

## Introduction

The purpose of this document is to provide an analysis of the document entitled “DNRC Fire Program Critical Resource Needs – January 2008” to assist the Fire Suppression Interim Committee (FSIC) with their deliberations regarding potential budget items for the Forestry Division of the Department of Natural Resources and Conservation (DNRC).

The traditional budget analysis format was utilized to provide a view of the critical resource needs identified by DNRC as if it was the actual executive request. Each itemized resource is listed in decision package format and is followed by a brief justification. These items are followed by commentary by the Legislative Fiscal Division analyst in the form of issues and comments.

In order to adapt this format, two assumptions were made. First, costs provided on the DNRC spreadsheet were for one year only (it was doubled to obtain a biennial amount). Second, all packages were funded based on current state policy of one-third forest protection fees (state special revenue) and two-thirds general fund.

## Program Description

The Forestry Division is responsible for planning and implementing forestry programs statewide. Forestry responsibilities include protecting natural resources from wildfire, regulating forest practices, and providing a variety of services to private forest landowners. Specific programs include:

- Fire and Aviation Management - Protecting 50 million acres of state and private forest and watershed lands from wildfire through a combination of direct protection and county support.
- Forest Practice Regulation - Enforcing Montana's streamside management zone regulations and monitoring the voluntary best management practices program on all forests in Montana.
- Administering Montana Fire Hazard Reduction Law - Ensuring that the fire hazard created by logging and other forest management operations on private forest lands is adequately reduced, or that additional fire protection is provided until the hazard is reduced.
- Providing Forestry Services - Providing technical forestry assistance to private landowners, businesses, and communities.
- Tree and Shrub Nursery - Growing and selling seedlings for conservation and reforestation plantings on state and private lands in Montana.

## Program Performance

A critical goal of this program is to achieve an initial attack rate of 95 percent, meaning that the staff and resources of the division are utilized to keep 95% of direct protection area fires to ten acres or less. The actual initial attack rates are as follows:

- 2005 - 97.3 percent: 218 of 224 fires
- 2006 - 94.6 percent: 368 of 389 fires
- 2007 - 93.8 percent: 411 of 438 fires

The initial attack rate has fallen off in the past two years, which were more severe than the average year. The reasons for the variance from the goal may include:

Fire Location – more difficult terrain

Lack of Resources – unable to obtain and utilize resources in a timely manner

Several of the prioritized needs have the goal of increasing initial attack capacity.

The department also tracks on the amount and scope of forestry assistance provided to landowners, businesses and communities. Data is available on the amount of assistance provided in terms of contacts, streamside violations, or hazard reduction agreements.

<b>LFD ISSUE</b>	<p><u>Performance Measurement</u></p> <p>The department publishes output data in relation to forestry goals and objectives. The information does not illustrate what benefit is provided to whom with the utilized resources. If output data is to be tracked, then it should at least be compared to a baseline. The committee may wish to address the need for increased performance measurement.</p>
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**Critical Needs - Highlights**

Forestry Division
Major Highlights of Critical Resource Needs
<ul style="list-style-type: none"> <li>◆ Priority 1 list contains 26.04 FTE and \$5.0 million in funding over the biennium, of which \$2.0 million is for one-time only issues, such as                             <ul style="list-style-type: none"> <li>▪ The development of an additional 20 county co-op engines</li> <li>▪ Cost share assistance for private land owners to reduce fuel loads</li> </ul> </li> <li>◆ Priority 2 list contains an additional 15.0 FTE and \$1.9 million in funding over the biennium of which \$325,000 is one-time only for helicopter and fuel truck development.</li> <li>◆ The total of both lists:                             <ul style="list-style-type: none"> <li>▪ 41.04 FTE</li> <li>▪ \$9.3 million of which \$3.0 million is one-time only</li> </ul> </li> </ul>
Major LFD Issues
<ul style="list-style-type: none"> <li>◆ Justifications provided are mainly based on potential savings from an average fire season.</li> <li>◆ Performance measurement needs to be integrated into program expansion to assure progress is being made.</li> <li>◆ An increase in fire protection fees may be need to occur.</li> </ul>

**Funding**

Currently, the department is required to collect up to one-third of the state’s fire protection appropriation from private landowners through a forest protection fee. The other two-thirds are funded with general fund. The department is required to levy the fee so that collections equal the amount appropriated by the legislature. This policy was applied to all items listed in the critical resource need document.

