December 30, 2010

The Honorable Richard Cohen, Chair
Senate Finance Committee
Capitol Building, Room 121
St. Paul, MN 55155

The Honorable Ellen Anderson, Chair
Senate Environment, Energy & Natural Resources Budget Div.
Capitol Building, Room 120
St. Paul, MN 55155

The Honorable Dennis Frederickson
Ranking Minority Member
139 State Office Building
St. Paul, MN 55155

The Honorable Loren Solberg, Chair
House Ways and Means Committee
443 State Office Building
St. Paul, MN 55155

The Honorable Jean Wagenius, Chair
House Environment & Natural Resources Finance Division
449 State Office Building
St. Paul, MN 55155

The Honorable Mary Liz Holberg, Lead-GOP
House Ways and Means Committee
303 State Office Building
St. Paul, MN 55155

The Honorable Tom Hackbarth, Lead-GOP
House Environment & Natural Resources Finance Division
309 State Office Building
St. Paul MN 55155

Dear Senators and Representatives:

Attached is the Annual Report on Emergency Fire Account Expenditures directed by Minnesota Laws of 2009, Chapter 37, Article 1, Section 4, Subd. 4. This report provides information that helps the Administration and the Legislature to review and evaluate expenditures from the Emergency Fire Account Direct and Open Appropriations.

The report describes firefighting expenditures and provides information related to the fire danger and fire occurrences that made these expenditures necessary during fiscal year 2010.

Please feel free to contact Olin Phillips, Fire Management Section Manager, at 651-259-5282, Denise Anderson, Administrator, Office of Management and Budget Services, at 651-259-5561, or me with any questions or concerns regarding this report.

Sincerely,

Mark Holsten
Commissioner
cc: Dan Mueller, Senate Fiscal Analyst
Jim Reinholdz, House Fiscal Analyst
Mike Roelofs, MMB
Legislative Library (6)
Department of Natural Resources  
Annual Report on Emergency Fire Expenditures  

FY 2010  

Purpose  
The purpose of this Report is to address the requirements of Minnesota Laws of 2009, Chapter 37, Article 1, Section 4, subd. 4, which states in part:  

“By January 15, of each year, the commissioner of natural resources shall submit a report to the chairs and ranking minority members of the house and senate committees and divisions having jurisdiction over environment and natural resources finance, identifying all firefighting costs incurred and reimbursements received in the prior fiscal year.”  

State Funding for Emergency Firefighting  

Emergency Fire Fighting - Direct Appropriation: Laws of 2009 appropriated $7,217,000 the first year and $7,217,000 the second year for prevention, presuppression and suppression costs of emergency firefighting, and other costs incurred under Minnesota Statutes, section 88.12. (1) Laws of 2010, Chapter 215, Article 3, Section 4, Subd. 4 states in part: “$72,000 in 2010 and $72,000 in 2011 are reductions in the appropriations for prevention costs of emergency firefighting.”  

Emergency Fire Fighting – Open Appropriation: Laws of 2009 further state in part that “If the appropriation for either year is insufficient to cover all costs of presuppression and suppression, the amount necessary to pay for emergency firefighting expenses during the biennium is appropriated from the general fund.”)  

Under the authority of the Open Appropriation during FY 2010, $13,873,176 was expended.  

Attachment 1 shows state fire fighting costs by object of expenditure.  

(1) Actual expenditure as of September 30, 2010 is $7,109,695. Additional spending in both appropriations may occur as encumbrances are settled through December 2010.
Reimbursements to the General Fund

Payments and Collections: The DNR receives payments for certain fire related activities. These include payments for supplies sold to local government units (e.g. fire departments) from the Inter-agency Fire Cache (Cache Sales – authorized under M.S.§ 88.065), and collections from responsible parties for starting illegal or negligent fires, (Fire Cost Collections – authorized under M.S.§ 88.75). These receipts are deposited directly to the general fund and are not used by the DNR.

