



Center for
**Sustainable
Economy**

Analysis • Solutions • Advocacy

May 11th, 2016

SENT BY ELECTRONIC AND OVERNIGHT MAIL

Director (210)
Attn: Protest Coordinator
20 M Street SE, Room 2134LM
Washington, D.C. 20003

**RE: Protest of Proposed Resource Management Plan and
Final Environmental Impact Statement for Western Oregon**

Dear Director:

Pursuant to 43 CFR §1610.5-2, please accept the attached protest from Center for Sustainable Economy of the Proposed Resource Management Plan (PRMP) and Final Environmental Impact Statement (FEIS) for western Oregon BLM lands. CSE and our members have a keen interest in ensuring that BLM makes a positive contribution to the economy of western Oregon and helps lead the way on sustainable management of our forests and the ecosystem services they supply. As discussed at length in our protest, we believe that eliminating the commercial timber sale program and instituting a major program of landscape level restoration is the only way for BLM to fulfill its statutory mandates at this time and achieve these purposes.

Thank you for your time and consideration of the issues we have raised.

Sincerely,

H. John Talberth, President and Senior Economist
Center for Sustainable Economy
16869 SW 65th Avenue, Suite 493
Lake Oswego, OR 97035-7865
(503) 657-7336

Attachments

- Protest
- Exhibit A: NRE report: negative economic impacts of logging.
- Exhibit B: NRE report: benefits and costs of logging.
- Exhibit C: CSE comments submitted during the planning process

CENTER FOR SUSTAINABLE ECONOMY

PROTEST OF THE PROPOSED RESOURCE MANAGEMENT PLAN AND EIS FOR BLM LANDS IN WESTERN OREGON

I. Decision being protested:

Decision by Acting State Director Jamie Connell to issue the Proposed Resource Management Plan/Environmental Impact Statement (PRMP/EIS) for the revision of the 1995 RMPs for the six BLM districts in western Oregon.

II. Concise statement as to why State Director Connell's decision is wrong:

- The PRMP and EIS are based on flawed economic reasoning and analysis that attempts to justify an expanded timber sale program that creates more economic harm than good.
- The BLM failed to ensure that timber offered for sale is offered at reasonable prices that offset all agency and public economic costs associated with logging.
- The BLM failed to recognize and respond to severe normal market failures associated with negative logging externalities, missing markets for environmental goods and services, and logging subsidies on federal, state, and private lands in the planning area.
- The BLM's decision to reject the Natural Selection, No Harvest, Small Diameter, and Maximize Carbon Storage alternatives is irrational since they all can provide steady supplies of timber as a by-product of restoration and meet all other statutory mandates.
- The decision to adopt the PRMP and EIS is arbitrary and capricious.

III. Protestor's contact information:

H. John Talberth, President and Senior Economist
Center for Sustainable Economy
16869 SW 65th Avenue, Suite 493
Lake Oswego, OR 97035-7865
(503) 657-7336

IV. Protestor's interests:

The Proposed Resource Management Plan (PRMP) adversely affects Center for Sustainable Economy (CSE) and our members. CSE has individual, organizational, and business members who rely on a wide range of ecosystem services provided by intact forests on BLM lands. Our members use and enjoy these lands for a variety of purposes, including recreation, research, gathering non-timber forest products, beneficial use of clean water, hunting, fishing, wildlife viewing and spiritual renewal. Past logging and roadbuilding activities on these lands has destroyed economic and cultural resources on which our members rely. The PRMP represents a new threat to these lands by maintaining and expanding the BLM's logging program and by authorizing construction of new logging roads.

CSE also has organizational standing in this matter. Part of CSE's mission is to speed the transition to a sustainable economy by ensuring that public policies are grounded in credible science and economics. In pursuit of this mission, CSE routinely provides counseling, referral, advocacy, and educational services to help stakeholders review and respond to the economic and environmental analyses used to justify government decisions. The BLM's failure to incorporate a sufficient economic analysis into the PRMP and EIS that considers all the factors Congress intended the agency to consider undermines our ability to engage, consult and counsel our members and partners on how to meaningfully participate in the planning and decision making process with respect to economic issues. CSE spends considerable resources developing its expertise and reputation for critiquing economic analyses in the NEPA process; non-disclosure of key economic and environmental information thus undermines CSE's activities and mission.

