and recommendations of the North Shore Kenai Lake Prescribed Fire Review report will involve coordination between responsible cooperating agencies involved in wildland fire management in Alaska. Approval of this Action Plan will trigger the implementation of actions for which the U.S. Forest Service has sole or part responsibility. The Forest Service will continue to work with cooperating agencies to implement action items where enhanced coordination is appropriate. Implementation of other actions recommended by cooperating agencies will be their responsibility. These actions may warrant involvement of each agency at various levels of their organizations. These actions, the persons involved and the associated timelines are displayed in this action plan.

**Finding - 1:** The Alaska Region Forest Service Manual (FSM) 5140 supplement (completed in 1999) is outdated, which affects the Forest Prescribed Fire Guidelines (completed in 1997) contained in the Chugach National Forest Fire Management Plan (completed in 2001).

**Report Recommendation:** Revise the Regional FSM 5140 supplement and the Forest Prescribed Fire Guidelines to be consistent with the Forest Service National manual and the Federal Fire Policy.

**Action:**

1. Complete Alaska Region Supplement FSM 5140.
2. Complete the Chugach National Forest (CGF) prescribed fire guidelines.

**Responsible Line Officer:**

1. Deputy Regional Forester for State and Private Forestry (DRF for SPF).
2. Forest Supervisor(s).

**Who should be involved?**

1. DRF for SPF and Regional Fire Staff.
2. Forest Supervisors, Forest Fire Management Officer (FMO) and District FMO.

**When should this task be completed?**

1. Completed May 2002.
2. Late summer of 2002.

**Finding - 2:** Implementation of the National Fire Plan has created performance expectations in field personnel leading to stresses from:

- unprecedented high acreage targets for hazardous fuels reduction;
- using prescribed fire as an expedient treatment solution;
- limited timeframes for accomplishment;
- competing resource management priorities,
- higher public expectation for insuring safety and protecting property, and uncertainty of continued out-year funding and program support.

**Report Recommendation:** Top leadership must promote an environment for intelligent and responsible decision making in the implementation of the National Fire Plan, especially where prescribed fire is the proposed treatment method. Employees must feel agency commitment, endorsement, and support to “do the right thing” and “do the thing right” regardless of compelling circumstances.

**Action:** Use Region, Forest and District level leadership team meetings, employee project and safety briefings, and other opportunities to renew commitment that the Forest Service’s highest priority is to ensure public and employee safety when implementing all National Fire Plan activities, especially those involving the use of fire.

**Responsible Line Officer:** DRF for SPF, Forest Supervisor and District Ranger.

**Who should be involved?** Regional Fire Staff, Forest and District FMO’s.

**When should this task be completed?** Continuing on an annual basis.

**Finding - 3:** The Alaska Regional manual supplement describing Delegation of Burn Plan Approval authority is not consistent with the national direction. The regional supplement does not describe the “requisite” qualifications and experience requirements for District Rangers.

**Report Recommendation:** Update the Regional supplement for Delegation of Burn Plan Authority. Clarify the delegation authority for prescribed fire plan approval, specify what complexity levels of burns can be delegated and what qualification the delegated official must have. Update the Forest Delegation of Authority.

**Action:**

1. Include authority direction in the FSM 5140 update.
2. Include Forest direction in the Forest Fire Management Plan.

**Responsible Line Officer:**

1. DRF for SPF
2. Forest Supervisor.

**Who should be involved?**

1. Regional Fire Staff.
2. Forest and Seward Ranger District FMO's;

**When should this task be completed?**

1. Completed May 2002.
2. Late summer of 2002.

**Finding - 4:** As the District implemented the prescribed fire; back up personnel to fill critical positions were non-existent. The District's ability to train, get experience, keep current fire and resource personnel to plan and implement prescribed burns is limited. This is due to limited prescribed fire activity, lack of interagency involvement and recognition of the potential workload.

**Report Recommendation:** The Forest and District should use red-carded Borough, State, Volunteer Fire Departments and other Federal Agencies to support planning and implementation of prescribed fire. The district needs to support other agencies' activities by involving its personnel in cooperating agency projects to build experience and training.

