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Forest Health Implementation Status Report & Strategy Development

January 6, 2009

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WASHINGTON STATE DEPARTMENT OF
Natural Resources
Doug Sutherland - Commissioner of Public Lands



December 30, 2008

The Honorable Ken Jacobsen, Chair
Senate Natural Resources, Oceans, & Recreation Committee
PO Box 40446
Olympia, WA 98504-0446

The Honorable Brian Blake, Chair
House Agriculture & Natural Resources Committee
PO Box 40600
Olympia, WA 98504-0600

Dear Senator Jacobsen and Representative Blake

I am pleased to send you the enclosed status report and draft implementation strategy for the Department of Natural Resources' forest health protection and management activities, in accordance with RCW 76.06.150.

As you know, the threats Washington's forests face from insects, disease and wildfires are severe. Our annual aerial survey data indicate that this year, approximately 1.4 million acres experienced significant tree mortality from forest insects and diseases. Protecting forests from these threats is important to a broad cross-section of the department's stakeholders, and forest health is a common thread that can draw needed connections among the many aspects of our work.

Therefore, I asked my staff to prepare a draft forest health implementation strategy for your review that updates the Washington State Strategic Plan for Healthy Forests (2004), and provides an integrated accounting of the DNR's work that pertains to forest health. My hope is to continue the rigorous, consensus-based public policy discourse that led to the formation of the Forest Health Strategy Work Group and eventual passage of SB 6141 in the 2007 legislative session.

The DNR will conduct a broader public input process in February before finalizing the strategy. Members of our Forest Health Strategy Work Group have already provided us a preliminary review of the strategy, and the input they supplied is reflected in the draft. At present, the strategy describes the sum of DNR's ongoing forest health related activities and provides a context or baseline with which to begin evaluating improvement and prioritization opportunities.

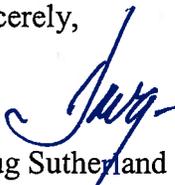
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Highlights of this year's forest health accomplishments, remaining policy and fiscal challenges, and the results in brief of the annual insect and disease mortality survey are also included in the report. In order to continue program development apace with the SB 6141 fiscal note, DNR has requested an \$849,400 Forest Health Program budget enhancement for the 2009-11 biennium. This funding would add essential analytical, risk assessment, and mapping capabilities, and contracts to acquire the data needed to quantify forest health risks. Tier 1 activities would continue to progress in the Stevens County Pilot Project, and at least one Tier 2 activity would be funded.

I thank you for your enduring commitment to the health of Washington's forests.

Sincerely,

A handwritten signature in blue ink, appearing to read "Doug Sutherland", is written over the printed name.

Doug Sutherland
Commissioner of Public Lands

Forest Health Implementation Report to the Legislature

January, 2009



WASHINGTON STATE DEPARTMENT OF
Natural Resources
Doug Sutherland - Commissioner of Public Lands

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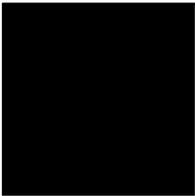
Figure 1 – Forest Disturbance Activity in Eastern Washington, 2008

Figure 2 – Forest Disturbance Activity in Western Washington, 2008

Appendices

Appendix A – Budget Enhancement Requests

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Forest Health Implementation

REPORT TO THE LEGISLATURE

1. Introduction

In 2007 the state legislature voted unanimously to pass SB 6141, amending the state's existing law governing forest health (RCW 76.06). The new law's foundation was built through several years' work by a diverse Forest Health Strategy Work Group (FHSWG), convened in 2004 by the Department of Natural Resources (DNR) at the legislature's request. The FHSWG developed an initial forest health strategy, findings, recommendations and draft legislative language.

The law designates DNR as the state's lead agency responsible for implementing a comprehensive program to improve forest health. A three-tiered approach was instituted. The first and primary tier is to expand voluntary, preventative efforts that help maintain forests across all land ownerships in conditions that are resilient and resistant to insects, disease and uncharacteristically severe wildfire. Options for more concerted actions, should forest health conditions worsen in a particular area, are made available in the second and third tiers. For the 2007-09 biennium, the department was appropriated \$1.3 million to initiate a pilot project and begin program development. The Commissioner of Public Lands is required to report annually to the legislature on progress under the law.

The DNR has taken a number of steps toward fulfilling its new responsibilities. A pilot project was initiated to test new methods and strategies for forest health improvement, with particular emphasis on providing enhanced landowner assistance, identifying and assessing forest health risks before significant mortality can occur, and methods of coordinating preventative actions across landscapes with multiple ownership types. Within the pilot project area and elsewhere, the DNR is engaging with federal land management agencies as an advocate for improved forest health management in project design and long-term planning.

Finally, an integrated strategic planning effort has been initiated to help inform and coordinate among the many aspects of DNR's work that contribute to forest health. Whether protecting and improving the value of forested state trust land, reducing the costs of wildland fire suppression, protecting the public resources like clean air and water, or mitigating and adapting to climate change, the department and its stakeholders recognize that healthy, functioning forest ecosystems are the foundation for success. An integrated forest health implementation strategy will efficiently leverage the department's diverse functions, identify opportunities and priorities, and provide for continuous improvement.

Based on the first year's progress, the following critical next steps have been identified for continued progress in the development of a comprehensive forest health program:

- **Data & Analysis:** A primary recommendation of the FHSWG was the need for site-specific forest condition data across areas of multiple land ownership categories, in order to construct forest health assessments that identify which lands are at risk. Most available data on forest conditions, however, is an 'average' of information collected through statistically designed sampling across large areas and cannot be used to identify a particular at-risk acre. The department has acquired several promising sample sets of data for this purpose, but the forest health program currently lacks the analytical capability to evaluate their utility and begin conducting assessments.
- **Communications:** Once at-risk areas can be accurately identified, a targeted program of communications is necessary to reach affected landowners. This will include the development of information materials and the means for their deployment.
- **Landowner Assistance:** What affected landowners will need next is a consultation with a professional forester. Landowner assistance forestry is a function the DNR already fulfills in administering a number of conservation programs, and these foresters are vital to the success of forest health projects. However, in accelerating landowner interest in forest health treatments, it would be easy to overwhelm the department's existing landowner assistance capabilities.

The DNR is requesting modest budget enhancements for the forest health and landowner assistance programs that would help address these next steps (see Appendix A). The forest health package requests \$849,400 to add program analytical capability and funding for communications products. The landowner assistance request would provide \$474,800 to maintain landowner assistance forestry services.

2. Implementation Status Report

Stevens County Pilot Project

The fiscal note that accompanied SB 6141 anticipated a pilot project to guide program development before scaling-up to a statewide level. The department selected Stevens County in northeast Washington for the pilot project's location because of its diversity of private, state, and federal land ownership, elevated levels of forest insect and disease mortality, public interest in forest health, and relatively strong markets for forest products.

Two informal stakeholder meetings were held in March and May, 2008, to introduce the new law and discuss strategic options for program development. Each was well attended by representatives of the forest landowner community, forest industry, conservation groups, state and federal agencies, local government, legislators, and tribes. As an outcome of these discussions, DNR identified five sub-landscapes within Stevens County as locations to test forest inventory methods for at-risk area identification, and outreach and communications strategies for encouraging landowner action.

Landowner Outreach and Assistance

The DNR already has an impressive rapport with family forest landowners who utilize assistance programs the department administers for stewardship planning, thinning, road and fish passage

improvements, and other management practices. Improving forest health on private land begins with providing landowners solid expertise and helping them understand their management options. Without landowner assistance foresters trained and dedicated to forest health improvement, the program would be unable to seek out, engage and assist landowners with at-risk forests. The Stevens County Pilot Project' strategy recognizes that focusing on landowners who already receive assistance from DNR will result in largely 'preaching to the choir.' Many small woodland owners may not know there is a forest health law in the state; may not understand the meaning of 'forest health'; may not know there is technical assistance available; or may simply not consider active management a priority.

The pilot project is therefore developing a scalable outreach plan to be initially implemented across several of the identified sub-County level landscapes. The goal is to raise the level of awareness and concern for forest health within a targeted audience, and help those landowners along a pathway to taking recommended actions that improve forest conditions. Success will be measured by comparing pre- and post-project forest conditions in terms of acres treated toward desired forest health objectives.

To meet the requirements of Tier 1 activities in the Stevens County Pilot Project, DNR has added a forest health specialist to its Northeast Region staff, and has increased the number of stewardship foresters who serve the area.

Quantifying Forest Health Risks

The FHSWG felt strongly that a different kind of forest data was needed to identify where vulnerable conditions exist on the landscape. Most available data on forest conditions is an 'average' of information collected through statistically designed sampling across large areas and cannot be used to identify a particular at-risk acre. Site-specific data are the prerequisite for initiating the Tier 2, and if needed, Tier 3 processes in the law.

An opportunity arose, and DNR successfully expanded a US Forest Service data acquisition project in the Sherman Pass Scenic Byway corridor using Light Detection and Ranging (LiDAR) technology. An additional 74,380 acres of private, state, tribal and federal land was "flown" for LiDAR data collection, using a federal grant and contributions from Conservation Northwest, The Lands Council and The Wilderness Society. The DNR Northeast Region, Forest Service, Colville Confederated Tribes, Spokane Tribe, and Forest Capital Partners, LLC are cooperating to collect the needed on-the-ground calibration data plots.