In FY 2010, receipts came from the following sources:
- Cache Sales - $202,577
- Fire Cost Collections - $500,819

Protection Services: School Trust Lands: The Permanent School Trust Fund forest suspense account makes an annual transfer to the general fund for services provided by the DNR. The FY 2010 transfer was based on the 2009 Forest Certification Report. Certified fire protection costs transferred to the general fund in FY 2010 were:
- Fire Protection Services - $1,843,613.

Special Revenue Fund: This is not a use of the state emergency fire appropriations, direct or open, but is included due to perennial interest. The DNR provides firefighters and CL-215 air tankers to assist federal partners in-state, send resources out-of-state to mobilize on national wildfire emergencies, or assist Compact partners. These costs are initially charged to the Emergency Fire Special Revenue Fund. During FY 2010 the DNR expended $2,125,711 in reimbursable costs for national mobilizations and Compact support. Approximately $1.3mm is due to firefighter mobilizations and $0.8 mm is due to CL-215 mobilizations. The federal government reimburses federal costs and Compact partners (adjoining states and provinces) reimburse their costs.

The Special Revenue Fund may over-recover costs reimbursed from out-of-state deployments, mostly from use of the CL-215 airtankers, but also from other equipment such as wildland engines. This is because the state adds a portion of the fixed costs associated with this equipment, which have already been paid out of the emergency firefighting appropriation. This excess recovery is periodically transferred to the General Fund. In FY 2010, excess recovery transferred to the general fund was:
- Excess Recovery from FY 2009 activity - $460,725

Total Reimbursement to the general fund in FY 2010 from all sources:
- Cache Sales - $202,577
- Fire Cost Collections - $500,819
- School Trust, Fire Protection Services - $1,843,613
- Special Revenue, Excess Recovery - $460,725
  Total - $3,007,734

It is estimated that approximately $103,000 will be transferred to the general fund from FY 2010 reimbursements.
Fire Suppression and Presuppression

The success of the DNR’s fire suppression strategy is largely due to aggressive initial attack. The goal is to keep fires small. Once a fire escapes initial attack, costs and damages increase exponentially.

The following discussion is offered to explain how preparedness and suppression activities work together to reduce wildfire damages. Presuppression levels move on a continuum that is proportional to fire danger. Presuppression costs include activities undertaken in advance of fire occurrence to ensure more effective suppression. These activities include overall planning, recruitment and training of personnel, procurement of firefighting equipment and contracts, and maintenance of equipment and supplies. Suppression costs include activities that directly support and enable the DNR to suppress wildfires during times when fires are likely to occur, including the pre-positioning of resources. As fire danger and fire occurrence increase, the resources that must be positioned for immediate response also increase. Presuppression costs amounted to 17% of the direct and open fire appropriations in FY 2010. Historically, presuppression has composed 25% or less of the fire account.

The DNR cost coding system provides accountability for fire expenditures. This detailed system captures all fire expenditures and tracks costs charged to individual administrative areas.

Attachment 2 shows the percentages of fire expenditures allocated to prevention, presuppression and suppression activities.

Planning and Readiness

Base costs for wildfire response are affected by general weather and precipitation patterns, in addition to actual fire occurrence. A system for determining potential wildfire risks and establishing fire planning levels is used to guide the level of readiness week to week.

Attachment 3 shows the criteria and planning levels currently in use.

These planning level guidelines are reviewed and implemented at weekly conference calls with fire managers from all of the agencies that cooperate in Minnesota wildfire suppression efforts. The planning level, combined with daily fire danger indices, establish the preparedness level needed to effectively respond to wildfires. Historically, about 80% of wildfires in the state occur during planning level 3. Major fires also can and do occur at this level.

In FY 2010 there were 218 days of possible wildfire danger. (i.e. at least one region at planning level 2 or higher). Of the possible wildfire days, 128 were at Planning Level 2, 48 were at Planning Level 3, 29 were at Planning Level 4 and 13 were at Planning Level 5. On 3 days, at least one area was at Planning Level 3 while the rest of the state was at Planning Level 2.

Attachment 4 shows the ten-year fire expenditure history.
Fire Occurrence and Causes

General Activity: In FY 2010, 1269 fires occurred, burning 28,005 acres. Historically, the state has experienced a 20-year average of about 1416 fires burning about 31,862 acres.

