



## FOREST RESTORATION AND WILDFIRE THREAT REDUCTION IN EASTERN WASHINGTON

*Eastside Forest Health: Challenges and Solutions*  
Spokane Convention Center • Spokane, Washington  
October 28-29, 2009

Forest structure and composition have changed significantly in dry forests of eastern Washington. High densities of dead and moisture-stressed trees increase potentials for the spread and intensity of fire, disease, and insect outbreaks, leading to massive environmental degradation, higher costs of management and greater atmospheric pollution. The capacity of these forests to withstand projected reduced precipitation and elevated temperatures under a climate change scenario is very much in doubt.

In response to the University of Washington "Future of Washington's Forests and Forest Industries" report, the 2007 legislature funded a pilot Forest Health project initiated by the Washington State Department of Natural Resources (DNR). The 2007 and 2008 Northwest Environmental Forums recommended that an expanded program is needed to improve forest health and resilience and remove surplus fuel loads to reduce forest fire hazards in eastern Washington.

In the Northwest Environmental Forum on Eastside Forest Health: Challenges and Solutions, an invited group of 60 federal, state, tribal and private forestland managers, in conjunction with government and conservation representatives, addressed an actionable strategy to restore and maintain the ecosystem services of the eastside dry forests. Resilient eastside forests protect the basic ecosystem services – wood and fiber, water and medicinal resources; environmental services – carbon sequestration, biodiversity, wildlife habitat, erosion control and pollination; and cultural services – community stability, recreation, tourism, educational and spiritual.

Forum deliberations were kicked off by keynote addresses from Mary Wagner, USDA Forest Service Regional Forester; Washington Commissioner of Public Lands Peter Goldmark and Northwest Indian Fisheries Commission chair Billy Frank, Jr. A series of presentations by leading scientists with expertise in fire ecology, forest health and wildlife

management set the stage for region-specific breakout groups. The format for these in-depth discussions was based on the results of a multi-question survey completed prior to the forum by attendees. The survey results helped focus group deliberations on the areas of greatest differences of opinion and perception.

In addition to these summary findings of the Spokane Forum, streaming videos of Forum presentations and dialogues can be viewed at [www.nwenvironmentalforum.org](http://www.nwenvironmentalforum.org).

Forum participants agreed that an ecosystem services strategy could improve forest resilience in the face of climate change, reduce greenhouse gas emissions, reduce fire damage and danger, promote rural economic stability, increase the availability of forest-based renewable energy and protect fish and wildlife habitat.

*The stated desired outcome of the Forum was: “A consensus agreement on the elements of an actionable strategy for restoring ecosystem services that are provided by eastside forests.”*

*The Forum Agenda directed that the strategy was to include:*

- 1. Adaptation to climate change and mitigation of greenhouse gas emissions*
- 2. Prioritization of early actions on the eastside forests within the strategy*
- 3. Innovations across ownerships and constituency lines*
- 4. Agreements to monitor and adapt*
- 5. Trust and confidence-building through the Forum collaboration*

## **IMPERATIVES FOR ACTION**

*A summary of comments by the Forum Keynote Speakers*

### **MARY WAGNER, Regional Forester, USDA Forest Service Region 6**

The Imperative is the Land, the People and the Promise. Secretary of Agriculture Vilsack’s new broad vision for American Forests has at its heart an “all lands” approach. All USDA agencies are working together to sustain the entire matrix of federal, tribal state, municipal and private forests. The Forest Service is committed to restoring the resilience of our forests to all types of disturbance and improve:

- Watershed health
- Sustained water flow quality and quantity
- Shelter for wildlife
- Richness of biodiversity,
- Rural prosperity
- Our ability to meet a shared vision of healthy, resilient forests

How do we look beyond ownership boundaries and bring landowners and stakeholders together to decide on common goals for landscapes they share? To meet public expectations for action, how can we increase the pace and scale of work?