Emergency Storm Response

Immediately after the December, 2007 wind storms struck western Washington, the forest health program contributed to DNR's integrated emergency response efforts by providing technical assistance and survey information to landowners and policy makers. Aerial surveys and reconnaissance which the forest health program performed across approximately 1.5 million acres in coastal Washington recorded the location of forest blow-down, as well as the locations and quantity of woody debris on agricultural lands in the Chehalis River basin. These efforts provided landowners, tribes, state and federal agencies, and the intergovernmental Storm Response Panel with the information needed to quickly assess the damage in their vicinity and respond accordingly. At three workshops for affected landowners, the forest health program

provided information about the extent, timing, and possible mitigation of future insect activity in areas with broken or fallen trees.

Working With Federal Forestland Neighbors

Incorporating another of the FHSWG recommendations, the forest health law makes DNR focal in promoting cooperation between the state and the federal government on maintaining the health whole forest landscapes, with special emphasis on federal forest lands. For this purpose, an executive management-level forest health policy position was created to begin reviewing and expressing state priorities for Forest Service project decisions in eastern Washington. These national forests are also revising their long-term management plans, which are an essential point of engagement for helping federal forests onto a sustainable trajectory. Formal cooperating agency status for the state is being sought on the Okanogan-Wenatchee National Forest plan revision. Discussions with state agencies, local government, tribes, and the Forest Service are ongoing, and DNR hopes to complete a joint Memorandum of Understanding soon. The DNR will pursue a rigorous, but less formal engagement structure on the Colville National Forest plan revision, where support for active management is well organized and the greater need is to help align desired resource management outcomes among stakeholders and local government.

Regional and national federal policy decisions such as the critical habitat designation for the Northern spotted owl, biomass utilization in the 2008 Farm Bill and 2008 Energy Bill, and Forest Service funding issues have been an additional focus.

State Lands Leadership

Improving the health of Washington's forests means DNR must lead by example, and leading by example means that state trust lands are managed so as to be in an exemplary condition. The addition of a forest health specialist in Northeast Region, while a valuable landowner assistance resource, has also helped state lands managers identify and address forest health risks. The statewide Policy for Sustainable Forests made forest health an explicit consideration in all revenue-generating timber sales, and this emphasis has been improved by implementing several risk assessment models for use with state lands forest inventory information in timber sale planning. In stands where commercial harvest is not economical, DNR is fully implementing the Forest Improvement Treatment (FIT) and contract harvesting authorities made permanent by the legislature in 2007. Since these tools were piloted in 2005, DNR has implemented treatments on over 13,000 acres of state trust lands, and another 13,000 acres are planned through 2010. Region and Land Management Division staff are working on evaluation tools to prioritize FIT program activities according to forest health risks and other factors; these tools may then be transferred for use by other landowners.

3. 2008 Forest Insect and Disease Damage

The DNR and the USDA Forest Service annually cooperate to conduct an aerial survey to record newly killed, defoliated or damaged trees on forestland across the state. The 2008 aerial survey identified approximately 1.36 million acres (estimated 5.3 million trees) affected by insects, diseases, wind, and fire. This is essentially unchanged from the level of 1.4 million affected acres identified in 2007. It is a decrease from the 2.5 million acres identified in 2005.

Major damage agents – eastern Washington

The major damage agents in eastern Washington include western spruce budworm, which defoliated trees on 450,000 acres; pine bark beetles, which killed trees on nearly 300,000 acres; fir engraver beetle, which killed trees on 181,000 acres; and larch needle problems, which defoliated trees on more than 62,000 acres. The extent of damage from these agents is displayed as Figure 1 at the end of this document. Douglas-fir tussock moth populations are rising and defoliation was located on approximately 300 acres in Okanogan County. With the exception of the larch problems, which are mainly caused by a non-native caterpillar, all of these damage agents are native insects and diseases.

High amounts of damage are related to long population cycles, annual droughts, and to recent shifts in forest composition that favor these pests. For example, western spruce budworm and Douglas-fir tussock moth feed primarily on the foliage of Douglas-fir and grand fir. Past forest management practices that created a shady environment for natural seedlings and suppressed wildfire, have increased Douglas-fir- and grand fir-dominated forests (at the expense of pine and larch). With more food available, the caterpillars thrive and can cause extensive damage to host trees. On sites where pines are the best adapted species, overcrowding weakens trees by forcing them to compete for water, light, and nutrients, enabling bark beetle populations to rise.

The accumulation of dead trees over time interacts with annual dry weather patterns, increasing risks to safety and resources from wildfire. Forest management activities that reduce tree crowding, remove the weakest trees, and encourage an appropriate mix of disease- and pest-resistant conifers are recommended to increase forest health in eastern Washington.

Major damage agents – western Washington

In western Washington, a major damage agent identified in the 2008 aerial survey was combined bear damage and root disease that killed trees on nearly 310,000 acres. Wind damage, most from the December, 2007 storms, affected approximately 25,000 acres. The extent of damage from these agents is displayed as Figure 2 at the end of this document. Forest management activities that recognize root diseases and reduce their impact, primarily through use of disease-resistant species, are recommended.

4. Forest Health Implementation Strategy Development

Forest health is a common thread that can draw needed connections among the many aspects of DNR's work. The department performed an integrated accounting of work that contributes to forest health as the first step to identifying opportunities and priorities for improvement that cut across departmental functions. This also allows the department to update the 2004 Washington State Strategic Plan for Healthy Forests, revisit the recommendations of the FHSWG, and plan for success in implementing the comprehensive program envisioned by RCW 76.06.

The DNR, the FHSWG, and the legislature have recognized that forest health problems may exist on forest land regardless of ownership. Some of the department's work assists all land ownerships, statewide; other aspects contribute differently to forest health according to specific

landowner subsets. Therefore, the draft forest health implementation strategy was organized so as to describe DNR’s role and key outcomes based on each major category of land ownership:

All Lands	Stevens County Pilot Project
Private Lands	State Trust Lands
Federal Lands	Tribal Lands
Other State Public Lands	

At this stage of strategy development, the key outcomes mostly represent ongoing work of the department, but some may also be aspirational or under development. Where applicable, specific tasks for divisions, regions, and other categories of staff responsibility within DNR are described. The major concepts of the draft strategy are summarized here, and the full version is presented as Appendix B.

Relating to all landowners, the DNR is a land manager, service provider, administrator of regulations to protect public resources, and a policy leader. The draft implementation strategy identifies eight major roles for the agency that are related to forest health protection and management on all lands in the state, and key outcomes associated with each.

Actions specific to the Stevens County Pilot Project area are being tested as the basis for scaling-up the Forest Health Program statewide. DNR roles include initiating cooperative forest health projects based on high quality forest health assessments and supported by effective communications and outreach.

The DNR’s private land roles described in the draft strategy are as a service provider, including assisting and organizing major insect and disease outbreak suppression projects, and wildfire prevention for private landowners.

The DNR has several specific forest health roles as the manager of forested state trust lands. Within the context of generating revenue for trust beneficiaries, the way timber sales and Forest Improvement Treatment (FIT) projects are designed and conducted, as well as the strategies selected for protecting threatened and endangered species and older forest conditions, are closely tied to forest health.

Active forest health management on federal lands in Washington is a high priority and emerging role of the DNR. The draft strategy describes expanded engagement and influence efforts with federal land policy in general, specific projects, and land management planning.

The DNR’s desire is to recognize the innovations and leadership in forest management that tribal lands exhibit in the state, and to investigate the best means by which the department can assist and learn from tribal governments and land managers. Preliminary outreach on this aspect of the draft strategy has been initiated.

The DNR has a role in forest health protection on other state public land, including areas managed by the department as Natural Area Preserves (NAP) and Natural Resource Conservation Areas (NRCA), and consultative roles with assisting other state land managers. Outreach on this aspect of the draft strategy is still ongoing.

Figure 1:

Forest Disturbance Activity in Eastern Washington Based on 2008 Aerial Survey Data