<table>
<thead>
<tr>
<th># Fires By Cause</th>
<th>FY 2010</th>
<th>%</th>
<th>20 Yr. Ave.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lightning</td>
<td>8</td>
<td>1</td>
<td>22</td>
<td>2</td>
</tr>
<tr>
<td>Campfires</td>
<td>55</td>
<td>4</td>
<td>47</td>
<td>3</td>
</tr>
<tr>
<td>Smoking</td>
<td>35</td>
<td>3</td>
<td>39</td>
<td>3</td>
</tr>
<tr>
<td>Debris Burning</td>
<td>437</td>
<td>34</td>
<td>539</td>
<td>38</td>
</tr>
<tr>
<td>Incendiary/Arson</td>
<td>385</td>
<td>30</td>
<td>422</td>
<td>30</td>
</tr>
<tr>
<td>Equipment Use</td>
<td>136</td>
<td>11</td>
<td>126</td>
<td>9</td>
</tr>
<tr>
<td>Railroad</td>
<td>17</td>
<td>1</td>
<td>64</td>
<td>4</td>
</tr>
<tr>
<td>Misc./Unknown</td>
<td>196</td>
<td>16</td>
<td>157</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>1269</td>
<td></td>
<td>1416</td>
<td></td>
</tr>
</tbody>
</table>

Overall, FY 2010 turned out to have higher than average percentages of, equipment and unknown causes, and lower than average debris burning and railroad causes.

Attachments 5a and 5b graphically illustrate fire history and causes.

Fire Behavior and Climatology

Similar to 2008, rainfall was lacking over much of the State through the summer months of 2009. However, summertime temperatures remained much cooler than normal which mitigated the effects of the dry conditions and kept fire occurrence low.

October 2009 was the 4th coldest and 5th wettest on record for the Twin Cities, along with the 7th snowiest going back to 1891. The cold and damp weather helped ease drought conditions over a large part of the State and kept fire occurrence to a minimum. As November arrived, fire activity increased, due in part to warmer and drier weather than usual. November 2009 was one of the warmest on record for many locations, including the second warmest November in the Twin Cities going back to 1891. (Minnesota Climatology Working Group, “Year in Weather Review: 2009, Dec. 2009)

2010 is the first year on record that no snow fell in March at Grand Rapids, Duluth or Minneapolis/St. Paul. Lack of snow and warm temperatures led to an active fire season in March and April. Snow cover disappeared from most of the State over a one week period, March 11-18. As usual, early spring grass fires burned with high intensity but instead of stopping at the woods where snow normally lingers in early spring, fires began carrying in timber leaf litter almost immediately. The first fire with conifer crown involvement occurred on April 1 near Perham. The fire burned through the short grass in a road ditch, climbed into the crowns of a
young pine plantation, and from there into an older pine stand. A number of residences were in imminent danger of being burned, but air tankers were able to save the structures along with the help of some tree thinning one of the landowners had accomplished around his home. Vinyl siding on one home was scorched and melted from the extreme heat (see photo). Typically, crown fires are uncommon until later in April or early May.

Even though the 2010 spring season started early, the month of May was fairly quiet due to accelerated green-up of live vegetation and periodic rainfall. Rain began in earnest over the majority of the State in June 2010 with the exception of localized dry areas over west-central Minnesota and in the Arrowhead of northeast Minnesota. By the close of FY 2010, moderate to severe drought conditions were still persisting over a majority of Minnesota’s Arrowhead country while east-central Minnesota had substantially recovered from the effects of the previous year’s drought.

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

http://drought.unl.edu/dm
Fire Activity in FY 2010

The first fire of 2010 was reported March 14, but the season started in earnest March 17 and 18 when 17 fires were reported around the State. By the end of March, 378 fires had burned – the third busiest March in 25 years (see chart below).

MIFC Dispatch which serves as the expanded dispatch for all agencies mobilizing resources throughout the State of Minnesota mobilized 903 overhead and crew resources to over 65 incidents. The DNR supplied 349 people to these incidents. These mobilizations included Type 2 Incident Management Teams being sent to the large fire incidents called the Hwy 11 Fire and the Tower Complex and Type 3 (somewhat smaller) teams sent to several other incidents such as the Floodwood Lake Fire.