We are faced with a series of questions:

- What will it take to accomplish landscape- scale conservation?
- Where are the priority landscapes?
- How can we increase the pace and scale of restoration efforts?
- How do we tap into the necessary resources so that our knowledge and ideas can take advantage of opportunities contained in the Forest Restoration Act?
- How will we take advantage of the nearly completed Washington Forest Assessment?
- How can we take advantage of current revisions to the Region's Forest Plans?
- What ideas and actions can we commit to together?

This Forum is a place to strengthen relationships; expand knowledge, imagine what is next, and grow the capacity to address these challenges.

### **PETER GOLDMARK, Washington State Commissioner of Public Lands**

#### **Imperative #1 – *Changed Forest Conditions***

I have witnessed tremendous change in the eastern Washington landscape over the past 40 years. The worsening forest health pandemic is like a slow moving forest fire. It's destructive, difficult to tackle, incremental change is hard to see and it's difficult to drive home the enormity of the issue

How to convince others of the enormity? We must respond. The forest health problem knows no boundaries and it is getting worse. There is high certainty that climate change has and will play a large role, and will not go away.

The Tripod Fire cost \$100 million to contain. These are untenable and unsustainable costs. Those dollars would be better spent on restoration and other means of improving forest health. Budget problems= opportunity for innovations

#### **Imperative #2 – *Take the Next Step***

Build on 2007 Legislature's bill SB 6141 "Forest Health Law." Coordinate action across landscapes by many landowners. This is an imperative for fire and also for forest health. We need to figure out new ways for cooperation.

The Commissioner of Public Lands is the designated state lead for forest health. In 2008, the legislature designated a pilot project for Stevens County. In 2009, the legislature cut those project funds.

Simultaneously, there are two successful collaborations in northeast (Colville) and southeast Washington (Tapash).

**Imperative #3 – Possible Outcomes and Solutions**

- Support implementation and funding for strategies in place.
- NE – retain infrastructure; build on collaborative success.
- Paradox of the eastern Cascades:
  - Lack of infrastructure for restoration – cost of restoration has to be borne by products extracted.
  - Lack of supply assurance needed to build upon existing infrastructure or attract new investment. Need new strategies.

Steps by DNR: DNR bio-mass initiative, with 30 applications for partnerships DNR for restoration and bio-mass for renewable fuels. Materials will come from forests at risk as well as from normal logging activities.

Great opportunities from new, current and emerging technologies for overstock materials for beneficial use in the market place, for construction materials and/or for renewable fuels.

**BILLY FRANK, JR., Chairman, Northwest Indian Fisheries Commission**

Change has to happen and it has to happen now. Need to involve tribes in management.

Some people and organizations are against harvesting. Tribes want foresters to harvest. We need a strong industry. We want you to stay.

Need to work collaboratively. How do we make the changes needed?

Tribes are committed to forest health. Tribal infrastructure is in place and needs to be utilized.

## FINDINGS

- Eastern Washington dry forests are in a crisis condition that requires active management to restore forest health and reduce catastrophic fire danger. Problems of disease, insects, and wildfire know no boundaries and are growing increasingly worse, accelerated by climate change coupled with lack of treatment.
- Climate change and increased fire risk are inextricably linked. A two degree Celsius rise in temperature will likely result in a 100%-200% increase in forest areas burned by wildfire.
- Fire, disease and bugs are part of the natural forest ecology but conditions today and for the projected future are significantly outside historic norms.
- Management prescriptions for large-scale landscapes (>5,000 acres) for ecosystem restoration should recognize the heterogeneity of Eastside forest and strive to mimic historic conditions of resilience and robustness - a mosaic of even and uneven-aged stands with species mix appropriate to that region. There is a high degree of comfort with the level of scientific knowledge about forest and fire ecology.
- Achieving desired conditions requires removal of surface fuels, ladder fuels and crown fuels in conjunction with controlled understory burning.
- Outcomes should be focused on what's left behind (general target of 50-100 trees/acre in uneven-aged management eastside dry forests) rather than on what is removed.
- Treatment units should be large scale (minimum of 5,000 acres up to 50,000 acres or larger), consistent with Forest Restoration Act criteria. Forest Service stewardship treatment contracts should be at least 10-20 years in duration to allow stability of workforce; investment in infrastructure to process output materials and provide adequate time for assessment and adaptive prescriptions.
- Federal and state management objectives for forest restoration, biodiversity and fire-resistant landscapes on dry, mesic and moist forest ecosystems should be multi-resource, landscape-scale and not oriented toward single species or stand level prescriptions.
- Proposed entries should focus on roaded areas except under extreme forest health conditions, where such entry would require community support. At this time there is much roaded and available land to treat.