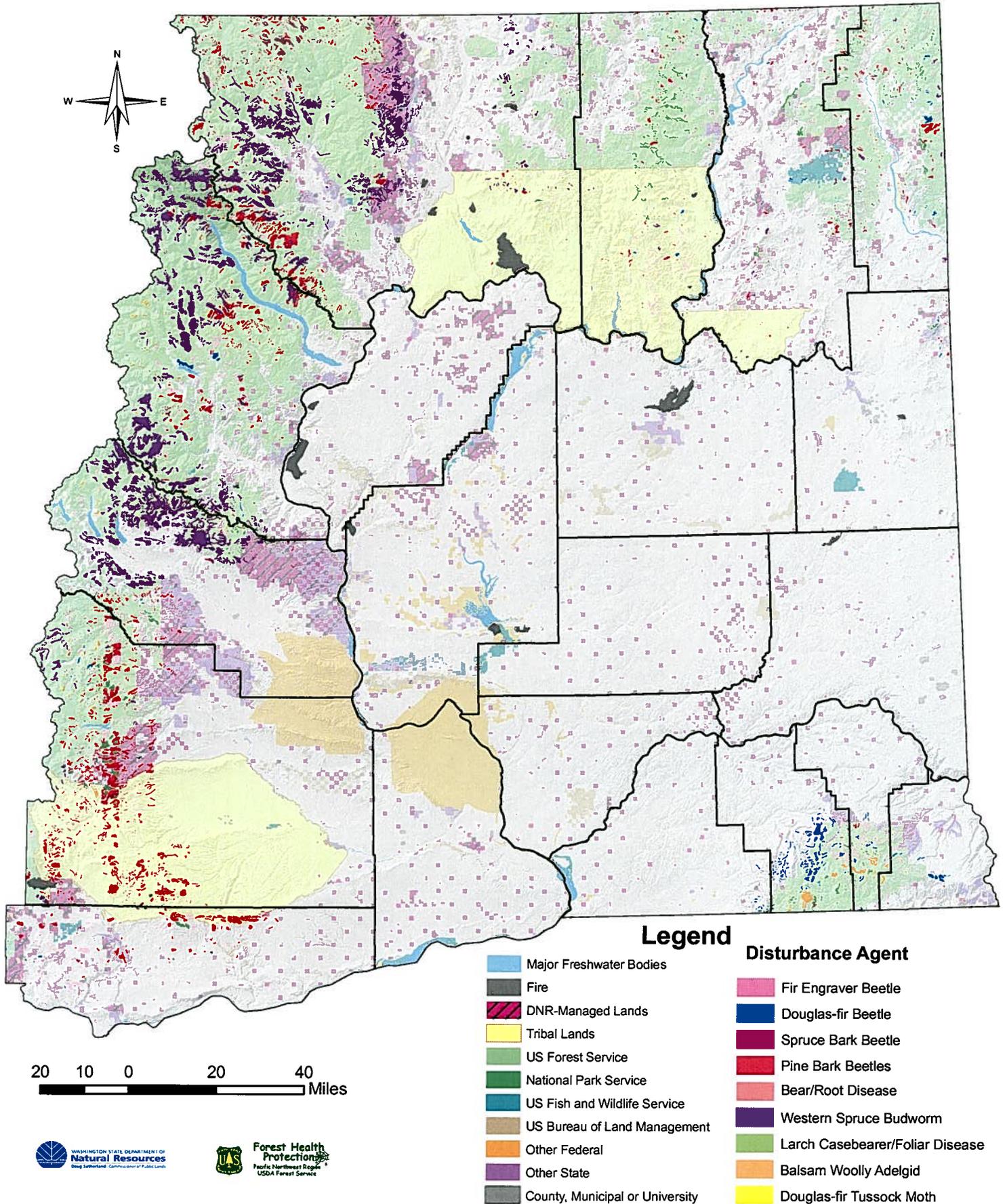
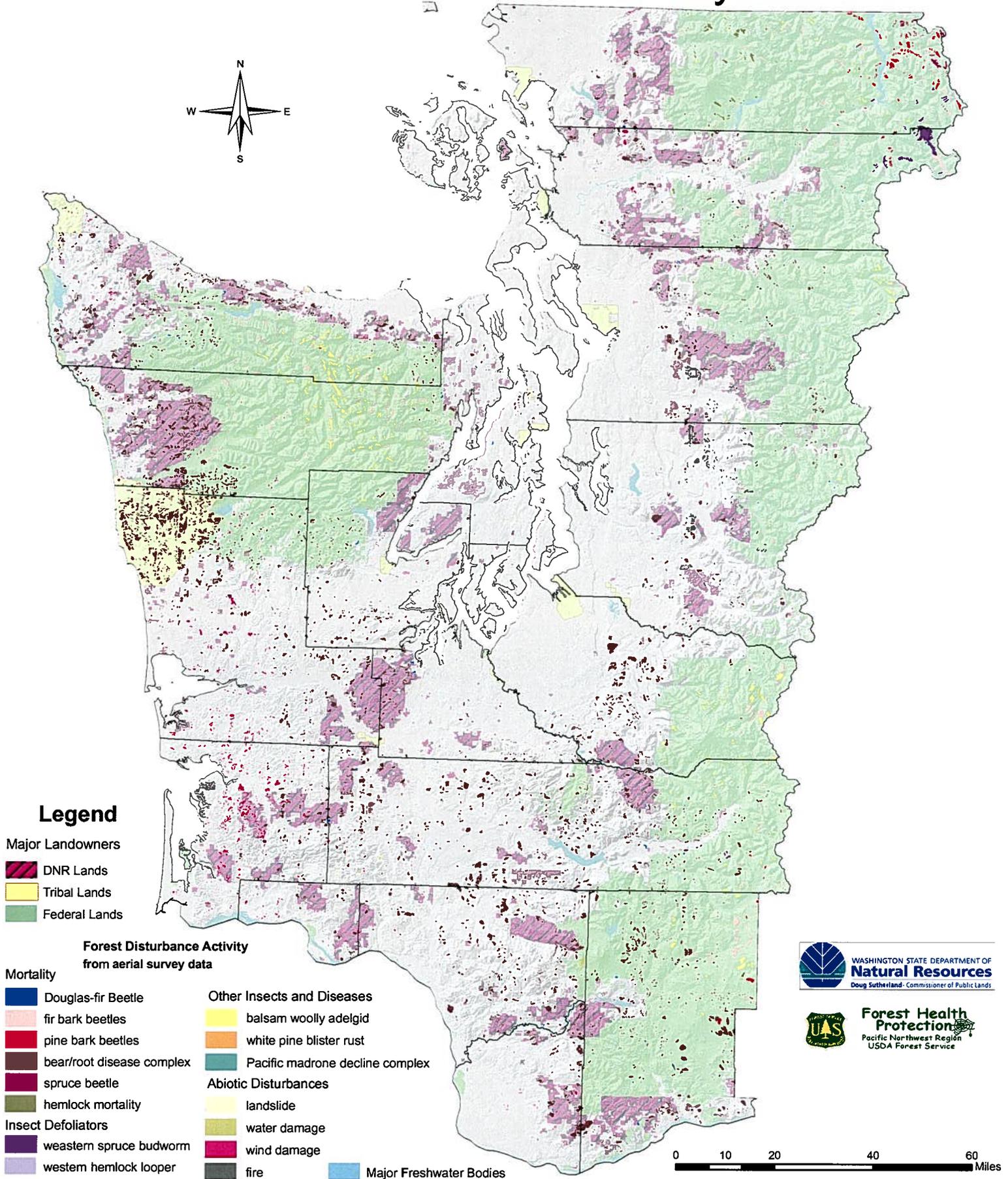


Figure 2:

Forest Disturbance Activity in Western Washington Based on 2008 Aerial Survey Data



Appendix A

Budget Enhancement Requests Forest Health Program Landowner Assistance

January, 2009



WASHINGTON STATE DEPARTMENT OF
Natural Resources
Doug Sutherland - Commissioner of Public Lands

State of Washington
Decision Package

FINAL

Agency: 490 Department of Natural Resources
Decision Package Code/Title: FH Forest Health Implementation
Budget Period: 2009-11
Budget Level: PL - Performance Level

Recommendation Summary Text:

Authority to modernize of the Forest Health Authorities (RCW 76.06) occurred with passage of ESSB 6141 in 2007. Obtaining spatially explicit forest inventory data, performing risk assessments, and identifying insect and disease risk thresholds were not funded in 2007 but continue to be a critical program need. This was identified by the multi-stakeholder agreement regarding the bill. The skills of an Analyst (Environmental Planner 3) to conduct spatial analysis, reporting, and creating Geographic Information Systems (GIS) communication products are needed. The program must have the capacity to assess forest condition, develop suitable forest health prescription recommendations, evaluate landowner forest management plans, and track land condition and accomplishment is needed for implementation of Tier 1 and Tier 2 services to landowners.

Fiscal Detail

	<u>FY 2010</u>	<u>FY 2011</u>	<u>Total</u>
Operating Expenditures			
001-1 General Fund - Basic Account-State	437,600	411,800	849,400
Total Cost	437,600	411,800	849,400
Staffing	<u>FY 2010</u>	<u>FY 2011</u>	<u>Annual Average</u>
FTEs	1.9	2.5	2.2

Package Description:

This request continues the phased in implementation of the legislatively mandated Forest Health Program at a slower pace than indicated in the original fiscal note for SB 6141 due to the status of the State's general fund. The proposal includes the additional staff necessary for expanding Tier 1 activities in eastern Washington and initiating Tier 2 activities on one site in FY10. This will result in improved forest health in Eastern Washington, a reduction in the number and intensity of wildfires and the cost of suppressing them, and increased landowner commitment to sustainable stewardship. It will contribute to developing methods for identifying, prioritizing, and treating forest areas at risk to insects, disease, wildfire, and climate change.

Narrative Justification and Impact Statement

What specific performance outcomes does the agency expect?

In order to fulfill the goals of RCW 76.06, the Forest Health Program must continue to increase its capacity to identify high priority areas for landowner outreach and prevention activities and provide meaningful site specific consultation and management recommendations to landowners. This would be accomplished by seeking spatially explicit forest inventory data and analysis

support (\$325,000 per biennium); employing an Environmental Planner 3 (to prepare forest risk analysis, GIS products, and reports), a NR Research Technician (to assist in conducting site specific forest and risk evaluations and in tracking program activities and land condition), and an Administrative Assistant 2 for support of the increased administrative workload. Small amounts are requested to fund communication products and to assist landowners in organizing cooperative projects.

Performance Measure Detail:

Expected result:	Incremental Changes	
Acres with site specific inventory assessments	1 million per year	2 million for biennium
Site specific landowner contacts and consultation	50 per year	100 for biennium
New forest management plans generated	10 per year	20 for biennium
Projects facilitated with state seed money	1 per year	2 for biennium

The Resource Protection Forest Health Program performance measure "Number of strategies implemented as a result of evaluations for current or potential forest insect, disease, fire or wind problems" is not specifically impacted by this request. Expanding Tier 1 activities and initiating Tier 2 for FY10 will provide the more robust results indicated above.