Three 20 person IA (initial attack) crews were brought in to the State through the DNR’s partnership with the federal agencies in the state. These included the Midewin Hotshots from Illinois, the Helena Interagency Regulars from Montana, and a Keweenaw Bay Indian Community Type 2 IA Fire Crew from the Upper Peninsula of Michigan. One Bureau of Indian Affairs (BIA) 5 Engine Strike Team was brought in from South Dakota and numerous resources were provided by the US Fish and Wildlife Service (USF&WS).

While March had nearly four times the average number of fires for the month, April and May had fewer fires than average. Over the three month period March-May, the DNR responded to 1117 fires which burned 25,576 acres, slightly less than the previous 20-year average of 1142 fires and 30,350 acres.
All Hazard and Interagency Support Activity

In the middle of June a devastating tornado hit the town of Wadena in west central Minnesota. MIFC dispatch sent a 20 person crew and 21 miscellaneous overhead (all MN DNR Firefighters) to assist with the tornado clean-up. The crew was used to help manage the 500 + volunteers that showed up each day to assist the local responders. The overhead included Advisors, Status Check-in Recorders, Division Supervisors, and Strike team leaders. The Wadena County Sheriff’s Office and Emergency Operations people were originally reluctant to utilize our personnel and the Incident Command System but with the overwhelming complexity of the incident they decided to give it a try. They are now convinced that ICS works and are very appreciative of the work that was done.

Even though summer fire activity was low in Minnesota, in late June the Manitoba Department of Conservation requested a State of Minnesota fire fighting crew for a fire near The Pas, Manitoba. Three 20 person crews were ordered through the Great Lakes Forest Fire Compact (GLFFC) agreement. In addition, on June 22 both the MN DNR CL-215s, the state owned Cessna 310, and an Air Attack Group Supervisor responded to fires near Flin Flon, Manitoba. The DNR also sent the Fire Boss (an aerial suppression aircraft contracted through the DNR) to fires near Snow Lake, Manitoba on June 24th.

CL - 215 Water Scooping Air Tankers

CL-215’s are twin engine, amphibious water scooping air-tankers purposely built for the suppression of wildfires. Minnesota owns two CL-215’s. These are managed by the DNR under a contract with an experienced air-tanker base owner/operator.

The state-owned CL-215 water scooping air-tankers are each capable of dropping 1,400 gallons of water per pass over a wildland fire. Scoopable lakes are plentiful in Minnesota. Aircraft turnaround times between a water source and the wildfire can be as short as three minutes, enabling each aircraft to deliver up to 28,000 gallons of water every hour.

Minnesota CL-215’s have also been deployed to the states of Alaska, California, Michigan, Montana, Washington, Wisconsin, as well as the provinces of Manitoba and Ontario.

In FY 2010 these aircraft made 335 water drops, delivering approximately 469,000 gallons of water on 31 missions flown in Minnesota. During times of low fire danger in this state the air tankers are often sent to other states under cooperative agreements. During the summer of 2009, the aircraft spent 41 days in the state of Alaska and flew 126 hours. During the spring of 2010, the aircraft flew 12 hours to assist MNICS partners in-state. Towards the end of June 2010, both aircraft spent 7 days in the province of Manitoba and flew 81 hours. Costs incurred as a result of assisting cooperating agencies are reimbursed to the state.

Land-based air-tankers, both large and small, supplement Minnesota’s CL-215’s. In the spring of
2010, the DNR utilized two heavy air-tankers, two Single Engine Air Tankers (SEAT) and seven aerial supervision airplanes. In addition, the state utilized two Fire Boss water scooping, single-engine air-tankers.

*Attachment 6 summarizes the ownership costs for the CL-215’s*

*Attachment 7 illustrates where MN DNR CL-215’s fought notable fires in FY 2010*
Attachments

Attachment 1 – State Fire Expenditures by Object Category for Emergency Fire Appropriations

Attachment 2 – Percentage of State Fire Costs in Prevention, Presuppression and Suppression

Attachment 3 - Guideline for Statewide Planning Level Determination

Attachment 4 - Ten Year Expenditure History of State Fire Fighting Costs.