**Action:**

1. Strengthen interagency prescribed fire cooperation through increased coordination of activities at the Forest and District levels with counterparts in other local, State and Federal agencies and organizations.
2. Expand opportunities for training and experience in planning and implementing hazardous fuel reduction projects.

**Responsible Line Officer:** Forest Supervisors.

**Who should be involved?** Forest and District FMO's, Cooperating Agencies, Regional Fire Staff.

**When should this task be completed?** Continuing on an as needed basis; at least annually.

**Finding - 5:** Coordination with other agencies and organizations (federal, state, municipal, and private) regarding fuel treatment planning, timing, and scheduling is lacking.

**Report Recommendation:** The Chugach National Forest must collaborate with other federal and state cooperators, private organizations, and the public to develop a coordinated, comprehensive fuel treatment program that utilizes the full array of treatment alternatives across jurisdictional boundaries.

**Action:** Meet with the Alaska Division of Forestry, other State agencies, federal agencies, and local community leaders to initiate the development of an interagency hazardous fuel reduction program with enhanced coordination process. See Action for Finding - 21.

**Responsible Line Officer:** Forest Supervisor and affected District Ranger(s).

**Who should be involved?** District Fire Staff, Regional Fire Staff.

**When should this task be completed?** Continuing on an annual basis. Work has already begun (April, 2002) in Moose Pass, Cooper Landing and Hope areas.

**Finding - 6:** There was a significant gap between SRD and cooperating local government, state, and other federal agencies in communication about the prescribed fire. This included all phases from the pre-burn planning process, burn plan implementation, to the escape and subsequent wildland fire.

**Report Recommendation:**

1. SRD and CGF need to work together to develop comprehensive contact lists to ensure that all interested parties in the immediate vicinity and in surrounding areas are contacted in a timely manner with concise, accurate information on all phases of the prescribed fire program.
2. A concerted effort must be made to inform and involve all of the local government, state and other federal agencies that have an interest in the prescribed fire program. Involvement of these organizations, especially local residents, will improve the dissemination of information and reduce the misinformation propagation that occurred during the North Shore Kenai Lake Prescribed Fire.

**Action:**

1. Prepare comprehensive contact list to be included in all burn plans that includes a positive completion checklist.
2. Prepare a comprehensive Communications Action Plan check list for future use as related to prescribed fire projects, and ensure that a CAP is completed for with each prescribed fire burn plan. When completed post on Forest website.

**Responsible Line Officer:** Forest Supervisor and District Ranger.

**Who should be involved?** Forest Public Affairs Officer and District Information specialists in coordination with District FMO and prescribed fire planning specialist.

**When should this task be completed?**

1. Summer 2002.

2. March 2003.

**Finding - 7:** The SRD personnel felt that according to direction in FSH 5109.34 they could not use local government fire department personnel on the burn because of a lack of training and NWCG fire qualifications (red card) and the Forest Service restriction of not hiring Administratively Determined (AD) (emergency hiring) workers on prescribed fire.

**Report Recommendation:** Two recommendations: 1. In cooperation with the Division of Forestry, local government fire personnel should be trained and red carded to appropriate NWCG positions. 2. The Forest Service should examine its policy of not allowing the use of AD hires in prescribed fire and change that policy if possible. If this policy cannot be changed, then work with the State of Alaska to obtain qualified and red-carded personnel to assist in prescribed fire activities.

**Action:**

1. In coordination with the Alaska Division of Forestry, promote training opportunities and funding for local government and volunteer fire departments so that their members and employees can qualify for fire assignments. Training to qualify Forest Service personnel for red cards will continue.
2. Verify with National Headquarters the current authority to use AD hires on prescribed fires.

**Responsible Line Officer:**

1. DRF for S&PF, Forest Supervisor(s).
2. DRF for S&PF

**Who should be involved?**

1. Regional Fire Staff; Forest and District FMO's.

## 2. Regional Fire Staff

**When should this task be completed?** Continuing on an annual basis; March, 2004

**Finding - 8:** SRD personnel felt that they could not utilize state personnel of a problem with the current agreement between the Forest Service and the State of Alaska. This appears to be a perception problem as there is the opportunity to utilize state personnel under the current agreement.