Performance Measure Detail

Activity: A046 Resource Protection **Incremental Changes**

No measures submitted for package

Is this decision package essential to implement a strategy identified in the agency's strategic plan?

This proposal supports our goal to assure that "forest systems enjoy equal or greater health and productivity" by implementing our strategies to:

- Establish, restore, and maintain healthy forests.
- Maintain a vigilant insect and disease monitoring system.
- Effectively pursue partnerships with small forest landowners, and provide leadership in dealing with their unique issues.
- Promote the establishment, maintenance, or restoration of forest stands so they can resist serious damage from fire, insects, and diseases.

Does this decision package provide essential support to one of the Governor's priorities?

As an essential element of the Resource Protection Forest Health Program, this proposal supports the following Priorities of Government:

- "Improve the quality of Washington's natural resources", through;
 - Establishing safeguards and standards to protect natural resources,
 - Preserve, maintain and restore natural systems and landscapes,
 - Providing good science and resource monitoring data to support decision making, and
 - Improving individual practices and choices about natural resources

Does this decision package make key contributions to statewide results? Would it rate as a high priority in the Priorities of Government process?

This proposal makes key contributions to the "Improve the quality of Washington's natural resources" statewide result by:

- Establishing safeguards and standards to protect natural resources
- Preserving, maintaining and restoring natural systems and landscapes
- Providing good science and resource monitoring data to support decision-making
- Improving individual practices and choices about natural resources.

What are the other important connections or impacts related to this proposal?

The Forest health program is currently investigating methods of evaluating success (such as forest landowner surveys) in a pilot demonstration area (Stevens County). This will likely generate potential success measures.

Spatially explicit inventory data might also allow quantitative success measurements in terms of reduced insect/disease/fire risk forest conditions across an area of interest.

Improving forest health has a relationship to reducing the potential impacts of climate change. When forest health is improved, then the individual trees become more resistant and resilient to drought and adverse climate in addition to insects, disease, and wildfire. When overcrowded trees are harvested and converted to wood products, they do not rot or burn to release carbon into the atmosphere. If they are used for energy production then they potentially replace fossil fuels that would have been used similarly. "Leading the Way on Climate Change: The Challenge of Our Time Interim Report, February 2008" recommended a forestry strategy (F-1) of Improving Forest Health. It describes implementing fuel reduction treatments on 25% of forest acres identified as being at high-risk of catastrophic wildfires by 2020. Site specific inventory and analysis activities and techniques as described in this proposal could be used to identify acres at high risk of wildfire. Employing forest health improving treatments will also reduce risk of wildfire and enhance the sustainability of the forest.

What alternatives were explored by the agency, and why was this alternative chosen?

The current proposal was developed anticipating ramping up of program capacity and services over future years. This proposal is the next iteration of ramping up, albeit at a reduced rate than originally envisioned in 2007

What are the consequences of not funding this package?

The implementation of the legislatively mandated Forest Health Program would not be funded. This will reduce the ability of the Forest Health Program to provide preventative forest health advice and treatments, rather than reactive treatments to state and private forest landowners. It will reduce the Program's capacity to provide high quality information to forest landowners throughout the state and to affect forests on a landscape basis. It will not contribute to reducing the number and intensity of forest fires and reducing the cost of suppressing them. It will not contribute to our capacity to increase the resistance and resiliency of forests to the potential effects of climate change nor will it contribute to enhancing our capacity to locate and treat forests at high risk of climate change and wildfire when/if we decide to take action.

What is the relationship, if any, to the state's capital budget?

None

What changes would be required to existing statutes, rules, or contracts, in order to implement the change?

None

Expenditure and revenue calculations and assumptions

A .5 FTE Environmental Planner 3 will prepare forest risk analysis, GIS products, and reports (this position would expand to full time in the 2011-13 biennium). A full time NR Research Technician 3 position would assist in conducting site specific forest and risk evaluations, tracking program activities, and land conditions. Starting in 2011 a .5 FTE Administrative Assistant 2 would provide support for administrative services in eastern Washington offices. Salary and benefit cost is \$267,900 for the 2009-11 biennium and \$361,600 a biennium thereafter.

Personal Service Contracts:

Contractual work to perform a site specific spatially explicit forest inventory and analysis and risk/needs assessment of the current condition of Washington's forests and locations of highest priority hazards. This involves an efficient forest inventory to identify the areas at greatest risk from specific insects or diseases and also requires determining site-specific prescriptive actions that will effectively reduce the risk on those sites. Cost for this work is \$325,000 for the 2009-11 biennium, \$500,000 for the 2011-13 biennium and \$2,000,000 for the 2013-15 biennium.

Contractual work for communication products. This work will assist landowners in organizing cooperative projects and support the general forest health strategic plan, the fire strategic plan, and the specific forest health hazard warning and order areas. Cost for this work is \$40,000 for the 2009-11 biennium, \$80,000 for the 2011-13 biennium and \$100,000 for the 2013-15 biennium.

Goods and services, rent, and travel are based on program averages.

One-time items include workstations at \$7,000 each for three positions, one pick-up for \$24,000 and three computers for \$3,900.

Grants: \$30,000 in the 2009-11 biennium for cost share agreements with landowners. This will allow the program to offer site-specific information, technical assistance and project coordination services. This includes landowner financial assistance to implement forest health treatments that do not pay for themselves through the sale of forest products. Cost for this work in outlying years is estimated to be \$200,000 a biennium.

Agency administrative cost is calculated at 27% and shown as object T. FTE associated with agency admin is estimated at .5 of a position.

There are no anticipated revenue changes due to this proposal.

Which costs and functions are one-time? Which are ongoing? What are the budget impacts in future biennia?

Costs related to this proposal are ongoing except as noted in expenditure calculation area above.

<u>Object Detail</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>Total</u>
A Salaries And Wages	100,900	102,800	203,700
B Employee Benefits	28,500	35,700	64,200
C Personal Service Contracts	195,000	170,000	365,000
E Goods And Services	24,600	22,200	46,800
G Travel	12,800	17,000	29,800
J Capital Outlays	26,700	1,200	27,900
N Grants, Benefits & Client Services	10,000	20,000	30,000
T Intra-Agency Reimbursements	39,100	42,900	82,000
Total Objects	437,600	411,800	849,400

State of Washington
Decision Package

FINAL

Agency: 490 Department of Natural Resources
Decision Package Code/Title: EA Expert Forestry Assistance
Budget Period: 2009-11
Budget Level: PL - Performance Level

Recommendation Summary Text:

This proposal ensures that DNR's Forest Practices Program can continue to deliver technical assistance to small forest landowners, to assist them in protecting public resources while maintaining healthy, productive forests. It also ensures that the program continues to have access to expert technical support needed to implement the Forest Practices Act and Rules. Specifically, this proposal: 1) transitions core stewardship forestry functions within DNR's Small Forest Landowner Office (SFLO) from federal to state funding, and 2) maintains current levels of expert technical support from the departments of Ecology (DOE) and Fish & Wildlife (DFW).

Fiscal Detail

Operating Expenditures	<u>FY 2010</u>	<u>FY 2011</u>	<u>Total</u>
001-1 General Fund - Basic Account-State	398,900	398,900	797,800
Total Cost	398,900	398,900	797,800
Staffing	<u>FY 2010</u>	<u>FY 2011</u>	<u>Annual Average</u>
FTEs	2.0	2.0	2.0

Package Description:

Element 1. Stewardship Forestry (\$474,800)

The Small Forest Landowner Office's (SFLO) stewardship forestry functions are a proven system for communicating information about sound forest management approaches and assistance programs to small forest landowners. Small forest landowners own and manage over 3 million acres of Washington's forest lands and exert a tremendous influence on public resources, particularly in low elevation areas that contain major streams and rivers, and important fish and wildlife habitat. Stewardship forestry offers advice and assistance to these landowners to help them protect water quality, provide fish and wildlife habitat, improve forest health, and reduce the risk of wildfire. Advice is customized to meet the landowner's objectives. Further, stewardship forestry's capabilities represent a form of incentive and encouragement for small forest landowners to maintain well-managed forest lands rather than creating unhealthy forest conditions or converting their forest lands to other uses. Historically, funding for stewardship forestry has been provided by the federal government. However, State and Private Forestry has recently been de-prioritized by the U.S. Department of Agriculture, and efforts by state and local officials to restore federal funding have had limited success. This proposal transitions 2 senior stewardship forestry staff from "soft" federal funding to state funding, thereby ensuring that the crucial, operational nexus between assistance programs and those whom the programs must reach remains intact.

Element 2. Expert Technical Support (\$323,000)

DNR relies upon expert technical support from DOE and DFW to implement the Forest Practices Act and Rules. Since 2000, federal funding has been provided to DOE and DFW for this purpose. From FY 00 through FY 06, funding was provided through a series congressional earmarks supporting implementation of Washington's landmark Forests & Fish Report. Federal funding ceased at the end of FY 06, and starting in FY 07, state funding was added to the Forest Practices Program's carry forward level for expert technical support provided by DOE and DFW, at the same level as FY 00. However, costs incurred by DOE and DFW to provide this support have substantially increased since FY 00, due to the point that DOE and DFW cannot continue to provide the same levels of support unless funding is increased. This proposal maintains current levels of expert technical support available to the Forest Practices Program by increasing funding to DOE and DFW.

Narrative Justification and Impact Statement

What specific performance outcomes does the agency expect?

Element 1: Technical assistance to small forest landowners is maintained. More small forest landowners manage their lands to provide optimal protection for public resources while maintaining healthy, productive forests.