- Reduction of catastrophic fire risk requires treatment of 25-30% of affected areas using strategically-focused actions based on USFS modeling, in conjunction with DNR and tribal forestry information. 70% or more of certain areas may need to be treated to achieve desired forest health conditions.
- Different ownerships will require different treatment protocols (e.g. private lands will not have the same prescriptions as habitat-designated USFS land).
- To address the scale of the current problems in areas of inter-mixed or “checkerboard” ownership, collaboration of management actions among ownerships is essential for effective forest health treatments. Authority and resources to create this necessary action space will require congressional and legislative action as well as changes in agency cultures and procedures.
- Ecosystem Services Districts could be defined and organized based on affected landscape and communities (e.g. Santa Fe watershed example – “Forest Restoration and Fire Prevention Districts.”)
- A sophisticated public information and education campaign focused on forest restorations and catastrophic fire threat reduction is essential to sustain activities at the scale and duration required to address the current and projected conditions. Effectively engaging decision makers at the local, state and federal levels is a critical part of this strategy.
- Multi-organization coordination of research and applied science is essential.
- Facilitated collaboration will be necessary to enable stakeholders to reach durable agreements as the necessary basis for landscape scale management.

## **ACTIONABLE STRATEGIES AND PATHWAYS TO FOREST HEALTH**

Consensus agreements to be affirmed by Steering Committee for presentation to Spokane Forum participants and to the November 23, 2009 Forum in Seattle.

### *Adaptation to climate change and mitigation of greenhouse gas emissions*

- In order to sustain both ecosystem values and processing infrastructure over time, planning for management outcomes should reflect an understanding that targets for landscape-level ecological improvements must be integrated with predictable flows of raw material to support required investment in processing infrastructure. Planning errors of the past have alternatively focused narrowly only on annual sale quantity in disregard of ecosystem values, or conversely, have idealized ecosystem

protection to the detriment of reliable harvest volumes. Significant infrastructure investments require at least a 10 year contractual window of predictable outputs in order to accomplish both objectives.

- In this regard, a paradigm shift is required to define “outcomes” rather than “outputs” at a landscape level (> 50,000 acres). Criteria for USFS forest restoration activities need to be changed to “acres treated” rather than board foot output measures, with emphasis on ecosystem management of all lands/ all resources (uplands and aquatic resources). The result will be a shift from single species and small-scale site prescriptions to landscape-scale desired outcomes. Landscape “outcomes” will include valuable social and economic “outputs.”
- The status quo, both institutionally and ecologically, is neither acceptable nor sustainable. Forum participants agree that the following recommendations are necessary to avoid loss of the entire range of forest landscape ecosystem functions and to diminish the likelihood of catastrophic wildfires.

#### *Prioritization of early actions on the eastside forests within the strategy*

- Joint legislative hearing in January, 2010, with Washington State House and Senate Natural Resources Committees on Eastern Washington Forest Restoration and Wildfire Threat Reduction.
- Introduce a Memorial to Congress regarding the urgent need for adequate funding for National Forest System activities and for supporting collaborative, community-supported actions on Forest Restoration and Wildfire Threat Reduction. The focus should be on Washington State while recognizing the urgency for action in the inter-mountain and southwest regions of the country.
- Full support for DNR Forest Health Strategy (“A Desirable Forest Health Program for Washington’s Forests – Forest Health Strategy Work Group Report, 2004).
- Encourage Washington State to recognize forest bio-mass as renewable energy source. Support federal lands outputs to be counted as renewable energy.
- Legislation/ rules changes to allow sustainable and longer (10 + years) for Forest Service stewardship contracts on larger acreages, in conjunction with funding to complete required environmental review and documentation.
- Provide stewardship contracting authority to DNR. Legislative action is needed to create an exception for “valuable materials contract” restriction to create the necessary management flexibility.