**Report Recommendation:** The new State of Alaska - Forest Service Master Agreement should be finalized. The Annual Operating Agreement between CGF and the Division of Forestry, Coastal Region needs to be reviewed and updated prior to the 2002 fire season. Personnel at the district level should also be educated in the process for obtaining cooperating agency resources.

**Action:**

1. Finalize Agreement.
2. Complete Annual Operating Plan (AOP) for Region and Forests. District FMO's to share AOP information with district personnel.

**Responsible Line Officer:** DRF for SPF; Forest Supervisor

**Who should be involved?** Forest FMO and Seward RD FMO; Forest Supervisor

**When should this task be completed?**

1. Agreement was finalized in October 2001.
2. Forest AOP will be completed within two months after receipt of the Regional AOP.

**Finding - 9:** The Forest Prescribed Fire Guidelines specify an annual update for Appendix G, but this document has not been updated in four years.

**Report Recommendation:** Update Appendix G (Forest Prescribed Fire Guidelines) on an annual basis.

**Action:** Update Forest Prescribed Fire Guidelines.

**Responsible Line Officer:** Forest Supervisor

**Who should be involved?** Forest FMO; Seward RD FMO.

**When should this task be completed?** Annually by April 1.

**Finding - 10:** The Forest Prescribed Fire Guidelines of the Chugach National Forest Fire Management Plan is identified as a required component of every Prescribed Fire Plan. This document was not attached to the North Shore Kenai Lake Prescribed Fire Plan or was otherwise discarded by some members of the burning team.

**Report Recommendation:** Every prescribed fire plan must contain all required parts or it is not compliant with Forest policy.

**Action:** All related documents would be attached to any burn plan.

**Responsible Line Officer:** Forest Supervisor or District Ranger.

**Who should be involved?** Seward FMO; Chugach FMO; Burn Boss.

**When should this task be completed?** Required for Burn Plan approval.

**Finding - 11:** The North Shore Kenai Lake Burn Plans identified the burns as “Complex”. The District Ranger approved these plans. Forest policy states that Complex burn approval is retained by the Forest Supervisor and not delegated to the District Rangers (see Chugach National Forest Fire Management Plan, Appendix E, Delegation of Authority for Prescribed Burn Plans).

**Report Recommendation:** Follow identified approval process for Complex prescribed burns found in FSM 5140.

**Action:** Follow identified approval process for Complex prescribed burns requiring Forest Supervisor approval.

**Responsible Line Officer:** Forest Supervisor

**Who should be involved?** Forest FMO, District FMO and Burn Boss

**When should this task be completed?** Prior to completion of any Complex prescribed burn plan

**Finding - 12:** A perceived funding cap limited prescribed fire planning and implementation tactics.

**Report Recommendation:** Clarify funding capabilities, opportunities, and ability to use AD authorities, agreements, and other authorities to ensure that resources needed for prescribed burns are available.

**Action:** Strengthen prescribed fire planning skills to more accurately assess the capability to successfully implement a prescribed fire within available funding constraints.

**Responsible Line Officer:** Forest Supervisor or District Ranger (depending on burn complexity and personal experience).

**Who should be involved?** Forest Supervisor or District, Forest FMO and District FMO and Burn Boss, Regional Fire Staff.

**When should this task be completed?** During development of Prescribed Fire Plan.

**Finding - 13:** Even though the prescribed fire complexity rating was identified in the burn plan, the review team found no evidence that a Prescribed Fire Complexity Rating as required by national policy was completed. Forest Service manual 5142.1 Determining Prescribed Fire Complexity calls for the use of National Wildfire Coordinating Group (NWCG) Prescribed Fire Complexity Rating System Guide (NFES 2474) for the initial determination.