V. Parts of the plan being protested:

Because this protest is based on omissions from the PRMP and EIS and calls for corrections that are relevant throughout we are thus challenging all sections including Chapter 1 (Introduction, Purpose and Need), Chapter 2 (PRMP and Alternatives), Chapter 3 (Affected Environment), Chapter 4 (Consultation and Coordination), and Appendices A through X (Major Legal Authorities, Management Objectives and Direction, Vegetation Modeling, Wildfire Modeling within the Range of the Northern Spotted Owl, Air Quality, Areas of Critical Environmental Concern, Climate Change, Fire and Fuels, Fisheries, Best management Practices, Livestock Grazing, Energy and Minerals, Rare Plants and Fungi, Recreation, Socioeconomics, Motorized Access, Tribal, Other Wildlife, Northern Spotted owl, Wild and Scenic Rivers, Monitoring, Response to Comments, Guidance for Use of Completed RMPs).

VI. Copy of documents addressing the issues that were submitted during the planning process:

Center for Sustainable Economy (CSE) submitted comments on the draft RPM and DEIS on August 17th, 2015. A copy is attached as Exhibit C.

VII. Issues being protested:

A. The PRMP and FEIS are based on flawed economic reasoning and analysis that attempts to justify an expanded timber sale program that creates more economic harm than good.

The most significant economic and social effects of the PRMP alternative will be associated with expansion of an economically irrational timber sale program at a time when markets are severely distorted by negative externalities, subsidies, and missing markets for environmental goods and services and affected communities are evolving away from an unhealthy dependence on the timber industry. Rather than suspending this program in response to these market failures, the PRMP calls for a 37% increase in timber offered for sale relative to the 2012 baseline.¹ The EIS fails to provide an explanation of why the increase in logging is economically justified and why the Natural Selection, No Harvest, Small Diameter, and Maximize Carbon Storage alternatives

¹ The timber offered for sale baseline in the EIS is 205 million board feet (mmbf) in 2012. The PRMP

were rejected when they represent the best choice for generating a sustainable flow of timber (as byproducts of restoration activities) while meeting all other statutory sideboards that specify under what conditions BLM timber should be offered for sale.

1. BLM's legal mandate to provide timber does not require a timber sale program that is economically irrational.

The BLM has misconstrued its legal mandate as one that requires an increase in logging. While there are dozens of statutes, regulations, and executive orders that have bearing on management of western Oregon BLM lands the controlling authority with respect to timber supply is the Oregon and California Railroad and Coos Bay Wagon Road Grant Lands Act (O&C Act; 43 U.S.C. 1181a et seq.).

In pertinent part, the O&C Act requires that western Oregon O&C lands be managed “for permanent forest production, and the timber thereon shall be sold, cut, and removed in conformity with the princip[le] of sustained yield for the purpose of providing a permanent source of timber supply, protecting watersheds, regulating stream flow, and contributing to the economic stability of local communities and industries, and providing recreational facilities.”² The O&C Act also provides that “timber from said lands in an amount not less than . . . the annual sustained yield capacity . . . shall be sold annually, or so much thereof as can be sold at reasonable prices on a normal market.”³

BLM has invoked this legal mandate as the primary purpose and need for the RMP revision process. In particular, the driving force behind the RMP revision and the proposed increase in timber harvest is to respond to what the agency has determined to be a “substantial, long-term departure from the timber management outcomes predicted under the 1995 RMPs.”⁴ The 1995 RMP estimated that a sustained yield allowable sale quantity. Current harvest levels are roughly 1/3 of that. However, there is nothing in the O&C Act that requires the BLM to actually sell that amount of timber each year. Indeed, the O&C Act puts significant conditions on BLM's timber sale program: (1) it must be offered at reasonable prices; (2) under normal market conditions, and (3) to achieve a variety of purposes, including community stability. If none of these conditions can be met, then no timber sale program much less an expanded one need be implemented. Against this backdrop, it is clear that the proposed increase in logging cannot be justified.

a. Reasonable prices preclude any additional timber sales during this planning cycle.

In developing the RMP and EIS, the BLM has not discussed the process the agency intends to use to ensure that when offered for sale, its timber receives reasonable prices. While current practice is to offer timber for sale at or below a fair market value based on current market prices for comparable timber,⁵ there is nothing to suggest that this price setting method is reasonable, especially when the agency has at its disposal other methods for determining fair market value that are designed to cover all costs of production from the seller's (BLM) perspective. The issue of

² 43 U.S.C. § 1181a.