Attachments 5a and 5b – Graphical Representation of Wildfire History and Causes.

Attachment 6 - Summary of Costs for CL-215 Air Tankers

Attachment 7 – CL-215 Dispatches in FY 2010

For further information, contact:
S. Olin Phillips, Forest Management and Protection Section Manager
DNR Division of Forestry
500 Lafayette Road, Box 44
St Paul, MN 55155
651-259-5281

sjs
### Emergency Fire Direct and Open Appropriations

#### State Expenditures by Category

**FY 2010**

<table>
<thead>
<tr>
<th>Appropriation</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Appropriation</td>
<td>7,109,695</td>
</tr>
<tr>
<td>Open Appropriation</td>
<td>13,873,176</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20,982,871</strong></td>
</tr>
</tbody>
</table>

- **Salary Costs**: 9,797,850
- **Operating Costs**: 11,185,021

**Total**: 20,982,871

*Actual expenditure as of September 30, 2010.*
<table>
<thead>
<tr>
<th></th>
<th>Emergency Firefighting Direct</th>
<th>Emergency Firefighting Open</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Prevention*</td>
<td>6%</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>Fire Presuppression</td>
<td>9%</td>
<td>21%</td>
<td>17%</td>
</tr>
<tr>
<td>Fire Suppression</td>
<td>85%</td>
<td>79%</td>
<td>81%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

*Fire prevention activities are supplemented by annual grants from the USDA Forest Service as follows:
- State Fire Assistance – approx. $550m (supports fire prevention and readiness).
- Volunteer Fire Assistance – approx. $300m (supports Rural Fire Department readiness).
- Cooperative Fire Assistance – approx.$300m (supports Firewise – Community Fire Protection activities)
## ATTACHMENT 3  
### A GUIDELINE FOR STATEWIDE WILDFIRE PLANNING LEVEL DETERMINATION

<table>
<thead>
<tr>
<th>BI (Q) spring, pre-green, floating 5 day average</th>
<th>PLANNING LEVEL I</th>
<th>PLANNING LEVEL II</th>
<th>PLANNING LEVEL III</th>
<th>PLANNING LEVEL IV</th>
<th>PLANNING LEVEL V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable</td>
<td>0-45</td>
<td>46-70</td>
<td>71-95</td>
<td>96+</td>
<td></td>
</tr>
</tbody>
</table>

### BUI (after June 1, floating 5 day average)

| Not applicable                                  | 0-25             | 26-50             | 51-67             | 68+              |

### ERC (Q) (alternate summer/fall indicator, after June 1, floating 5 day average)

| Not applicable                                  | 0-15             | 16-29             | 30-36             | 37+              |

### 8-14 day Weather Forecast

<table>
<thead>
<tr>
<th>Winter conditions, most of State snow covered, temps below freezing.</th>
<th>Normal conditions for season, adequate precip. expected</th>
<th>Less than normal precip. and RH, higher than normal temps expected</th>
<th>Dry weather patterns persisting, no change forecast</th>
<th>Dry pattern intensifying. Unstable weather forecast leading to extreme fire behavior conditions.</th>
</tr>
</thead>
</table>

### MN Regional Planning Levels

<table>
<thead>
<tr>
<th>All Regions/Agencies at P.L. I</th>
<th>One or more Regions/Agencies at P.L. II</th>
<th>Two or more Regions/Agencies at P.L. III</th>
<th>Two or more Regions/Agencies at P.L. IV</th>
<th>Two or more Regions/Agencies at P.L. V</th>
</tr>
</thead>
</table>

### Eastern Area Planning Level

<table>
<thead>
<tr>
<th>I</th>
<th>I-II</th>
<th>I-III</th>
<th>I-IV</th>
<th>I-IV</th>
</tr>
</thead>
</table>

### National Planning Level

<table>
<thead>
<tr>
<th>I-II</th>
<th>I-III</th>
<th>I-IV</th>
<th>I-V</th>
</tr>
</thead>
</table>