**Report Recommendation:** Use National Wildfire Coordinating Group (CWCG) Prescribed Fire Complexity Rating System Guide (NFES 2474) to rate prescribed fire complexity and includes complexity worksheet in all burn plans. Refer to using this guide in the Chugach Forest Fire Management Plan, and R-10 5140 manual supplement.

**Action:** Include NFES 2474 direction into prescribed fire plans by using the FSM 5140 R-10 Supplement prescribed burn format outline.

**Responsible Line Officer:** DRF for SPF.

**Who should be involved?** Regional Fire Staff.

**When should this task be completed?** FSM 5140 R-10 Supplement completed May 2002. All new prescribed fire plans will be developed using new rating system.

**Finding - 14:** The same individual prepared, reviewed, and implemented the North Shore Kenai Lake Prescribed Fire Burn Plan.

**Report Recommendation:** Prescribed fire plans should receive a technical review by at least one additional individual with equal or higher prescribed fire qualifications. This individual cannot be directly associated with development of the plan.

**Action:**

1. The preparation and review of the burn plan will be accomplished by two different individuals who are qualified Prescribed Fire Planning Specialists.
2. Explore options that recruit and train additional staff, train existing staff, or utilize personnel from other Forests to provide quality control.

**Responsible Line Officer:** Forest Supervisor and District Rangers.

**Who should be involved?** Forest FMO's, District FMO's and prescribed fire planning specialist

**When should this task be completed?** Prior to Fire Plan Approval.

**Finding - 15:** All prescribed plan including aerial ignition require the review and approval of the Forest Aviation Officer. This procedure is outlined in Chugach National Forest Prescribed Fire Guidelines. The Forest Aviation Officer did not sign the North Shore Kenai Lake Prescribed Fire Burn Plans (#19 A-C, F and #20 A-P, 21A).

**Report Recommendation:** Follow existing forest policy for aerial ignition prescribed fire plans.

**Action:** Ensure adherence to prescribed fire guidelines are accomplished and documented.

**Responsible Line Officer:** Forest Supervisor or District Ranger.

**Who should be involved?** Forest Aviation Officer, Forest FMO and District FMO.

**When should this task be completed?** Ongoing.

**Finding - 16:** The site-specific burn plan does not list planned contingency resources as required by the Chugach National Forest Prescribed Fire Guidelines.

**Report Recommendation:** Follow contingency direction as outlined in section 13 of the Chugach National Forest Prescribed Fire Guidelines.

**Action:** Ensure adherence to established prescribed fire guidelines. Follow contingency direction as outlined in the Chugach National Forest Prescribed Fire Guidelines.

**Responsible Line Officer:** Forest Supervisor.

**Who should be involved?** Forest FMO and Seward RD FMO; prescribed fire-planning specialist.

**When should this task be completed?** Ongoing.

**Finding - 17:** The district approved and implemented prescribed fire burn plans originally prepared in 1999. They were re-approved in 2001 with no substantial changes and no apparent application of the lessons learned from escaped prescribed fires in other parts of the country.

**Report Recommendation:** It is essential that the latest and best information be used in the development of prescribed fire burn plans to maximize probability of success and safe project implementation.

**Action:** Annually update Forest prescribed fire guidelines and Forest Fire Management Plans to reflect direction and guidance that is based on the latest available technology and "lessons learned".

Immediately before implementing a prescribed fire, consult with prescribed fire experts inside and outside the Forest Service to ascertain whether new developments in technology or "lessons learned" should be used to help ensure a successful project. See also Action for Finding - 20.

**Responsible Line Officer:**

1. DRF for S&PF
2. Forest Supervisors and District Ranger

**Who should be involved?**

1. Regional Fire Staff
2. , Forest and District FMO's, prescribed fire-planning specialist.

**When should this task be completed?**

1. Annually
2. During preparation of the prescribed burn plan and immediately prior to project implementation.

**Finding - 18:** Insufficient firefighting and resource personnel were available to assist during the implementation of the Prescribed Burn. Specific individuals were assigned both prescribed fire and initial attack responsibilities.