³ Id.

⁴ EIS at xxiii.

⁵ EIS at 479.

sales below fair market value from the seller’s perspective is an issue that has plagued the agency for decades, and one that could be remedied in this planning cycle. As stated succinctly in 1997 in a PEER white paper on the subject, “[b]ecause no seller would perpetually sell a product for less than its cost, this suggests that Congress intended that BLM appraisals insure cost-recovery when the fair market value of timber is estimated.”⁶

For a private entity a reasonable price that covers the costs of production includes direct material costs, labor costs, sale and administration costs, and provisions for markup to achieve a desired internal rate of return on investment plus markup for profits. This is simply known as full cost pricing. But the BLM is not a private firm. It also bears responsibility for the economic, social and environmental costs it may pass on to society – negative externalities. OMB Circular A-94 (“General Principles” Section 5) is explicit in this requirement for federal programs:

Analyses should include comprehensive estimates of the expected benefits and costs to *society* based on established definitions and practices for program and policy evaluation. Social net benefits, and not the benefits and costs to the Federal Government, should be the basis for evaluating government programs or policies that have effects on private citizens or other levels of government. Social benefits and costs can differ from private benefits and costs as measured in the marketplace because of imperfections arising from: (i) *external economies or diseconomies* where actions by one party impose benefits or costs on other groups that are not compensated in the market place; (ii) monopoly power that distorts the relationship between marginal costs and market prices; and (iii) taxes or subsidies (emphasis in original).⁷

The Department of Interior (DOI) has fully embraced OMB’s mandate to consider negative externalities in planning decisions:

In many cases the benefits provided by the raw materials and products that flow from DOI managed lands, as well as the production, distribution and use of these products, also may cause adverse effects on the environment, economy, or society. Economists typically characterize these adverse effects as *negative externalities*.... The ability to evaluate these negative externalities is an important component to strengthening the set of information available to decision makers” (emphasis in original).⁸

To correct for the presence of negative externalities, the DOI has stated its commitment to full cost accounting to “help promote more cost-effective investments on public lands.”⁹ The BLM has further reinforced this mandate through an agency-wide directive to account for all of the market and non-market values affected by management activities with a strong preference for

⁶ Public Employees for Environmental Responsibility (PEER). 1997. Land of No Return\$. Bankruptcy of the BLM Public Domain Forestry Program. White Paper Number 13. Hood River, OR: PEER.

⁷ The full text of Circular A-94 is available online at: https://www.whitehouse.gov/omb/circulars_a094#6.

⁸ US Department of Interior (DOI). 2012. The Department of The Interior’s Economic Contributions. Fiscal Year 2011, Chapter 7 – The Externalities of DOI Activities: Moving Towards Full Cost Accounting. Washington, DC: US DOI.

⁹ Id.

quantitative methods when certain criteria are met: (a) when significant non-market values are at risk; (b) when alternatives present a strong contrast between extractive and non-extractive uses of the land, and; (c) when the magnitude of the proposed change in management is large.¹⁰ The PRMP meets each of these criteria.

In the PRMP, there are no provisions for or even discussion of how the BLM intends to go about offsetting both the federal financial costs and negative externalities of its timber sale program. The range of negative externalities associated with BLM timber sales includes a wide array of costs associated with diminished recreational and commercial fish landings, sediment removal, increased flooding, loss of water quality, increased habitat restoration costs, loss of tourism revenues, and social costs of carbon emissions, to name a few.¹¹ The most logical way to account for these and one most consistent with market principles, DOI commitments, and BLM guidance is to incorporate these costs into minimum bid prices. The methods and sources of information needed to meet the reasonable price standard and set minimum bid prices that reflect all agency and social costs are well established, and have been for decades. To illustrate, consider the negative externalities associated with lost recreation value and carbon emissions and what they imply for reasonable prices of BLM timber.