### Fire Occurrence (Initial Attack)

<table>
<thead>
<tr>
<th>Rare, infrequent fire occurrence</th>
<th>Fires reported in scattered Areas. Generally less than 10 fires/day Statewide</th>
<th>Multiple Areas/Agencies reporting fires. 10 to 20 fires/day Statewide</th>
<th>Multiple Areas/Agencies reporting fires. 20 to 30 fires/day Statewide</th>
<th>Multiple Areas/Agencies reporting fires. 30+ fires/day Statewide</th>
</tr>
</thead>
</table>

### Fire Occurrence (Escaped fires)

<table>
<thead>
<tr>
<th>None</th>
<th>None</th>
<th>1-2 fires requiring extended attack Statewide (more than mop-up)</th>
<th>3-5 fires requiring extended attack Statewide</th>
<th>5+ fires requiring extended attack Statewide</th>
</tr>
</thead>
</table>

### Sociopolitical Considerations

Statewide or Regional events such as fishing opener or the have large scale impacts should be considered. Fourth of July; natural events such as floods or windstorms; other unexpected or unusual events that may

### Resource Availability

<table>
<thead>
<tr>
<th>Normal complement of personnel.</th>
<th>No shortages expected.</th>
<th>Moderate demand for some in-state resource types expected</th>
<th>Shortage of certain in-state resource types</th>
<th>Most in-state resources committed. Out of State assistance necessary.</th>
</tr>
</thead>
</table>

### In-State Mobilization

<table>
<thead>
<tr>
<th>None</th>
<th>Less than 5% of statewide resources assigned out of home unit.</th>
<th>Some short term movement occurring, 5-10% of statewide resources assigned out of home unit.</th>
<th>10-20% of statewide resources assigned out of home unit.</th>
<th>20%+ of statewide resources assigned out of home unit.</th>
</tr>
</thead>
</table>

### Out of State Mobilization

If out of State mobilization is occurring or anticipated to occur, an ‘A’ designator will be applied at the current Planning Level.

- Once Planning Level has reached level III in spring, preparedness will not drop below P.L. III until May 31 or later.
- Terms used above, which are calculated daily from weather and fuel measurements:
  - BI (Q) = **Burning Index**, fuel model Q: A measure of fire danger based on the probability of ignition and fire spread in a specified forest type.
  - BUI = **Build Up Index**: An indication of the dryness of larger sized woody fuels, which becomes a significant factor during a drought.
  - ERC (Q) = **Energy Release Component**, fuel model Q: A measure of the expected heat release from a fire, which will be experienced by firefighters on the fireline.
## MINNESOTA EMERGENCY FIRE ACCOUNT EXPENDITURES

### Nominal Dollars

<table>
<thead>
<tr>
<th>Source of Funds</th>
<th>FY 2001(c)</th>
<th>FY 2002</th>
<th>FY 2003</th>
<th>FY 2004</th>
<th>FY 2005</th>
<th>FY 2006</th>
<th>FY 2007</th>
<th>FY 2008(a)</th>
<th>FY 2009(b)</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forestry General</td>
<td>$2,640,238</td>
<td>$2,748,198</td>
<td>$2,634,900</td>
<td>$0 (e)</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$2,573,308</td>
</tr>
<tr>
<td>Emergency Fire-Direct</td>
<td>$4,412,245</td>
<td>$6,398,430</td>
<td>$5,888,070</td>
<td>$7,050,000</td>
<td>$7,136,880</td>
<td>$7,094,492</td>
<td>$7,313,596</td>
<td>$6,998,988</td>
<td>$7,338,440</td>
<td>$7,109,865</td>
</tr>
<tr>
<td>Cost Recovery(a)</td>
<td>$2,372,114</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Emergency Fire-Open</td>
<td>$9,405,941</td>
<td>$9,070,462</td>
<td>$9,554,514</td>
<td>$9,550,028</td>
<td>$9,334,419</td>
<td>$9,424,271</td>
<td>$10,516,394</td>
<td>$12,221,642</td>
<td>$11,656,791</td>
<td>$13,873,176</td>
</tr>
<tr>
<td>Fire Activity Total</td>
<td>$18,800,589</td>
<td>$17,617,065</td>
<td>$17,652,369</td>
<td>$17,210,028</td>
<td>$14,071,069</td>
<td>$15,508,708</td>
<td>$23,437,660</td>
<td>$19,180,570</td>
<td>$19,034,231</td>
<td>$20,362,871</td>
</tr>
<tr>
<td>Cost Recovery(a)</td>
<td>$2,372,114</td>
<td>$2,174,734 (d)</td>
<td>$2,380,108</td>
<td>$2,525,917</td>
<td>$2,538,675</td>
<td>$2,890,598</td>
<td>$1,893,112</td>
<td>$3,636,988</td>
<td>$3,087,734</td>
<td>$3,567,889</td>
</tr>
<tr>
<td>Reimbursable Mobilization Fire Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(f)</td>
<td>$2,604,290</td>
<td>$2,876,747</td>
<td>$2,962,300</td>
<td>$4,440,958</td>
<td>$3,284,726</td>
<td>$3,987,899</td>
<td>$4,317,572</td>
<td>$2,442,486</td>
<td>$2,014,520</td>
<td>$2,125,711</td>
</tr>
</tbody>
</table>