**Report Recommendation:** The Forest and District must ensure initial attack capability is not compromised during prescribed fire implementation. Additional personnel were necessary to permit assignment of specific individuals to either prescribed fire activities or initial attack responsibilities. Potential assistance could be obtained from the Tongass NF, State of Alaska, Division of Forestry or the local Volunteer Fire Departments. This could require training, equipment and assistance for Hire Agreements for wildfire suppression and prescribed fire operations.

**Action:** Both district initial attack and prescribed fire personnel will be designated in the burn plan. If a burn plan identifies needs exceeding Ranger District capabilities, then additional resources will be identified and requested prior to ignition.

**Responsible Line Officer:** Forest Supervisor or District Ranger

**Who should be involved?** Forest FMO, District FMO and prescribed fire planning specialist

**When should this task be completed?** Completed at the Operational Briefing prior to ignition

**Finding - 19:** The decision making process surrounding the 2001 Kenai Lake Prescribed Fire was based significantly on the outcome of the 1999 Kenai Lake Prescribed Fire in the absence of the full understanding of the fire danger differences between the two years.

**Report Recommendation:** Establish a process that uses the appropriate fire danger and fire behavior system to challenge and verify intuitive judgments (the Canadian Forest Fire Danger Rating System is the standard used for most agencies in Alaska). Seasonal Fire danger should be tracked using normal and extreme values, and should be used in the decision making process.

**Action:**

1. Follow R-10 FSM 5140 direction. Consult both the National Fire Danger Rating System and the Canadian Fire Danger Rating System as appropriate for enhanced decision making.
2. Include Remote Area Weather Station (RAWS) information to establish normal and extreme values based on historical weather data as appropriate

**Responsible Line Officer:** Forest Supervisor or District Ranger

**Who should be involved?** Forest FMO, District FMO, prescribed fire planning specialist and Forest Dispatcher

**When should this task be completed?** During preparation of prescribed burn plan

**Finding - 20:** The burn was implemented on a day with weather predictions for humidity and temperatures on the dry and warm end of the approved burn prescription. Warm temperatures and low relative humidity conditions were predicted and continued to exist until the fire was declared a wildland fire. Note: This last sentence is inaccurate and should read as follows: Warm temperatures and low relative humidity conditions were not predicted, rather, the prediction was for an increase in humidity.

**Report Recommendation:** The Chugach National Forest should, with its own staff and/or a team of fire behavior experts from cooperating agencies, utilize fire behavior predictive technology to develop new prescriptions for this fuel type.

**Action: 1.** Consult with fire behavior prediction experts, inside and outside the Forest Service, including the research community (Pacific Northwest Forest Experiment Station), to assess whether latest available fire behavior predictive technology warrants the development of new and site specific prescriptions for areas impacted by spruce bark beetle infestations.

**2. Depending on the consultation, develop new prescriptions.**

**Responsible Line Officer:** Forest Supervisor

**Who should be involved?** Forest FMO, District FMO and prescribed fire planning specialist, Regional Fire Staff

**When should this task be completed?**

1. Fall 2002
2. Winter 2002-03

**Finding - 21:** Coordination among Alaska agencies is very good for wildland fire suppression; however, this coordination does not extend to prescribed burning situations.

**Report Recommendation:** The Alaska Wildland Fire Coordinating Group and other interested organizations should establish interagency/cooperator partnerships for planning and implementing hazardous fuel treatment projects on the Kenai Peninsula as an example to be expanded for the remainder of Alaska.

**Action:** Promote and charter a multi-agency "Hazardous Fuels Management Steering Committee" for the Kenai Peninsula to identify common objectives, coordination opportunities for shared resources, and sharing of information.

**Responsible Line Officer:** DRF for SPF, Forest Supervisor

**Who should be involved?** Forest FMO and Regional Fire Staff

**When should this task be completed?** December 2002

**Finding - 22:** There are underutilized opportunities to join funds and efforts to address the bark beetle infestation on the Kenai Peninsula.

**Report Recommendation:** Explore all Forest program funding avenues and partners to maximize and leverage funds to treat hazardous fuels in a cooperative manner. Utilize the Kenai Peninsula Borough Fire Science Technical Committee as a potential vehicle to coordinate efforts and resources on the Kenai Peninsula.