Element 2: Water quality and fish and wildlife habitat considerations are well represented during Forest Practices Application (FPA) processing. Regulatory decisions affecting water quality or fish and wildlife habitat are well informed by expert technical input provided by DOE and DFW.

Potential performance measures include:

Element 1

- Numbers of contacts with small forest landowners.
- Acres of forest land managed under approved stewardship plans.
- Rates of conversion of small forest landowner properties to other land uses.

Element 2 is reflected in existing Forest Practices Program's performance measures. Because Element 1 represents a funding transition and Element 2 maintains current support levels, no incremental changes are expected.

Performance Measure Detail

Activity: A016 Forest Practices Act and Rules

Incremental Changes

No measures submitted for package

Is this decision package essential to implement a strategy identified in the agency's strategic plan?

This proposal supports the Department of Natural Resources' strategic plan as follows:

Goal: The public we serve widely and consistently holds DNR in high esteem

Goal: Forest systems enjoy equal or greater health and productivity

Goal: DNR is faithfully implementing its responsibilities as a regulator

Goal: DNR's workforce is skilled, knowledgeable, motivated, and effective

Does this decision package provide essential support to one of the Governor's priorities?

Yes, this request provides essential support to several of the Priorities of Government:

Improve the quality of Washington's natural resources

Improve the ability of state government to achieve its results efficiently and effectively

Does this decision package make key contributions to statewide results? Would it rate as a high priority in the Priorities of Government process?

Yes, this request contributes to the following statewide results:

Improve the quality of Washington's natural resources
Improve individual practices and choices about natural resources
Provide good science and resource monitoring data to support decision-making

Improve the ability of state government to achieve its results efficiently and effectively
Improve decision support for government decision makers

What are the other important connections or impacts related to this proposal?

Other agencies that rely upon small forest landowner's voluntary forest-management actions and count upon well-informed regulatory decision-making by DNR to help accomplish their missions are positively impacted. These include the departments of Ecology and Fish & Wildlife, the Governor's Salmon Recovery Office, and the Puget Sound Partnership. Approximately 20% of work to be carried out under this proposal is within the Puget Sound Basin.

What alternatives were explored by the agency, and why was this alternative chosen?

For Element 1, DNR considered continuing to rely upon "soft" federal funding to support core stewardship forestry functions. DNR rejected this alternative because federal funding for state and private forestry programs is declining and uncertain. For Element 2, DNR considered working with reduced levels of expert technical support from DOE and DFW. DNR rejected this alternative because maintaining current levels of support from DOE and DFW is essential to ensuring that DNR's Forest Practices foresters are well informed, thereby allowing them to make the best possible regulatory decisions for forest practices activities involving water quality or fish and wildlife habitat.

What are the consequences of not funding this package?

For Element 1, core stewardship functions would be subject to availability of federal funding; this funding is declining and uncertain. For Element 2, reduced levels of expert technical support would be available to inform DNR's regulatory decision-making. There would be a higher likelihood that water quality or fish and wildlife habitat considerations could be overlooked during FPA processing.

What is the relationship, if any, to the state's capital budget?

None.

What changes would be required to existing statutes, rules, or contracts, in order to implement the change?

None.

Expenditure and revenue calculations and assumptions

Element 1: One Natural Resource Specialist 4 and 1 Natural Resource Specialist 3 are shifted from "soft" federal funding to state funding. These are permanent positions; costs are ongoing.

Salaries and benefits are \$310,800.

Goods and services, rent, travel are based on program averages.

Agency administrative cost is calculated at 27% and shown as object T. FTE associated with agency admin is estimated at 2.0 FTE.

Element 2: FY 00-level funding provided to DOE (\$197,000 per year) and DFW (\$388,000 per year) was inflated using actual (2001 - 2007) and estimated (2008 - 2010) Implicit Price Deflators supplied by DOE budget staff. This resulted in a cumulative 27.6% increase from 2000 to 2010. This amount of additional funding is requested (DOE = 27.6% x \$197,000 per year = \$54,400 per year; DFW = 27.6% x \$388,000 per year = \$107,100 per year). These are ongoing costs.

This proposal does not affect any form of revenue.

Which costs and functions are one-time? Which are ongoing? What are the budget impacts in future biennia?

All costs are ongoing.

<u>Object Detail</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>Total</u>
A Salaries And Wages	117,400	117,400	234,800
B Employee Benefits	38,000	38,000	76,000
E Goods And Services	177,100	177,100	354,200
G Travel	17,700	17,700	35,400
T Intra-Agency Reimbursements	48,700	48,700	97,400
Total Objects	398,900	398,900	797,800

Appendix B

DRAFT Integrated Forest Health Implementation Strategy

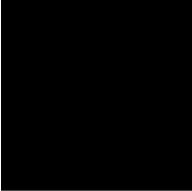
January, 2009



WASHINGTON STATE DEPARTMENT OF
Natural Resources
Doug Sutherland - Commissioner of Public Lands

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DRAFT Integrated Forest Health Implementation Strategy

1. INTRODUCTION

In 2007 the state legislature tasked the Department of Natural Resources (DNR) with new responsibilities for the protection of forest health (RCW 76.06). The DNR, its stakeholders and the legislature have recognized that forest health problems may exist on forest land regardless of ownership. Some of the department's work assists all land ownerships, statewide; other aspects contribute differently to forest health according to specific landowner subsets. Therefore, a draft forest health implementation strategy was organized so as to describe DNR's role and key outcomes based on each major category of land ownership in Washington.

At this stage of strategy development, the outcomes mostly represent ongoing work of the department, but some may also be aspirational or under development. Where applicable, specific tasks for divisions, regions, and other categories of staff responsibility within DNR are described.

<u>Landowner Categories</u>
All Lands
Stevens County Pilot Project
Private Lands
State Trust Lands
Federal Lands
Tribal Lands
Other State Public Lands

The draft implementation strategy:

- Incorporates major policy and statutory responsibilities;
- Provides the framework for a comprehensive forest health program that will recognize and integrate the many responsibilities of the Department;
- Updates and replaces 2004 Washington State Strategic Plan for Healthy Forests;
- Guides the implementation of the forest health pilot project in Stevens County

The purpose of the implementation strategy is three-fold. The first is to inventory DNR's existing work that pertains to forest health, and communicate it effectively to external and internal audiences. The second is to recognize the distinctions among, and clearly frame DNR's

role in, the diverse management objectives for maintaining healthy forests across private, state, federal, and tribal land ownerships. The strategy's third purpose, and the next step of its development, is to identify priorities and opportunities for integrating DNR's work, and thereby, institute a system of continuous improvement that cuts across departmental functions.

2. ALL LANDS

The DNR is a land manager, service provider, administrator of regulations to protect public resources, and a policy leader. The draft implementation strategy identifies eight major roles for the agency that are related to forest health protection and management on all lands in the state.

2.1 Research, Data and Monitoring

The DNR's role is, through partnerships or directly, to identify needs for and conduct data acquisition, analysis, research and monitoring that contributes to improved forest health protection and management.

Contributing Personnel & Programs	
Forest Health Program	Region Managers & Staff
Fire Prevention Program	Forest Practices Division
Land Management Division	Information Tech. Division

Key Outcomes

- Research, data collection and monitoring conducted by DNR to meet State Trust Lands management, regulatory obligations, and other management functions is readily available to all landowners and managers, policy makers and the public.
- The Forest Health Program, in cooperation with US Forest Service Forest Health Protection, collects statewide aerial survey data on forest insect and disease damage annually. These data are available electronically and are distributed to state lands managers, private landowners, policymakers, and general audiences.
- Major forest condition data acquisition and analysis projects are coordinated with other agencies and governments. Data analysis tools are developed to mutually serve departmental regulatory and land management responsibilities as well as broader land management decision support needs.
- Resource Protection Division annually updates a statewide GIS layer of acres burned in wildfires, including any available information on severity.

- Agency-wide geospatial data on implemented forest management projects are updated regularly by State Lands Assistants and Forest Practices Division. The Forest Health Program provides analytical capability to assist effectiveness monitoring.
- The Land Management Division, through efforts like the Tapash Collaborative in central Washington, cooperates with state and federal research institutions, land management agencies, and stakeholders, to evaluate management strategies for forest landscape resistance and resiliency.
- The Land Management Division participates in numerous applied silvicultural research cooperatives dealing with forest structure development and growth and yield relationships.
- The Land Management Division and Forest Health Program develop maximum tree density threshold recommendations for the susceptibility of eastern Washington forests to forest insects and diseases.
- The IT Division and data stewards work with Forest Health Program, Land Management Division, and Region Managers to make data readily and publicly accessible.
- The value of non-market environmental and social benefits of healthy, functioning ecosystems is quantified and understood.
- Long-term avoided costs attributable to preventing unwanted forest health and wildfire disturbances are quantified and understood.

2.2 Markets & Market Enhancements

The DNR’s role is to contribute to policy, incentive, and supply structures that encourage the maintenance and development of strong markets.

Contributing Personnel & Programs	
State Lands Steward	Region Managers
Product Sales & Leasing Division	Policy Office
Government Affairs Director	

Key Outcomes

- State trust lands produce reliable supplies of forest products that contribute to the maintenance of existing manufacturing infrastructure.
- Region Managers and the Product Sales & Leasing Division receive and react to business inquiries for biomass and other material supply agreements on state trust lands, communicating significant developments and challenges to the Policy Office. Expanding, complimenting, and strengthening existing infrastructure is desired.
- The Policy Office assembles information about state and federal wood utilization market policy and incentives, represents the

Department with related state and federal organizations, and distributes information to the State Lands Steward, Region Managers, and the Government Affairs Director.