### Notes:

(a) Cost Recovery Breakout: $3,057,734
(b) Fire Cost Collections - $500,919
(c) Forestry Sales - $269,277
(d) School Trust Fund: - $1,005,613
(e) Excise Recovery, Sp. Rev. - $460,225
(f) Does not include one-time Federal (FEMA) payment of $4.7mm for the Carlton Edge fire of 1989
(g) Purchase of CL-245's
(h) Does not include one-time Federal (FEMA) payment of $4.7mm for the Carlton Edge fire of 1989
(i) Does not include one-time Federal (FEMA) payment of $4.7mm for the Carlton Edge fire of 1989
(j) Beginning in FY 2004, all firefighting costs are paid by the emergency fire appropriations.
(k) Beginning in FY 2004, all firefighting costs are paid by the emergency fire appropriations.
(l) Beginning in FY 2004, all firefighting costs are paid by the emergency fire appropriations.
(m) Beginning in FY 2004, all firefighting costs are paid by the emergency fire appropriations.
(n) Beginning in FY 2004, all firefighting costs are paid by the emergency fire appropriations.
(o) Beginning in FY 2004, all firefighting costs are paid by the emergency fire appropriations.
(p) Beginning in FY 2004, all firefighting costs are paid by the emergency fire appropriations.
(q) Beginning in FY 2004, all firefighting costs are paid by the emergency fire appropriations.
(r) Beginning in FY 2004, all firefighting costs are paid by the emergency fire appropriations.
(s) Beginning in FY 2004, all firefighting costs are paid by the emergency fire appropriations.
(t) Beginning in FY 2004, all firefighting costs are paid by the emergency fire appropriations.
(u) Beginning in FY 2004, all firefighting costs are paid by the emergency fire appropriations.
(v) Beginning in FY 2004, all firefighting costs are paid by the emergency fire appropriations.
(w) Beginning in FY 2004, all firefighting costs are paid by the emergency fire appropriations.
(x) Beginning in FY 2004, all firefighting costs are paid by the emergency fire appropriations.
(y) Beginning in FY 2004, all firefighting costs are paid by the emergency fire appropriations.
(z) Beginning in FY 2004, all firefighting costs are paid by the emergency fire appropriations.

**December 9, 2010**
MN DNR Wildfires By Year
as of 10/20/2010

Wildfires by Year
Average

2188 1700 1374 1280 1479 1334 1862 1737 1943 2383 1766 1236 1247
MN DNR Fires by Cause
20 year average
1990-2009
Attachment 6  

CL – 215 AIR TANKER OPERATION COSTS  
FY 2010

State Owned (2 aircraft):

Availability Cost: 230 days @ $6,098.00 = $1,402,540  
Availability Cost: 170 days @ $6,208.00 = $1,055.360  
(Rate change April 2010)

400 days availability total (200 each aircraft) = $2,457,900

Flight time: 142.43 hrs @ $3,647 = $519,442  
Flight time: 136.69 hrs @ $3,781* = $516,825