The value of recreation on BLM and other public lands is typically expressed in terms of consumer surplus – or the amount people are willing to pay over and above the costs of travel, supplies, lodging, fees, and other financial outlays they make in association with particular recreation experiences. For all BLM administered lands in western Oregon, the EIS estimates consumer surplus associated with outdoor recreation to be \$222,872,000 per year (\$232,676,040 in 2015 dollars).¹² Although a significant portion of this value is generated on lands allocated to Recreation Management Areas (RMA), recreation use is widely dispersed because many of those who participate in recreation activities seek access to the secluded sites and old growth forests provided by even small and isolated patches of BLM lands in an otherwise heavily logged landscape for uses such as wildlife viewing, camping, hunting, and nature study.¹³ So recreation value is spread out on all BLM lands, included those allocated to timber management.

The BLM administers roughly 2.5 million acres of land. This implies that an average acre yields \$93.07 in recreation related consumer surplus benefits each year. Clearcutting mature and old growth forests as planned under all action alternatives destroys this recreation value since clearcut areas are in abundance while mature and old growth forests are increasingly scarce and so substitute sites are already in short order. This is especially true because the greatest scarcities

¹⁰ Bureau of Land Management. 2013. Instruction Memorandum 2013-131, Change 1, attachment 1, “Economic Methods for Estimating Nonmarket Environmental Values. Accessible online at: http://www.blm.gov/wo/st/en/info/regulations/Instruction_Memos_and_Bulletins/national_instruction/2013/IM_2013-131_Ch1.print.html.

¹¹ See, e.g. Niemi, Ernie and Ed Whitelaw. 1999. Assessing Tradeoffs in Forest Management. General Technical Report PNW-GTR-403. Portland, OR: USDA Forest Service, Pacific Northwest Research Station; Talberth, John and Karyn Moskowitz. The Economic Case Against National Forest Logging. Santa Fe, NM: Forest Conservation Council and Forest Guardians.

¹² EIS at 612, Table 3-147.

¹³ DS Consulting. 2013. Summary and Key Findings for the Bureau of Land Management Recreation Outreach and Public Participation of the Resource Management Plans for Western Oregon. Portland, OR: DS Consulting, Prepared for the Oregon BLM.

in the western Oregon region are for camping, trails, and other recreation opportunities that bring people closest to nature and provide solitude.¹⁴ The most suitable sites for expansion of camping opportunities and trail use are in these unmanaged forests. Assuming this value is destroyed for all future years (50) in the analysis period yields an average present value cost to recreation of \$2,395 per acre at a 3% discount rate. This is a cost of providing federal timber that must be factored into the BLM's determination of reasonable price, or minimum bid.

Historically, minimum bids are set close to current appraised values – roughly \$300 per thousand board feet (mbf) anticipated under this RMP. An average acre of mature forest in the suitable timberland base on BLM lands in western Oregon yields roughly 46.2 mbf and so minimum bids will probably be close to \$13,860 per acre.¹⁵ Adding the recreation externality to this would boost the minimum bid needed to cover costs to \$16,255 per acre or \$351/mbf – an increase of 17.3%.

As another example, consider the social costs of carbon dioxide emissions (SCC) associated with logging activities. A typical acre of mature or old growth forest in the Pacific Northwest stores roughly 500 metric tons of carbon per acre.¹⁶ The DEIS estimated 150 metric tons per acre on western Oregon BLM lands – a figure that includes clearcuts, plantations, and natural forests.¹⁷ When logged, about half of this is released as a carbon dioxide CO₂ pollutant after accounting for the amount temporarily stored in wood products before they decay.¹⁸ The emissions associated with a typical mature or old growth logging unit thus generates 917.5 metric tons of carbon dioxide equivalent (CO₂-e) per acre.¹⁹ The social cost of these carbon dioxide emissions (SCC) have been well studied, and incorporated into federal agency decision making as the BLM notes in the EIS.²⁰ At a SCC price of \$42.77 per metric ton CO₂-e²¹, this means \$39,241 per acre in social costs. If the BLM minimum bid price is adjusted to offset both the social costs of carbon dioxide and the cost to recreation values it would thus have to be set at \$55,496 per acre or \$1,201/mbf – an increase of 400% over present minimum bid levels.

Another approach for internalizing negative externalities of logging into minimum bid requirements would be to incorporate the growing body of literature on ecosystem service values

¹⁴ ECONorthwest. 2015. *Outdoor Recreation Scarcity and Abundance in Western Oregon: A Spatial Analysis*. Portland, OR: ECONorthwest.