- The Policy Office advocates for federal policy and fiscal incentives for market development, such as biomass and bioenergy.
- The Government Affairs Director advocates for state policy and fiscal incentives for biomass market development.
- The Policy Office and State Lands Steward lead the Department’s identification of research and planning needed to address critical forest management, material supply, and feasibility questions.

2.3 Leadership in Forest Health Policy

The DNR’s role is to serve as the state of Washington’s lead for all forest health issues.

Contributing Personnel & Programs	
Commissioner of Public Lands	State Forester
Communications Office	Division Managers
Government Affairs Director	Region Managers
Forest Health Program	

Key Outcomes

- The Commissioner of Public Lands convenes state and federal agencies, private landowners, and stakeholders in major initiatives and cooperative forest health protection and management efforts.
- The Policy Office, at the direction of the Commissioner, conducts a program of intergovernmental relations in the service of protecting forest health on all lands in the state.
- The State Forester and the Policy Office monitor, engage, influence, and/or initiate federal legislative, regulatory, and policy-making efforts affecting forest health, including upkeep of working relationships with members and staff of the Washington Congressional Delegation, Committees of jurisdiction, and the Presidential Administration.
- The Policy Office and Government Affairs Director coordinate coalition-building for state and federal legislative and policy initiatives to improve attainment of forest health objectives.
- Agency-wide, local government partnerships are employed to share information, share training opportunities, and communicate forest health priorities (as described more specifically elsewhere in this strategy).
- State and federal agencies, local governments, neighboring landowners and general audiences are aware of and contribute to coordinated forest management project development.

- Project successes and significant innovations are communicated to policy-makers, other agencies, and the public.

2.4 Regulatory Environment

The DNR’s role is to protect public resources on state and private lands, coincident with maintenance of a viable forest products industry, through consistent administration of the Forest Practices Act rules and adaptive management processes.

Contributing Personnel & Programs	
Exec. Director of Regulatory Programs & State Forester	Forest Practices Division
Resource Protection Division	Forest Practices Board
Cooperative Monitoring, Evaluation & Research	Forest Health Program
Region Forest Practices Staff	

Key Outcomes

- The Forest Practices Habitat Conservation Plan (FPHCP) provides assurances for compliance with the Endangered Species Act for aquatic and riparian dependent species, restores and maintains habitat, and meets Clean Water Act requirements on state and private forestlands.
- Forest Practices and Forest Health regulatory elements are coordinated by the Forest Practices Board so that the goals of each can be mutually realized.
- The Forest Practices Board receives technical and scientific information through the adaptive management program to determine whether adjusting rules and guidance is necessary or advisable.
- The Forest Practices Division evaluates and reports to the Forest Practices Board on how rules and voluntary processes are working. The Forest Health Program contributes to that evaluation.
- The Small Forest Landowner Office coordinates landowner recommendations on improving regulatory performance through the Small Forest Landowner Advisory Committee to the Forest Practices Board.
- The Region Forest Practices staff provides assistance for landowners who wish to develop harvest or management plans that propose alternatives to the state Forest Practices Rules as a tool to address site-specific issues and provide greater management flexibility.
- The Region Forest Practices staff and Small Forest Landowner Office assist landowners who wish to submit a long-term forest practices application.

- Changed circumstances related to disease and pest outbreaks, including their effects on FPHCP-covered species, are addressed through the Adaptive Management program if and when they occur.

2.5 Wildland Fire Protection

The DNR’s role is to protect public safety and forest resources through its primary responsibility for aggressive suppression of wildland fire on private and state forestland, participating in cooperative suppression efforts on improved land and federal forestlands, and the regulation of silvicultural burning.

Contributing Personnel & Programs	
State Forester	Smoke Management Program
Resource Protection Division	Forest Health Program

Key Outcomes

- Healthy forest conditions are recognized as the foundation for reducing the costs and impacts of wildland fire.
- At least 93 percent of all fires on land under DNR protection responsibilities are contained at less than ten acres.
- Through interagency partnership agreements and State Mobilization, fire suppression resources are shared with fire protection districts, federal agencies, and tribal governments.
- Silvicultural burning is regulated through a permitting process that protects public health, complies with the State Smoke Management Plan and controlled burn prescription windows.
- Resource Protection Division works with other agencies and landowners to develop policy and guidance in use of prescribed fire to address and maintain forest health, and as a fire prevention activity.

2.6 Climate Change Mitigation & Adaptation

The DNR’s role is to provide leadership in the state’s forest sector on reducing greenhouse gas emissions, pursuing carbon market opportunities, and adapting and improving forest resilience in the face of climate change.

Contributing Personnel & Programs	
Commissioner of Public Lands	State Forester
Resource Protection Division	State Lands Steward
Small Forest Landowner Office	Policy Office
Land Management Division	Forest Health Program

Key Outcomes

- The Commissioner of Public Lands participates on government bodies dealing with climate change, such as the Governor’s Climate Action Team.
- The Policy Office leads or participates in stakeholder, intergovernmental, and regional efforts to accurately quantify and design the forestry-related elements of greenhouse gas mitigation systems.
- The Policy Office promotes climate change mitigation approaches that responsibly treat forest sector contributions, including improving forest health conditions.
- The State Lands Steward evaluates opportunities for trust land forests to participate in carbon market opportunities.
- Research and science-based planning anticipates climate change effects and informs management actions to improve forest ecosystem resilience, including the development of site-specific best management practices.
- The DNR’s seed orchard program conducts research on changes to tree species hardiness zone requirements that may result from climate change scenarios, including for historically under-served tree species of eastern Washington.
- Adequate supplies of high quality seed and seedlings are built and maintained by department’s network of seed orchards, the Webster Forest Nursery, and through participation in genetic and tree improvement cooperatives.

2.7 Harmful Exotic Forest Insect & Disease Control

The DNR’s role is to contribute resources and expertise to assist and support the Washington Department of Agriculture in control or eradication efforts, exercising its independent authorities when needed.

Contributing Personnel & Programs	
Commissioner of Public Lands	Forest Health Program
Forest Practices Division	Policy Office
Landowner Assistance Programs	

Key Outcomes

- The Forest Health Program, working with other state and federal agencies, has the lead departmental responsibility in the detection and response to harmful exotic forest insect or disease species.
- The Landowner Assistance Program coordinates necessary agreements and assistance to affected forest landowners.

-
- The Forest Practices program provides input on likely impacts and mitigation techniques to protect public resources during control or eradication efforts on forest land.
 - Failing other efforts, the Commissioner of Public Lands may declare a forest health emergency, delineate an affected area, and accomplish exotic insect or disease outbreak control.

2.8 Post-Catastrophic Event Response & Recovery

The DNR’s role is to provide for public safety, protect public resources, assist landowners in meeting their recovery objectives, and maintain long-term value for trust beneficiaries.

Contributing Personnel & Programs	
Commissioner of Public Lands	State Lands Steward
Communications Office	Region Managers & Staff
Landowner Assistance Programs	Forest Health Program
Resource Protection Division	

Key Outcomes

- For a significant catastrophic event affecting multiple landowners over a broad geographic area, the Commissioner designates a project coordinator responsible for overseeing DNR’s response efforts.
- Resource Protection Division provides trained incident management personnel, equipment and supplies as requested by state or local governments.
- A clearinghouse organization is developed to deliver available state and federal assistance for landowner recovery. Additional recovery needs are quantified and communicated to the Commissioner through the Policy Office, which advocates for these at appropriate levels.
- The Forest Health Program contributes specialized expertise, such as aerial assessment of damaged area extent, site assessments of tree damage, and insect and disease considerations in forest recovery.
- Material damaged by catastrophic events on State trust lands is timely salvaged, in accordance with department policy and state and federal laws.

3. STEVENS COUNTY PILOT PROJECT

Functions specific to the Stevens County Pilot Project area are being tested as the basis for scaling-up the forest health program statewide. Other functions described in this strategy pertain to Stevens County

activities, but those listed under the Stevens County heading are specific to the pilot project (do not apply elsewhere). The DNR has identified critical roles in risk area identification, communications and outreach, and carrying-out cooperative projects across multiple land ownerships.

3.1 Preemptive Risk Identification

The DNR’s role is to provide objective, spatially explicit forest condition data and assessments of forest health risks.

Contributing Personnel & Programs	
Northeast Region Manager	Forest Health Program
Landowner Assistance Programs	

Key Outcomes

- The Forest Health Program, subject to available funding, acquires new and makes use of existing spatially explicit data that objectively identify areas of elevated forest health risk.
- Methods, technologies and types of data are assessed based on cost-effectiveness, quality and functionality. The Forest Health Program produces a written evaluation of publicly and commercially available data sources, technologies and analysis methods for assessing forest health hazards.
- The Forest Health Program ensures data collection meets multiple purposes where possible, and is shared freely.
- Data and risk assessment methods are transferred to major landowners and managers so that consistent methods of risk assessment may be employed across land ownerships.
- Capacity and efficiency increases over time to facilitate faster, more accurate analyses over larger areas.

3.2 Communications & Outreach

The DNR’s role is to communicate information on forest health concepts, conditions and opportunities for landowners and the public.

