

DNR Helicopter Cost and Use Report 11-3

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STATE OF WASHINGTON
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REPORT SUMMARY

Helicopters Used in Fighting Wildland Fires

The Department of Natural Resources (DNR) has lead responsibility for fighting wildland fires on 12.7 million acres of state, private, and tribal lands in Washington. These are primarily forest lands, but also include some adjacent and intermingled sagebrush and grass areas.

The primary objective of DNR's wildland fire suppression program is rapid initial attack and control of wildfires when small. To aid in this objective, DNR operates nine firefighting helicopters. The helicopters are used for dropping water or fire retardant and delivering firefighters and supplies to difficult to reach fire sites.

Other state and federal agencies also use helicopters in their wildland firefighting efforts. Some agencies rely on helicopters that they maintain and operate themselves, while other agencies contract for the exclusive use of helicopters owned by private vendors. Agencies also make use of call-when-needed and interagency agreements for additional helicopter support.

In the 2010 Supplemental Operating Budget (ESSB 6444), the Legislature directed JLARC to review the use and cost of helicopters for wildland fire suppression. The Legislature specifically requested information on how DNR's costs for maintaining and operating its helicopters compare to the costs of entering into contracts that provide exclusive use of private vendor helicopters.

DNR Operating Its Own Helicopters Costs Less Than Exclusive Use Contracts

We could not find any kind of formula in use in Washington, elsewhere, or in the literature that identifies a "best" way to determine how many helicopters or what types of helicopters to have, or what approach to take to acquire helicopters. We did compare the cost of DNR operating its own fleet of helicopters with three different options for exclusive use contracts:

- **Option A** provides contract coverage for six helicopters for 120 days, similar to DNR's goal of having six of its nine helicopters always ready for immediate deployment during the fire season;
- **Option B** expands the coverage period ramping up the number of helicopters for the peak of the fire season; and
- **Option C** provides coverage for the same time period as Option B, but substitutes two smaller helicopters for two medium-sized helicopters similar to what DNR currently operates.

In all three cases, the costs for DNR to operate its helicopters are less than the costs of the exclusive use contract options.

DNR Helicopter Costs Are Less Than Exclusive Use Costs

	Operating Own Helicopters	Exclusive Use Contract Alternatives		
		Option A	Option B	Option C
2009 State Operating Costs	\$2.19 Million	\$4.60 - \$5.43 Million	\$4.11 - \$5.00 Million	\$3.78 - \$4.51 Million

Source: JLARC analysis of DNR, USFS, BLM, and Idaho data.

Availability of Helicopters for Fire Suppression Is Limited

The Legislature also asked for information about the availability of sufficiently outfitted helicopters that are privately owned or owned by nonstate governmental entities. Separate from costs, overall availability of helicopters rated and equipped for fire suppression is limited. The availability of private vendor helicopters is largely dependent upon the need for helicopters in the private sector (e.g., logging, mineral exploration, and oil rigs). Demand by other state and federal agencies is also a factor, although to a lesser degree. Nonstate government-owned helicopters in the region are either currently accessed through interagency agreements, or they are not an option because the helicopters do not meet firefighting standards.

DNR’s Helicopter Fleet May Be Larger Than Needed

DNR currently maintains and operates nine helicopters. The agency tries to manage its maintenance schedule to keep six of the helicopters ready for immediate deployment at all times during the fire season.

JLARC’s review of five years of DNR helicopter flight data calls into question whether DNR needs all nine helicopters in its fleet and six ready for immediate deployment. Six helicopters are seldom used at one time.

Recommendation:

The Department of Natural Resources should conduct an analysis of how many helicopters should be in its fleet and how many helicopters must be maintained for immediate deployment and report back to JLARC and the fiscal and natural resource committees of the Legislature.