**Priority 1**

The “Priority One” table shows the 10 critical resource needs ranked by the department. For the purpose of this analysis, the assumption was made that these requests would be funded under the current 1/3 fire protection fee and the 2/3 general fund formula. Base year numbers were provided by DNRC and were doubled to show the potential biennial impact. As these numbers are estimates, they will vary from what is presented to the executive for potential inclusion in the executive budget during the upcoming executive planning process (EPP).

	FY 2010				FY 2011			
	FTE	GF	Protection Fee	Total	FTE	GF	Protection Fee	Total
P1 - 1 <i>Extend Engine Crews to 7 days/week</i>	7.0	\$173,334	\$86,666	\$260,000	7.0	\$173,334	\$86,666	\$260,000
P1 - 2 <i>Extend Aviation Coverage to 7 days/week</i>	6.79	313,231	156,615	469,846	6.79	313,213	156,615	469,846
P1 - 3 <i>County Rural Fire Coordinators</i>	2.0	124,667	62,333	187,000	2.0	124,667	62,333	187,000
P1 - 4 <i>Fire Business Specialists</i>	4.0	200,000	100,000	300,000	4.0	200,000	100,000	300,000
P1 - 5 <i>Operations Section Supervisor</i>	1.0	63,334	31,666	95,000	1.0	63,334	31,666	95,000
P1 - 6 <i>Fire Safety Specialist</i>	1.0	56,667	28,333	85,000	1.0	56,667	28,333	85,000
P1 - 7 <i>Dispatch Center Staff</i>	4.25	106,667	53,333	160,000	4.25	106,667	53,333	160,000
P1 - 8 <i>County Engines - OTO</i>	0	333,334	166,666	500,000	0.0	333,334	166,666	500,000
P1 - 9 <i>Fuels Mitigation Fund - OTO</i>	0	333,334	166,666	500,000	0.0	333,334	166,666	500,000
P1 - 10 <i>Aviation Hangars - (Capital Appropriation)</i>	0	466,667	233,333	700,000	0.0	0	0	0
<b>Tota Priority One</b>	<u>26.04</u>	<u>\$2,171,235</u>	<u>\$1,085,611</u>	<u>\$3,256,846</u>	<u>26.04</u>	<u>\$1,704,550</u>	<u>\$852,278</u>	<u>\$2,556,846</u>

**P1 -1 Extend Engine Crews to 7 days/wk**

Add or extend season positions on DNRC engines to provide 7 days/wk coverage. FTE allocation is 1.6 FTE to the central land office, and 2.7 FTE to both the northwest and southwest land offices. Operations funding of \$50,000 per year is included for equipment needs and increased fuel.

*Justification Provided:* This package has the potential to prevent two 1000+ acre wildfires/year through increased initial attack success. This package may also reduce severity costs. Current staffing for engine initial attack has been static for the past 20 years. The potential biennial savings is \$6.0 million.

<b>LFD COMMENT</b>	The justification is based on the prevention of wildfires. If the potential avoided costs of \$6.0 million over the biennium were realized, the return on investment for this package is 1053 percent. As this is a direct increase to the initial attack program, the outcome of the investment could be measured by adjusting the initial attack goal to 97% of fires held to ten acres or less.
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**P1 – 2 Extend Aviation Coverage to 7 days/wk**

Staff helicopters with a manager, crew and fuel truck driver. Package includes three seasonal pilots, three seasonal managers and two 2 person crews, three seasonal fuel truck drivers, and a full time aviation specialist. This amount also includes \$63,000 per year of minor capital and operations funding.