**Action:** Coordinate fuels treatment projects with Kenai Peninsula partners. Example is work currently being accomplished in the Moose Pass area. Forest FMO continues serving as a member of the Kenai Peninsula Borough Fire Science Technical Committee.

**Responsible Line Officer:** Forest Supervisor

**Who should be involved?** Forest FMO

**When should this task be completed?** Continuing

**Finding - 23:** The fire is an example of difficulties faced during implementation of landscape-scale prescribed fire applications. Proper means to measure and mitigate the social, environmental, and economic concerns and risks must be developed and applied by all agencies.

**Report Recommendation:** Federal, state, local, and non-government land managing agencies and organizations must pursue and reach agreement on common guidelines and protocols for completing complex prescribed burns and achieve the highest levels of interagency understanding, standardization, and cooperation. Development of and full understanding and endorsement of and adherence to standardized prescribed fire and fuel treatment planning and implementation procedures are an immediate and priority programmatic need. Other possible management considerations include: Coordinate prioritization and sequencing of fuel treatment across jurisdiction boundaries to collaborate, mitigate and minimize conflicts; enhance community support and maximized public safety. Seek alternative means and funds to treat hazardous fuel in the urban interface. To improve cooperation and effectiveness across all agencies, aggressively use Firewise recommendations to treat nearby structures, conduct interagency emergency management disaster drills, preparedness exercise and training, and after-action assessments. Ensure agreements and authorities exist and are understood for sharing resources and information across agencies, for emergency and non-emergency activities. Explore other authorities or expand existing authorities to use Federal funds on non-federal lands to meet objectives of the National Fire Plan.

**Action:** When the Kenai Peninsula "Fuels Management Steering Committee" is established, coordination and cooperation will be addressed for all partners on the Kenai Peninsula (see action item for Finding 21).

**Responsible Line Officer:** Forest Supervisor.

**Who should be involved?** Forest FMO.

**When should this task be completed?** After establishment of the Fuels Management Steering Committee.

**Finding - 24:** The burn ban/closure and burn permit process and required areas that the State and the Chugach NF implemented created confusion with the public and the agencies.

**Report Recommendation:** Region 10 State & Private Forestry and the State of Alaska, Division of Forestry need to rewrite and clarify the burn ban/closure and burn permit process and required areas and terminology prior to the start of the 2002 fire season and inform the public. Involvement of the other local government, state, and federal agencies will be necessary to ensure consistency. All agencies need to endorse and adhere to the burn ban/closure process to present a clear and unified image and example to the public.

**Action:**

1. Work with the Alaska Division of Forestry to review and clarify, as needed, the burn restriction/ban and closure process and document it in the annual operating plan.
2. Work with the Alaska Division of Forestry to develop consistent terminology.
3. Coordinate statewide acceptance of consistent terminology through the Alaska Wildland Fire Coordinating Group.
4. Communicate standard terminology and policy to the public via news releases in local newspapers annually.

**Responsible Line Officer:** DRF for SPF, Forest Supervisor

**Who should be involved?** Forest FMO, Regional Fire Staff.

**When should this task be completed?** September 30, 2002.

## Approval

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Deputy Regional Forester for State and Private Forestry

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Date

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Chugach National Forest Supervisor

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Date

## Action Plan Participants

The following individuals participated in various phases the action plan development:

|                 |                                    |         |
|-----------------|------------------------------------|---------|
| Gary Lehnhausen | Regional Fire Program Manager      | USDA-FS |
| Mike Stubbs     | Forest Aviation/Fire Mgmt. Officer | USDA-FS |
| Mark Black      | Fire Management Officer            | USDA-FS |
| Bill Beebe      | Fire Management Officer            | ADNR    |
| Doug Newbold    | Fire Management Officer            | USFWS   |
| Tom Marok       | Fire Management Officer            | ADNR    |
| Warren Oja      | Vegetation Management Specialist   | USDA-FS |