- Encourage DNR and USFS to utilize competitive bid contracts with tribal resource agencies and other capable bidders for forest health treatment.
- Support DNR and Okanogan/Wenatchee NF offering of 10 year or longer stewardship contracts with explicit baseline volume outputs to incentivize infrastructure investment in the Ellensburg area. Consider a similar pilot project for the Ferry County/ southeast Okanogan region.
- Create infrastructure investment incentives (see previous Forum recommendations) tied to long-term contracts. A critical incentive for investment is a stable, predictable supply of materials from landscape management units designed to improve forest health and that are supported by affected stakeholders.
- Provide state authority for efficient siting decisions for mills/ processing facilities on existing or former manufacturing sites.
- Provide smoke management flexibility/exemptions for prescribed forest health treatments and maintenance (prevention against catastrophic smoke events).
- Develop public information campaign/ materials re: urgency of forest restoration, public health and fire threat reduction for federal, state and local decision makers as well as for the general public.

### *Innovations across ownerships and constituency lines*

- Emphasize the need for state and federal authority for Forest Service, DNR and tribal nations to collaboratively manage landscape units of a significant scale (“anchor collaboratives”). Consider incentives to help build trust to accelerate multi-agency cooperation, stabilize output/ supply scenarios and encourage infrastructure investments without creating additional financial burdens on the respective agencies.
- Develop mechanisms to coordinate activities on the “anchor collaboratives” with adjacent and private land in-holdings on a voluntary basis.
- Support TAPASH and Northeast Washington Forestry Coalition collaborative efforts through legislative and congressional recognition and create a statewide information network (“meta-collaborative”) for these and other potential efforts (e.g. Colville.) The collaboratives could provide the basis for developing business-based models for forest health and restoration.

### *Agreements to monitor and adapt*

- A sustained effort requires continuous gathering of multi-disciplinary scientific information, monitoring of management activities, testing of new ideas, and dissemination of results to on-the ground managers and policy makers. Possible role for UW School of Forest Resources (“Institute for Eastside Forest Policy”?) in conjunction with “Inland Empire” educational institutions (WSU, U. of Idaho ....?)

### *Trust and confidence-building through the Forum collaboration*

- Maintain momentum of this Forum through a standing steering committee to coordinate agreed upon actions and implementation.
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Note: Members of the Steering Committee have reviewed and approved the text of this summary of the 2009 Spokane Forum Findings and Actionable Strategies

## IDENTIFIED REGION-SPECIFIC NEEDS

### NORTH CENTRAL

- At present there is no collaborative stakeholder group to form a consensus base in Okanogan region.
- Lack of infrastructure and workforce precludes economically viable forest treatment alternatives.
- Efforts must begin with land managers and elected officials concerned about watershed and fish restoration and fire protection.

### SOUTH CENTRAL

- Support continuation of the DNR timber sales and management program in the Southeast Region.
- Expand the Tapash partnership to include community stakeholders.
- Support the Yakama Nation infrastructure as essential for long-term restoration

### NORTHEAST

- Increase forest restoration outcomes to insure outputs that support the region's functioning infrastructure (pulp, chips, small and large log mills)
- The region requires at least 1 billion bf/year from all ownerships to continue functioning.
- Preserve the Northeast Washington Forestry Coalition - Forest Service unique relationship through continuation of "proof of concept" framework.
- Northeast Washington Forestry Coalition support provides the flexibility for the USFS test and use a wider range of capabilities and authorities.

## FORUM SPONSORS

Many thanks for the generous contributions from the following organizations:

Green Diamond Resource Company  
Hancock Timber Resource Group  
Port Blakely Tree Farms  
The Nature Conservancy  
USDA Forest Service Region 6  
USDA Forest Service Pacific Northwest Research Station  
Washington Forest Protection Association  
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