*Justification Provided:* This package has the potential to prevent two 1000+ acre wildfires/year. Full deployment of DNRC helicopters will decrease suppression costs. An aviation specialist will increase coordination and safety of the entire aviation program. The potential biennial savings is \$6.0 million.

**LFD COMMENT** The justification is based on the prevention of wildfires. If the potential avoided costs of \$6.0 million over the biennium were realized, the return on investment for this package is 538 percent. The outcome of this investment could also be tracked by adjusting the initial attack goal to 97% of fires held to ten acres or less.

P1 – 3 County Rural Fire Coordinators

Add rural fire specialist at the Northeastern and Southern Land Offices where only one fire staff position currently exists. This request includes \$50,000 in minor capital and \$20,000 in operations on a yearly basis.

*Justification Provided:* Currently at the Northeastern and Southern Land Offices, there is not sufficient state oversight if there is more than one county assistance fire.

**LFD ISSUE** Performance Measurement - The duties of a rural fire coordinator include oversight of county assistance fires, as well as training of local government entities. The “value” of this position is improved firefighter safety and local coordination. The committee may need to quantify and measure how this value will provide to the overall fire program. Is it:

- Through increased presence in rural areas to improve coordination?
- Reduced accidents on county assist incidents?
- Increased training opportunities?
- More on-the-ground management of fuel reduction programs?

P1 – 4 Fire Business Specialists

Provider two additional fire business staff within the Fire and Aviation Management Bureau and four half time positions in field offices. This package includes \$10,000 in operations funding for each FTE, each year of the biennium.

*Justification Provided:* This proposal could increase fiscal oversight during and after fire season operations, to work as incident business advisors and audit fire bills at fire season end. The potential cost savings of this proposal is approximately \$750k in expenditures per year.

**LFD ISSUE** Trial Run Available  
 The department has the flexibility to hire the short term workers into such positions during the next fire season. The department could hire these individuals and track their activities to determine the magnitude of cost savings from utilizing these individuals. This would aid in establishing the value of the permanent positions.

No support for Centralized Services Division (CSD):  
 This package, as written, does not include support for the CSD of DNRC who must manage the cash flow, billing of federal partners and finalization of packages. Such an individual could, potentially, complete more thorough internal audits of fire costs, potentially saving the state money. The committee may want to consider:

- A specific FTE for the Centralized Service Division
- Reduce this package by 1.0 FTE and increase the Centralized Services staff by 1.0 FTE.

Performance Measurement Needed  
 The committee may wish to inquire how the agency intends to track the performance of the role of fire business specialists, whether house in the Fire and Aviation Management Bureau or the Centralized Services Division, in terms of reducing or eliminating unnecessary fire costs.

**LFD COMMENT** If the potential avoided costs of \$1.5 million over the biennium were realized, the return on investment would be 150 percent.

P1 – 5 Operations Section Supervisor

Operations Section Supervisor to assist Fire and Aviation Management Bureau Chief. This package includes \$20k capital and \$10k operations annually.

*Justification Provided:* Currently, there is insufficient fire staff to effectively manage fire operations across the state and represent DNRC within the Northern Rockies Coordinating Group.

<b>LFD ISSUE</b>	<u>Increased Management Layer</u> -This adds a new managerial level to the Fire and Aviation Management Bureau. Additional information may be needed to determine the role this person would have, such what role would they plan in day-to day management, and how would success of this position be measured.
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P1 – 6 Fire Safety Specialists

Package includes 1.0 FTE as a safety and investigation specialist for the Fire and Aviation Management Bureau. Also included is \$20,000 in minor capital and \$10,000 in operations each year of the biennium.

*Justification Provided:* Increased focus on fireline and aviation safety and investigations. This proposal is an action item from 2007 DNRC aviation safety investigation.

<b>LFD ISSUE</b>	<u>New Position</u> –Currently the individual responsible for implementing training programs also investigates safety complaints or incidents. If the position is intended to separate the roles to allow for increased independence in investigations, the committee may wish to ask how this will be accomplished and how success will be measured.
An estimate in costs savings was not provided.	