¹⁵ Department of Interior. 1992. Report of the Secretary of the Interior to the Endangered Species Committee. Related to the Application by the Bureau of Land Management for Exemption from the Requirements of Section 7(a)2 of the Endangered Species Act.

¹⁶ DellaSala, Dominick. 2015. Comments on Revised Draft CEQ Guidelines on Greenhouse Gas (GHGs) Emissions and Climate Change NEPA analysis. Ashland, OR: Geos Institute.

¹⁷ Calculated by multiplying the teragrams carbon figure from DEIS Table 3-23 (373.02) x 1,000,000 (metric tons per teragram) divided by the 2.5 million acres of western Oregon BLM lands. The FEIS contains slightly different figures but since this section is illustrative, it does not alter the conclusions.

¹⁸ DellaSala. 2015. Note 6.

¹⁹ Converting carbon to carbon dioxide equivalent (CO₂-e) units requires multiplication by an adjustment factor of 3.67. The 500 metric tons carbon thus represents 1,835 metric tons of CO₂-e. If half of this is lost to logging it thus represents a per acre emission factor of 917.5.

²⁰ EIS at 483.

²¹ This is the 2007 average social cost of carbon figure of \$37 per metric ton CO₂-e (EIS at xx) converted into current (2015) dollars.

and studies on how logging affects them. This is the “lost services” approach and may present a more tractable alternative to estimating negative externalities on a case-by-case basis. For example Niemi (2015) quantified the annual ecosystem service benefits associated with provision of biological diversity (northern spotted owl habitat), water quantity, water quality, and carbon storage and then estimated the effects of an increase in industrial logging activities proposed on western Oregon BLM lands. He found that “[t]he value of these lost services likely would average at least \$50,000 per acre and perhaps more than \$100,000 per acre, especially on lands with large trees.”²² By the same methods used above, this would translate into minimum bid prices between 1,382/mbf and \$2,465/mbf needed to offset these negative externalities.

The importance of incorporating the best available scientific information about negative externalities into the PRMP is summarized succinctly in an analysis prepared by Ernie Niemi of Natural Resource Economics. With respect to economic impacts of the PRMP in Douglas County, the NRE analysis finds that:

These numbers suggest that logging will have a net negative impact on per capita income and, hence, on jobs, property values, and other indicators of socioeconomic wellbeing. Logging could reduce income in the surrounding county by at least \$350 per person. Thus, instead of increasing income by \$87.8 million, as projected by the BLM, the PRMP could decrease it by \$1.7 billion or more. Exhibit A at 10.

So without incorporating negative externalities into the PRMP, it is likely to create more economic damage than good and invalidate all of the positive impacts alleged by the BLM in the EIS.

Regardless of which approach is used – lost services or case-by-case estimation of the negative externalities associated with logging – the BLM has an obligation to incorporate this information into the design of its timber sale program so that minimum bids received reflect the true social cost of providing timber from federal land and thus reflect a reasonable price. But offering BLM timber sales at minimum bid prices of \$1,200/mbf or more would be prohibitive for buyers now purchasing logs on the open market at roughly half this amount, at best. But this is a reasonable outcome, by law, since the O&C Act sets conditions on whether or not (reasonable prices and normal markets) BLM timber must be offered for sale at all. Thus, by the reasonable price standard alone, the BLM should adopt the no-harvest alternative. The EIS and PRMP must be revised to consider this outcome.

b. Normal timber market conditions do not exist.

The second condition Congress set on the offering of timber from O&C lands is the condition that BLM only participate in “normal” markets. The concept of normal markets is a precise term for economists. It means markets that are not distorted by one or more market failures that take the form of externalities, public goods, missing markets, subsidies, monopoly power, barriers to

²² Niemi, Ernie. 2013. *Economic Value of Goods and Services Produced by the O&C Lands With and Without Industrial Logging*. Eugene, OR: Natural Resource Economics.

competition, and asymmetrical information.²³ Markets for BLM timber are severely distorted by many of these market failures. The presence of negative externalities has been discussed above. In particular, each acre of BLM timber offered for sale may generate negative externalities of up to \$100,000.²⁴ In Douglas County, the PRMP is likely to cause a loss of income of \$1.7 billion or more. Exhibit A at 10.