Total flight time: 279.12 hrs = $1,036,267

Annual liability insurance policy = $32,250

FY 2010 Total Costs: $3,526,417

Reimbursements for MNICS/GLFFC flight time: (92.96 hrs.) = $385,651
Reimbursements for daily availability: Manitoba = $86,912
Reimbursements for daily availability: Superior Nat. Forest = $30,313

Reimbursements for Alaska flight time: (126.46 hrs.) = $487,756
Reimbursements for daily availability: Alaska = $291,018

Total reimbursements for cooperative mobilizations = $(1,281,650)

FY 2010 Net Costs: $2,244,767

Discussion:
Components of ownership costs include liability insurance and a contract to operate, maintain, and repair the aircraft. Contract costs comprise flight time and availability amounts paid to the contractor.

1) Liability Insurance - protects the state from the loss of the aircraft.
2) Flight time - is an hourly rate paid to the contractor to perform required maintenance on the aircraft for hours actually flown on firefighting missions.
3) Availability is a daily rate paid to the contractor that operates the aircraft. This covers the annual costs of having the aircraft "ready to fly" for the required 200 days per year (which is the anticipated season of need in Minnesota).
4) When the aircraft are mobilized to assist federal and other-state agencies that are not in-state or Great Lakes States partners, a premium is charged on availability and operating costs to help recover overhead not directly included in the operating contract.

*Flight rate change due to fuel price adjustment.

Attachment 7
FY 2010
CL-215 Dispatches

Red text indicates reimbursable missions

Alaska Fires
185 drops
259,000 gallons

Manitoba Fires
791 drops
1,107,400 gallons

Red Lake Fire
#14
11 drops
15,400 gallons

Red Lake Fire
#178
8 drops
11,200 gallons

O'Leary Fire
9 miles SW of
Side Lake MN
4 Drops
5,600 gallons

Littlefork Fire
12 SE of
Littlefork MN
10 drops
14,800 gallons

Pike Fire
7.5 miles N of
Biwabik MN
15 Drops
21,000 gallons

Spring Mine Fire
3 miles NE of
Old Mesaba MN
14 drops
19,600 gallons

Bass Lake Fire
17 miles NE of
Ely MN
20 drops
28,000 gallons

Whiting Rd Fire
5 miles NE of
Stratton MN
3 drops
4,300 gallons

Cutoff Fire
near Cass Lake MN
30 drops
42,000 gallons

Hiram Sec 20 Fire
Hackensack MN
11 drops
15,400 gallons

Loon Lake Fire
near Nisswa MN
5 drops
7,000 gallons

Mississippi
Meadows Fire
near Ball Club MN
17 drops
23,800 gallons

Hwy 11 Fire
2.5 miles SE of
Deer River MN
19 drops
26,600 gallons

Rice Lake Fire
3 miles W of
Princeton MN
12 drops
16,800 gallons

Isanti Fire
4 miles W of
Isanti MN
7 drops
9,800 gallons

Carroll Trail Fire
10 miles E of
Shaw MN
3 drops
4,200 gallons
**LEGISLATIVE REPORT – Cost of Preparation**

**NAME OF LEGISLATIVE REPORT – Annual Fire Report**
Based on: ____________________________

Minnesota Statute Reference: MN Laws of 2009, Chapter 37, Art.1, Sec. 4, Subd.4

Prepared by:  _Steve Simmer_, Department of Natural Resources

Phone:  (651) 259-5288 ________________

E-Mail:  steve.simmer@state.mn.us ________________

<table>
<thead>
<tr>
<th>Description of Cost</th>
<th>Further explanation if necessary</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Time</td>
<td>72 hours @ $36 (ave. among five staff contributors)</td>
<td>$2592</td>
</tr>
<tr>
<td>Duplication Cost (includes paper)</td>
<td>nominal</td>
<td></td>
</tr>
<tr>
<td>Other: Postage</td>
<td>nominal</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL TO PREPARE REPORT**  
( _Note: Right click on amount cell and choose update to complete_ )  
$2592