P1 – 7 Dispatch Center Staff

Augment existing and add additional dispatch positions at all land offices. Central would receive 0.25 FTE; Eastern, Southern and Northeastern would each receive 0.5 FTE; and Southwestern and Northwestern would receive 1.25 FTE each.

*Justification Provided:* Increased representation in interagency dispatch centers, yielding better distribution of firefighting resources on state and local government fires.

<b>LFD ISSUE</b>	<u>Assurance</u> – The committee may wish to obtain information on how resources are distributed now and how this investment would change the current situation. How would success of these positions be measured; increased resource deployment or increased coordination of resources?
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P1 – 8 County Engines - OTO

One –time addition of 20 new county co-op engines to be developed through the equipment development center in the Fire and Aviation Management Bureau. This would supplement the current development of 15 engines per year.

*Justification Provided* - Increased effectiveness and safety of local fire departments. Continue to remove aging engines (30+ years) from local government fire departments. Potential to prevent a 5,000 acre in Eastern Montana each year, a \$500,000 cost savings.

<b>LFD COMMENT</b>	At this time, the county co-op program still has over twenty 1960s era jeeps active in the field. This package provides an additional 20 engines to the county co-op program for a total of 50 engines over the biennium to aid in replacing the aging equipment. Each engine is developed for approximately \$41,550 versus purchase of the engines at \$89,000. They are transferred to the counties for use under a memo of understanding.
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The state retains title to the vehicles.

**LFD  
ISSUE**

Maximum Staff Capacity

The upper limit on engine development given current staffing levels is 50 engines over the biennium. If the committee is interested in increasing the number developed, staffing levels would need to increase also.

Performance Measurement

The committee may wish to inquire how the success of new engine deployment is measured. Increased local fire fighting capacity? Engine utilization?

Return on Investment

If the potential avoided costs of \$1.0 million over the biennium were realized, the return on investment for this package is zero. However, an engine has an average life of 20 years; therefore the return on investment should be looked at over a longer period of time, rather than the biennium.

Condition the appropriation

To assure that this funding is utilized only for engine development, the committee may wish to request that an appropriation be restricted. For additional flexibility, the appropriation should be biennial so that the agency may use it in either year of the biennium.

P1 – 9 Fuels Mitigation Fund- OTO

Cost-share assistance to private landowners in the wildland urban interface to reduce fuels, consistent with priorities established in the Community Wildfire Protection Plans (CWPP)

*Justification Provided:* Reduced fire behavior, losses, and fire costs on treated private and state lands. Prevent one 500-acre fire/year, plus prevent one home/year lost to wildfire. Potential cost savings of \$1.0 million per year.

**LFD  
ISSUE**

Dwindling Federal Funds

This request would add state dollars into the fuels mitigation program. The department currently receives federal funding for such activities. However, the federal funds have been declining over time. Providing a one-time only state appropriation will address the reduced federal funding for a short time. The committee may wish to consider whether a one-time infusion of cash is sufficient to make a difference on the Montana landscape.

Condition the appropriation

To assure that this funding is utilized only for fuels mitigation, the committee may wish to request that any appropriation be restricted. For additional flexibility, the appropriation should be biennial so that the agency may use it in either year of the biennium.

Performance Measurement Needed

The committee may wish to inquire how the agency intends to track the outcome of the fuel mitigation projects, including the impact on fire costs.

**LFD  
COMMENT**

This item links fuel mitigation to Community Wildfire Protection Plan (CWPPs). Per the DNRC website, at the end of FY 2006, only 15 communities had CWPPs in place. If a CWPP is a condition of qualification, the ability to disburse the funding may be limited

P1 -10 Aircraft Hangars –

Build two aircraft hangars at Kalispell and Missoula for DNRC aircraft. **(Note: This would be submitted as a long range planning request via HB 5 and not in HB 2.)**

*Justification Provided:* Provide security from weather/vandalism and have an adequate maintenance facility at field level.