Timber subsidies also abound. These subsidies take the form of numerous federal, state, and local government programs and policies that result in more timber being cut than would be in the absence of such programs and policies. They can be either direct or indirect. An example of direct subsidies is the below-cost timber sale programs operated by both the BLM and U.S. Forest Service in this region. The issue of below-cost timber sales has been a flashpoint of controversy for decades.²⁵ Failure to incorporate taxpayer costs associated with negative externalities was previously discussed. But the below-cost timber sale issue is also about losing money – irrespective of costs that are non-market in nature – including the ultimate below-cost activity of giving valuable timber away for free.

The BLM and Forest Service timber sale programs are big money losers. Remarkably, the below-cost issue is not systematically monitored, so researchers have to conduct their own periodic studies. For example, one compilation of data considered both Forest Service and BLM timber programs in all western states between 1998 and 2001. During this time period, the BLM earned \$47.8 million in timber revenues but spent \$99.3 million. The agency brought in just 48 cents to the dollar. The Forest Service did slightly better during this period, bringing in about 64 cents per dollar.²⁶

Another type of direct subsidy is the routine practice of giving federal timber away for free. This is accomplished by under-reporting the true volumes contained in BLM and Forest Service harvest units. In an opinion piece that ran in the Eugene Register Guard in 2010, forester Roy Keene explains the details of how this is occurring:

The log scaling and grading system currently used to value and sell timber was created 100 years ago, when forests still were full of lumber-perfect trees. Controlled by industry, this system always has been biased in their favor. It's archaic grading rules allow timber operators to buy our old growth timber as "culls" for chip wood prices. Scaling rules allow a modern mill to cut two board feet from every board foot they pay us for. If we are to receive fair value for our timber, BLM will need to exercise far more control over logging and marketing.²⁷

²³ Various forms of market failure are discussed in depth in most intermediate level macroeconomics courses. But a more accessible list has been compiled by Economics Online at:

http://www.economicsonline.co.uk/Market_failures/Types_of_market_failure.html.

²⁴ Niemi, 2013, Note 22.

²⁵ PEER, 1997, Note 6.

²⁶ Fretwell, Holly Lippke. 2009. *Who is Minding the Federal Estate? Political Management of America's Public Lands*. New York, NY: Rowman and Littlefield.

²⁷ Keene, Roy. 2010. "Poor BLM logging practices cost counties revenues." *The Register Guard*, August 21st, 2010. Available online at: <http://projects.registerguard.com/csp/cms/sites/web/opinion/25163097-47/timber-blm-market-value-forest.csp>.

In 2016, Mr. Keene evaluated the BLM's scaling and grading practices again in the context of the John's Last Stand timber sale, east of Eugene. Here, he found that "much of this tall, fully stocked, relatively defect free 115 year old DF-Hem stand has nearly twice the volume estimated by the BLM."²⁸

Other forms of subsidies are indirect, but nonetheless highly disruptive to normal markets. The BLM and US Forest Service, for example, help supply timber from private lands through right of way and log haul permits that grant private logging companies unlimited use of federal roads to bring their logs to markets. The State of Oregon offers tremendous tax breaks to logging companies. In 1999, former Governor Kitzhaber rescinded the timber harvest privilege tax, which has now led to a \$60 million a year shortfall in school funding. Timber companies do not have to pay property taxes at the rate most landowners pay. Instead, they pay based on what is known as "current use valuation" that translates into property taxes of just 10% of what other private landowners pay.

Yet another major subsidy takes the form of unemployment insurance paid by other businesses to compensate for the timber industry's failure to maintain community stability by overcutting its lands, exporting wood, and engaging in other practices harmful to labor. As noted by Niemi and Whitelaw (1999):

The amount of benefits paid to workers in the lumber and wood products industry often has exceeded the industry's premiums. Between 1980 and 1991, for example, the unemployment-insurance benefits paid to workers laid off from Oregon's lumber and wood products industry exceeded the total premiums paid by more than \$221 million (1992 dollars).²⁹ Business owners in other industries, and their workers, bore the burden of making up this difference.

The problem of missing markets is, perhaps, the greatest market failure in play with respect to BLM timber sales. While clean water, carbon storage, recreation, pollination, scenery, and biological diversity are public goods with vastly more economic value than timber they are not paid for because they are non-exclusive and non-rivalrous.³⁰ The typical results are:

...underprovision of a good, service, or amenity relative to the efficient level of provision;
excessive levels of discommodities and disamenities, relative to the efficient level;
overexploitation of a resource, relative to the efficient level of exploitation; and

²⁸ Available online via Forest Web at: <https://www.facebook.com/notes/forest-web/roy-keenenes-thoughts-on-johns-last-stand/994687637244963>.