Contributing Personnel & Programs	
Commissioner of Public Lands	Forest Health Program
Landowner Assistance Programs	Fire Prevention Program
Communications Office	

Key Outcomes

- The Forest Health Program has communications capabilities and resources, coordinated with the Communications Office, to carry out strategic outcomes.
- A baseline program of communicating information and key messages is made accessible and is effective to general audiences. This includes DNR website information and regular earned media stories on major forest health developments and projects.
- A social marketing and communications plan designed to incite voluntary landowner action is developed, funded, and implemented by the Forest Health Program. This includes earned and paid media that is targeted for a specific landowner audience.
- Partnerships are developed and enhanced to leverage education and communication opportunities and success.
- Communications products are designed to facilitate monitoring and evaluation of their impact and efficacy.
- Successful communications methods are continued and expanded as appropriate to strengthen messages and reach a targeted audience over a wider area.
- In Tier 2 and 3 situations, the Commissioner and Communications Office clearly communicate declarations, Technical Advisory Committee findings, and recommended actions.

3.3 Coordinated Landscape Projects

The DNR's role is to identify, initiate and participate in cooperative management projects in forest landscapes that are at risk from forest health hazards.

Contributing Personnel & Programs	
Commissioner of Public Lands	Forest Health Program
Northeast Region Manager	Fire Prevention Program
Landowner Assistance Programs	Communications Office
Resource Protection Division	Policy Office
State Environmental Policy Act Coordinator	Region Forest Practices Staff

Key Outcomes

- Initially, the Forest Health Program uses available information to identify several sub-County level emphasis landscapes for coordinated project initiation.
- With the acquisition of spatially explicit data, the Forest Health Program performs landowner-blind risk assessments of forest conditions based on acquired data.

-
- Policy Office coordinates participation among federal and tribal landowners and provides assistance as requested to region State Lands Assistants, Resource Protection & Service Assistants, and division staff.
 - The Resource Protection Division and Policy Office coordinate securing funding for projects as needed.
 - The Forest Health Program supplies supplemental budget resources to Landowner Assistance forestry programs, which dedicate these to forest health projects.
 - Forest Health Program and Landowner Assistance foresters coordinate nonindustrial private landowner participation through technical assistance, management planning, and incentives, considering landowner objectives.
 - Region Forest Practices staff timely process submitted forest practices applications and assist landowners with successful regulatory compliance.
 - The Commissioner, as needed, utilizes the authorities of the tiered system of addressing forest health issues provided for in law, such as the appointment of a Technical Advisory Committee to guide project development.
 - The Communications Director articulates project objectives and progress toward its implementation.
 - Pre- and post-project forest landscape conditions are quantified and monitored by the Forest Health Program.

4. PRIVATE LAND

In addition to those described in the All Lands section, the DNR has three essential service roles that are specific to private landowners in providing forestry assistance, fire prevention, and major insect or disease outbreak control assistance.

4.1 Landowner Forestry Assistance

The DNR's role is to provide technical assistance and cost share funds for planning and forest management activities that maintain and restore forest health, consistent with landowner objectives.

Contributing Personnel & Programs	
State Forester	Region Managers & Staff
Landowner Assistance Programs	Policy Office
Communications Office	Forest Health Program
Resource Protection Division	

Key Outcomes

- The DNR’s Landowner Assistance programs are staffed to supply site visits from professional foresters to evaluate landowners’ forest conditions, management objectives, recommend action, and share information on applicable programs and services.
- Landowners’ forest stewardship plans reflect forest health considerations.
- The Forest Health Program supplies site visits on an as-needed basis to assist with insect and disease identification, management, and suppression.
- The Resource Protection Division maintains a database of landowner contacts, land condition, and project status.
- Training and education opportunities are routinely organized and offered in partnership with education and extension institutions, and landowner, forestry, and conservation organizations.
- Ongoing and new assistance projects for private landowners are coordinated with forest health and state lands management priorities at a landscape level by Region Managers and the Resource Protection Division.
- The Communications Office assists in publicizing service availability, landowner training opportunities, and available services.
- Demand for technical and financial assistance is quantified, and the State Forester and Policy Office coordinate advocacy for commensurate federal funding levels for landowner assistance programs are obtained.
- The State Forester develops a statewide strategic plan that prioritizes the allocation of landowner assistance resources, in partnership with other state and federal agencies and stakeholders.
- Funding for landowner assistance is diversified among federal and state sources so as to ensure program stability.

4.2 Fire Prevention & Mitigation

The DNR’s role is to protect the economic, ecological and social values of state and private forests from wildfires through an active program of fire prevention and mitigation.

Contributing Personnel & Programs	
State Forester	Region Managers
Fire Prevention Program	Fire Control Program
Resource Protection Division	Forest Health Program

Key Outcomes

- Public and firefighter safety is foremost in all activities.

- Resource Protection Division acquires, and Landowner Assistance foresters administer federal and state resources to complete coordinated projects among many landowners.
- The public desires, and landowners are capable of, improving or maintaining forest health to allow efficient and effective wildfire protection. The Fire Prevention program utilizes ‘teachable moment’ opportunities to generate landowner interest in implementing projects.
- Forest Health Program consults with Fire Prevention staff on landscape prioritization for fuels reduction projects and project prescriptions.
- Landowners, communities, governmental entities and the public acknowledge and fulfill their wildfire protection responsibilities. Community Wildfire Protection Plans (CWPP), developed by units of local government with assistance from Region and Resource Protection Division staff, are the primary tool. CWPPs identify risks and prioritize home defensibility and hazardous fuels reduction projects.
- Collaborative Fire Prevention & Mitigation program activities enhance the state’s wildland fire protection efficiency and effectiveness to achieve the lowest net cost to taxpayers and landowners.
- Avoided wildfire suppression costs, and property and ecosystem services losses attributable to prevention treatments are quantified.

4.3 Major Insect or Disease Suppression Projects

The DNR’s role is to provide technical assistance and project coordination for major insect or disease suppression efforts.

Contributing Personnel & Programs	
Region Forest Practices staff	Communications Office
Landowner Assistance Programs	Forest Health Program

Key Outcomes

- The Forest Health Program maintains an account containing seed money which can be granted for hiring a project coordination consultant.
- The Forest Health Program assists the project coordination consultant with ensuring landowners receive advice on operational issues, contracting, and ideal project activity timing for effective suppression.

-
- Region Forest Practices staff and Landowner Assistance foresters ensure landowners receive timely information on an insect or disease outbreak and obtain appropriate forest practices permits.
 - Efficacy monitoring is conducted to indicate whether suppression goals were achieved.
 - The Communications Office assists with publicizing project activities and success stories.
-

5. STATE TRUST LAND

The DNR has five roles that are essential to forest health protection on the 2.1 million acres of forested state trust land it manages for perpetual income to the beneficiaries. Timber sales designed to produce revenue and Forest Improvement Treatments designed to treat economically marginal forest stands are the two principal types of forest management projects conducted. The State Trust Lands Habitat Conservation Plan (HCP) and guidance for old forest structure maintenance and protection affect how DNR integrates forest health concerns with key species and biodiversity protection. Finally, in carrying out the preceding roles, the DNR’s seeks to create an organizational climate of leadership and innovation in land management.

5.1 Board of Natural Resources-Approved Timber Sales

The DNR’s role is to manage forested state trust lands to produce revenue for the beneficiaries in perpetuity, considering statutory and policy requirements, market conditions, catastrophic loss prevention and associated avoided costs, and forest health.

Contributing Personnel & Programs	
Product Sales & Leasing Division	Region State Lands Staff
Land Management Division	Forest Health Program

Key Outcomes

- Land Management Division describes, documents and evaluates how forest health conditions are acknowledged and addressed in the prioritization and execution of revenue-generating timber sales on forested state trust lands.
- Land Management Division describes, documents and evaluates how forest health is considered in the development of site-specific prescriptions.

- Opportunities are routinely identified for the Forest Health Program to add value for Region state lands managers.

5.2 Forest Improvement Treatment Program

The DNR’s role is to assure long-term income to trust beneficiaries by identifying, managing, and investing in economically marginal forest stands, in particular, those that are at risk of loss to wildfire or forest insects and diseases.

Contributing Personnel & Programs	
Product Sales & Leasing Division	Region State Lands Staff
Land Management Division	Forest Health Program

Key Outcomes

- The Land Management Division, Product Sales & Leasing Division and Forest Health Program develop evaluation tools for risk assessment and treatment prioritization tailored to available state trust lands forest inventory data.
- Region state lands staff select and prioritize stands based on development stage, insect infestation risk factors, risks to public resources, health and safety, management objectives for each forest management unit, and a break-even economic threshold.
- Stand prescriptions are developed on the basis of restoring or maintaining appropriate species composition, tree age and tree density levels, and stand resiliency that are ecologically appropriate for each site.
- Product Sales & Leasing Division reports annually to the Board of Natural Resources on the implementation of FIT program.
- The Product Sales & Leasing Division quantifies the long-term trust asset value increase and the value of avoided catastrophic losses from FIT program implementation.

5.3 State Trust Lands Habitat Conservation Plan & Voluntary Species Conservation Agreements in Eastern Washington

The DNR’s role is to meet the requirements of federal and state law in protecting endangered, threatened and sensitive species, implementing management policies that meet HCP goals and are appropriate within the ecological context of disturbance-prone forests.