<b>LFD COMMENT</b>	The department aircraft were obtained through the federal excess property program. The US Government still maintains title to the aircraft. As part of the agreement, the department must follow specific security guidelines, which include storage in a secured area. Currently, the department rents as needed and when available, space within the secured area of the Missoula airport. The lease in the Kalispell area was recently lost. Construction of the hangars would guarantee secured storage for the aircraft.
	When the aircraft is deployed to a fire, the department is also responsible for security, which usually entails armed guards.

**Priority 2**

The “Priority Two” table shows the additional six resource needs ranked by the department. For the purpose of this analysis, the assumption was made that these requests would be funded under the current 1/3 fire protection fee and the 2/3 general fund formula. Base year numbers were provided by DNRC and were doubled to show the potential biennial impact. As these numbers are estimates, they will vary from what is presented to the executive for potential inclusion in the executive budget during the upcoming executive planning process (EPP).

	FY 2010				FY 2011			
	FTE	GF	Protection Fee	Total	FTE	GF	Protection Fee	Total
P2 - 11 <i>Communication System Support</i>	2.0	\$186,667	\$93,333	\$280,000	2.0	\$186,667	\$93,333	\$280,000
P2 - 12 <i>Type 3 IMT Development &amp; Support</i>	0.0	200,000	100,000	300,000	0.0	200,000	100,000	300,000
P2 - 13 <i>Eastside Capital and Mobile Kitchen</i>	0.0	76,667	38,333	115,000	0.0	0	0	0
P2 - 14 <i>Federal Excess Property Acquisition Staff</i>	1.0	90,000	45,000	135,000	1.0	90,000	45,000	135,000
P2 - 15 <i>Twenty Person Type 2 IA Crew</i>	10.0	453,333	226,667	680,000	10.0	453,333	226,667	680,000
P2 - 16A <i>Additional Helicopter and fuel truck</i>	0.0	216,667	108,333	325,000	0.0	0	0	0
P2 - 16B <i>Additional Crew for Helicopter and truck</i>	2.0	74,667	37,333	112,000	2.0	74,667	37,333	112,000
<b>Total Priority Two</b>	<u>15.00</u>	<u>\$1,298,001</u>	<u>\$648,999</u>	<u>\$1,947,000</u>	<u>15.00</u>	<u>\$1,004,667</u>	<u>\$502,333</u>	<u>\$1,507,000</u>

P2 – 11 Communications Support System

Add two Communication Technicians to existing staff. This package includes 2 vehicles (\$60k), and training and operations (\$98k) each year.

*Justification Provided::* Increase management of existing radio network to improve system reliability. Increases the transition time to narrowband equipment, but does not include transition to digital/trunked communications network.

<b>LFD ISSUE</b>	<u>Vehicles should be one-time only</u> As proposed the cost of the vehicles would be added to the department’s base budget. The committee may wish to recommend that this be a one-time only expenditure.
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P2 – 12 Type 3 IMT Development & Support

Provide support to two type 3 incident management teams (IMT) include training, equipment, and vehicles.

*Justification Provided:* Improved success during extended attack resulting in reduced costs and losses. This may prevent one Type 2 IMT deployment per year. Potential cost savings of \$1.0 million over the biennium.

<b>LFD COMMENT</b>	This request is to provide resources to the department to develop and support a type three team. It does not include any FTE. This type of team would handle extended attack operations. Extended attack is the period after the first 24 hours, but prior to management mode.
If the potential avoided costs of \$1.0 million over the biennium were realized, the return on investment for this package is 67 percent. A type 2 team costs approximately \$500,000 per day, compared to a type 3 cost of \$150,000 per day.	

<b>LFD ISSUE</b>	<p><u>Vehicle Purchases</u></p> <p>The vehicles purchased to develop this team are an up front cost. The replacement cycle of such vehicles should be considered before adding the funding to the base.</p>
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P2 -13 Eastside Capital and Mobile Kitchen

This package would provide funds for truck replacement for the eastern land offices, as well as monetary support of state mobile kitchens.

*Justification Provided:* Ensure readiness of state mobile kitchens. Prevent one national caterer mobilization per year. The potential biennial savings is approximately \$0.5 million.

<b>LFD COMMENT</b>	This funding would provide for vehicle replacement in the eastern land offices on a routine basis. The mobile kitchen funding would provide annual funding for maintenance and deployment. This funding was removed from the department budget as part of cost cutting measures during the 2003 Legislature.
If the potential avoided costs of \$0.5 million over the biennium were realized, the return on investment for this package is 300 percent.	

P2-14 Federal Excess Property Acquisition Staff

Provide 1.0 FTE to screen Federal Excess Property Program (FEPP) & Department of Defense (DoD) equipment. This request includes annual funding for capital (\$30k) and operations (\$60k).

*Justification Provided:* Increase capability for counties and state, and reduce program costs by utilizing excess equipment. Potential cost savings of \$100,000 per every 5 FEPP or DoD vehicles procured rather than purchased new.

<b>LFD COMMENT</b>	The fire program does use excess property and obtains parts for equipment in the same manner. The excess property program does come with strings and non-fire use is limited to 10 percent of total utilization. For this request, the savings of \$100,000 per year does not exceed the cost of \$135,000 per year.
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<b>LFD ISSUE</b>	For this request, the savings of \$100,000 per year does not exceed the cost of \$135,000 per year. The implementation of this need would cost \$35,000 each year.
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P2 -15 Twenty Person Type 2 Initial Attack Team

Provide 10.0 FTE to develop a 20 person type 2 initial attack crew for DNRC use. This request also includes vehicles, equipment, training, and staffing costs.

*Justification Provided:* Prevent one 1,500 acre fire/year by increasing initial attack effectiveness. There could also be savings in contract or severity resources. Current crews come from federal, tribal, or contract sources. The potential biennial savings is \$3.0 million.

<b>LFD COMMENT</b>	This team would be a DNRC team that would aid initial attack efforts in areas with difficult access where hand crews could be a benefit. This team would not be dispatched out of state. These individuals would also be used for thinning and brush work to aid in reducing forest fuels.
<p>If the potential avoided costs of \$3.0 million over the biennium were realized, the return on investment for this package is 340 percent. As this is a direct increase to the initial attack program, the outcome of the investment could be measured by adjusting the initial attack goal to 97% of fires held to ten acres or less.</p>	

<b>LFD ISSUE</b>	<p><u>Vehicle and Equipment Purchases</u>                  The vehicles and equipment purchased to develop this team are an up front cost. The replacement cycle of such items should be considered before adding the funding to the base.</p>
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P2 – 16 Additional MT 205 Helicopter and Crew

Develop an additional MT 205 helicopter, and hire a seasonal pilot, manager, crew, and a fuel truck driver. Includes personnel costs (\$112k), development costs (\$250k) and fuel truck (\$75k)

*Justification Provided:* Increases initial attack program effectiveness. Potential cost avoidance of \$3.0 million over the biennium if two 1500 acre fires are prevented.

<b>LFD ISSUE</b>	<p><u>One-time only funding</u>                  The cost to develop the helicopter and the fuel truck are one-time only costs and should be treated as such.</p> <p><u>Equipment needs Staff</u>                  The department is in a critical position now where there is not sufficient staff to operate the aircraft. In order to avoid compounding the problem in the future, the two items need to remain attached.</p>
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**Additional Items**

The following two items were not provided in the “DNRC Fire Program Critical Resource Needs – January 2008”. However, these items may be of interest to the committee.

Title to helicopters

The 2007 legislature approved a \$1.0 million one-time only general fund appropriation for the department with the priority use to be purchasing the title to the department helicopters from the US Forest Service. If the department is not successful in purchasing title during the 2009 biennium, the appropriation may need to be reconsidered by the 2009 Legislature.

Woody Biomass program

The 2007 legislature approved one-time only general fund to support the fuels for schools program. This program has been traditional funded by the federal government. If fuel reduction programs are considered, the biomass program may provide an opportunity to utilize the “waste” from forest management.