Contributing Personnel & Programs	
Land Management Division	Region State Lands Staff
Policy Office	Forest Health Program

Key Outcomes

- The HCP defines and provides for nesting, roosting, and foraging habitat and dispersal habitat for the Northern spotted owl in strategic areas in order to provide demographic support, species distribution, and dispersal.
- Annual reports are prepared to track all management activities under the HCP, monitor the implementation and effectiveness of HCP strategies, validate or invalidate habitat/species response relationships, and apply adaptive management principles accordingly.
- The Klickitat Planning Unit Amendment to the HCP responds to spotted owl habitat loss from insect and disease mortality and wildfires by focusing habitat development in areas where it can be sustained in the long-term and generally restoring more resilient cover types across the landscape.
- Land Management Division performs a 10-year comprehensive review of the implementation of the state uplands Habitat Conservation Plan.
- The Lynx Habitat Management Plan provides for a balance of stands in different forest conditions, including denning, foraging, and travel corridors that minimizes the probability of long-term adverse effects to lynx, produces consistent revenue for the trusts, and guards against conditions susceptible to severe forest disturbances.
- The Land Management Division performs annual implementation monitoring reports to US Fish & Wildlife Service to ensure that the guidance contained in the Lynx Habitat Management Plan is faithfully applied. Biennial effectiveness monitoring determines whether application of Plan guidance results in the anticipated habitat conditions.
- The trust lands HCP research and adaptive management program supports the continued development and improved implementation of the habitat conservation strategies.
- The Policy Office and the Forest Health Program provide technical, organizational, and external support for HCP and other habitat planning as needed.
- The Policy Office and the Forest Health Program assist and share resources with Land Management Division on emerging technologies, research and initiatives for landscape assessment.

5.4 Old Forest Structure Conservation for State Trust Lands in Eastern Washington

The DNR's role is to develop and implement science-based guidance for eastern Washington old growth management that sustains key ecosystem biodiversity components in disturbance-prone landscapes.

Contributing Personnel & Programs	
Land Management Division	Region State Lands Staff
Product Sales & Leasing Division	Forest Health Program
Policy Office	

Key Outcomes

- Old Growth Definition Committee completes a preliminary definition, inventory and mapping for old-growth forests east of the Cascade crest.
- Land Management Division partners with research institutions to produce science-based old growth identification field guide and a science review of active management approaches to sustaining and restoring old forest structures.
- Old forest structure guidance, HCP goals and objectives, and sustainable harvest calculations are integrated with forest health considerations to form management policy in eastside forests.
- Necessary data and management planning tools are available to evaluate management options and results over time.

5.5 Organizational Climate of Leadership & Innovation

The DNR's role is to make concerted recognition of its land managers who demonstrate leadership, innovation, and collaboration in forest health protection so that successful examples may be shared and promoted agency-wide.

Contributing Personnel & Programs	
Commissioner of Public Lands	State Lands Steward
Communications Office	Region Managers & Staff
Policy Office	

Key Outcomes

- State and federal agencies, local governments, neighboring landowners and general audiences are aware of and contribute to forest management project development.

- Annually take stock of project successes and reward innovation with recognition by the Commissioner.
- Communicate project successes to policy-makers, other agencies, and the public.

6. FEDERAL LAND

Federal land management agencies are responsible for over 9 million acres of forest land in Washington State. Improving forest health conditions on these lands is a priority of DNR and is among its responsibilities under RCW 76.06. In addition to those described in the All Lands section, the department’s roles that are specific to federal land include a heightened involvement with federal land policy in general, and more focused emphasis on federal land projects and land management plans.

6.1 Federal Land Management & Policy in General

The DNR’s role is to engage federal land management agencies at all organizational levels in advocacy for forest health management.

Contributing Personnel & Programs	
Commissioner of Public Lands	Region Managers & Staff
State Forester	Policy Office
Forest Health Program	

Key Outcomes

- The Commissioner of Public Lands clearly and regularly articulates the department’s priorities and objectives for federal land management in public settings, including active representation at federal advisory boards and collaborative groups.
- The State Forester coordinates federal agency interface on forest health, in addition to fire suppression, fire prevention, landowner assistance, and regulatory programs.
- Region Managers are a direct interface with field units of federal land management agencies regarding business operations, and identify significant projects, activities, and challenges that require assistance or engagement from the Policy Office.
- The Government Relations Director and Policy Office coordinate local government and state legislative priorities throughout the Department’s federal lands policy efforts.

- The Policy Office actively seeks cooperation on mutually beneficial outcomes from other state agencies, so as to advocate from a collectively unified state position whenever possible.
- The Policy Office is in regular contact with Regional and Washington Office officials of federal land management agencies.
- Building institutional commitments and technical capability within federal agencies is accomplished through strong relationships, federal budget and appropriations processes.
- Build coalitions of support for appropriate legislative and policy tools, as identified in project and planning engagement levels, to improve federal land management agencies' attainment of forest health objectives. Convene, coordinate and support statewide and regional collaborative structures.
- The Policy Office monitors federal management programs' status and accomplishments.

6.2 Federal Land Projects

The DNR's role is to advocate for effective forest health restoration and maintenance outcomes in projects on federal lands.

Contributing Personnel & Programs	
Policy Office	Region Managers & Staff
Forest Health Program	

Key Outcomes

- Formal government-to-government cooperation agreements and consultation options are evaluated on a case-by-case basis.
- The Policy Office and Region Managers build coalitions of support for desirable forest conditions that may result from federal project implementation, to include both federally-proposed projects and the external development of specific project proposals.
- Project design elements incorporate protecting non-federal land from uncharacteristic or unwanted forest disturbances.
- The Policy Office assembles information from Region state lands staff about completed, ongoing and planned projects and facilitates coordination among federal and non-federal entities, sharing success and using these intersections to complement new project proposals so that larger landscape-level conditions are achieved wherever possible.
- Federal policy barriers and fiscal constraints that impede project efficacy are identified for follow-up at appropriate levels.
- The Forest Health Program transfers risk assessment data and analytical methodologies to federal managers.

6.3 Federal Land Management Plans

The DNR's role is to participate in and lend advice to influence the outcome of long-term federal land management planning activities in the service of restoring and maintaining forest ecosystem health.

Contributing Personnel & Programs	
Commissioner of Public Lands	Region Managers & Staff
Forest Practices Division	Forest Health Program
Government Relations Director	Policy Office

Key Outcomes

- Formal government-to-government cooperation and consultation options are evaluated on a case-by-case basis.
- The Commissioner of Public Lands convenes other willing state agencies to secure formal Cooperating Agency Status on the Okanogan-Wenatchee National Forest plan revision.
- The Forest Practices Division and Policy Office coordinate departmental involvement in federally listed species recovery planning and management, and their intersections with federal land planning.
- The Policy Office convenes and assists parties to the Colville National Forest plan revision toward conflict resolution and mutually beneficial management outcomes.
- Building support for a set of desired forest-wide conditions and macro outcomes forms the basis of durable, sustained improvements in federal land forest health management.
- Management direction and guidance in federal plans enables and encourages the attainment of desired conditions and outcomes. Remedy, where possible, policy barriers identified at the project level.
- Scientific data and research produced at the state level is used to inform federal land planning decisions.
- State legal, regulatory, policy and management structures with demonstrated performance are evaluated as options.
- Federal management plan contributions to threatened, endangered and sensitive species conservation acknowledge the contributions and roles of state, private and tribal lands.

7. TRIBAL LAND

The DNR's desire is to recognize the innovations and leadership in forest management that tribal lands exhibit in the state, and to investigate the best means by which the department can assist and learn from tribal

governments and land managers. Preliminary outreach on this aspect of the draft strategy has been initiated.

The DNR is engaging tribes on a government-to-government level to establish an appropriate and mutually beneficial role.

Contributing Personnel & Programs	
Commissioner of Public Lands	Region Managers
State Forester	Policy Office
Forest Health Program	

8. OTHER STATE PUBLIC LAND

The DNR has a role in forest health protection on other state public land, including areas managed by the department as Natural Area Preserves (NAP) and Natural Resource Conservation Areas (NRCA), and consultative roles with assisting other state land managers. Outreach on this aspect of the draft strategy is still ongoing.

8.1 Natural Area Preserves

The DNR's role is to identify and protect a network of preserves that represents the best remaining examples of important or rare ecological communities.

Contributing Personnel & Programs	
Commissioner of Public Lands	Natural Areas Program
Natural Heritage Program	Forest Health Program
Natural Heritage Advisory Council	Asset Management & Protection Division

Key Outcomes

- In general, NAPs are managed to allow natural processes to occur as much as possible with minimal human intervention.
- The Natural Heritage Advisory Council identifies and recommends candidate areas to the Commissioner of Public Lands.
- The Natural Areas Program develops management plans for each Natural Area Preserve to guide action necessary for the protection of natural features.
- Management plans for NAPs address a range of activities including prescribed burning to restore ecosystems dependent on fire, controlling invasive species that threaten the special features,

boundary and interpretive signing, and restoring native species if necessary.

8.2 Natural Resource Conservation Areas

The DNR's role is to identify and protect areas with important ecological, geological, cultural or scenic characteristics and opportunities for low-impact public use and outdoor environmental education.

Contributing Personnel & Programs	
Commissioner of Public Lands	Natural Areas Program
Natural Heritage Program	Forest Health Program
Natural Heritage Advisory Council	Asset Management & Protection Division

Key Outcomes

- In general, the management of NRCAs only intervenes in naturally-occurring insect infestations and diseases in cases when the primary features for which the NRCA was designated are jeopardized.
- Site management plans for NRCAs are developed to address protection, enhancement, and restoration of resources, as well as low impact public uses.
- If monitoring indicates a need for management action, a Natural Areas Program ecologist, in consultation with the Forest Health Program, may develop an insect and/or disease control plan.

8.3 Technical Assistance

The DNR's role is to assist managers of other state public lands with forest health management and protection.

Contributing Personnel & Programs	
Forest Health Program	