²⁹ ECONorthwest with data provided by the Oregon Employment Division. Data on file with: ECONorthwest, 99 W. Tenth, Suite 400, Eugene, OR 97401.

³⁰ This is also known as the public goods market failure. Public goods are goods that are non-exclusive (meaning no one can be excluded from enjoying them) and non-rivalrous (meaning one person's use does not diminish the next). Because of these characteristics, private markets cannot supply them. The outcome is that they are under-provided. For a useful synopsis, see: <http://www.pitt.edu/~upjecon/MCG/MICRO/GOVT/Pubgood.html>.

underinvestment in the management, conservation, and productive capacity of a resource.³¹

This is an accurate portrayal of what is occurring on Oregon's federal, state, and private timberlands. While development of missing markets in the form of payments for ecosystem services (PES) is forthcoming, the lack of PES markets at this time is one of the key explanatory factors in the dramatic overcutting of Oregon's state and private timberlands (see below) and use of techniques such as short rotation clearcutting that are so damaging to soils, watersheds, long term forest productivity, wildlife, scenery, biological diversity.³²

The problem of missing markets has distorted the decision-making process for this PRMP. For example, the absence of formal markets for carbon storage has led the BLM to dramatically undervalue this resource in the EIS and exclude it as a management objective. According to Natural Resource Economics, incorporating the best available research findings into the EIS would raise the BLM's estimates of carbon-storage value by about 14 times. Exhibit B. The BLM's rejection of the Maximize Carbon Storage proposed alternative was based in part on the BLM's failure to recognize how this alternative would contribute to the economic stability of local communities and industries.³³ The problem of missing markets for backcountry and primitive recreation – which are activities with the highest economic values in terms of consumer surplus – has led the BLM to reduce rather than increase the acreage set aside for these activities despite soaring demand and increasing scarcity of suitable sites. The PRMP reduces the amount land in primitive and backcountry recreation opportunity spectrum classes by 33,121 acres and 79,164 acres, respectively, relative to the No Action alternative.³⁴

Adding more BLM timber to the mix in this context of these missing markets is unjustified. Despite Congress's unambiguous language, the PRMP and EIS are silent on the entire concept of normal markets, these market failures, and how the proposed increase in logging is justified in the presence of them.

c. Additional timber sales will not meet the purpose of protecting watersheds, regulating stream flow, and contributing to economic stability.

Congress also put constraints on BLM's timber sale program in the form of a set of purposes that a sustained yield supply of timber is supposed to serve alongside the purpose of a permanent source of timber supply. These include "protecting watersheds, regulating stream flow, and contributing to the economic stability of local communities and industries, and providing

³¹ Randall, Alan. 1981. *Resource Economics: An Economic Approach to Natural Resource and Environmental Policy*. Columbus, OH: Grid Publishing.

³² Zwick, Steve. 2010. *Oregon Company Taps California Protocol to Earn More by Logging Less*. Published online at Ecosystem Marketplace:

http://www.ecosystemmarketplace.com/pages/dynamic/article.page.php?page_id=7520§ion=home

³³ The EIS maintains that the BLM "has no specific legal or regulatory mandate or policy direction to manage BLM-administered lands for carbon storage, and carbon storage is not part of the purpose and need for action." EIS at 103-104.

³⁴ EIS at 568, Table 3-129.

recreational facilities.”³⁵ But the proposed increase in logging of 37% and 400 new miles of road runs counter to these purposes.

As demonstrated elsewhere in the administrative record and public comments, all remaining tracts of mature and old growth forest need protection because they are key landscape components for regulating stream flow, water quality, and water temperature and for responding to increasing scarcities of campsites, trails, and other recreation needs that depend on unlogged forests. Putting more of these stands on the chopping block is thus inconsistent with O&C Act requirements. So is the plan to build new logging roads. It is remarkable that the BLM is proposing new road construction when, in fact, forest roads in western Oregon already represent an extreme disruption of healthy watershed function.³⁶ The dominant effects of these high road densities on stream and riparian networks are well known and involve “alteration of routing of water, water-borne chemicals, sediment, and mass movements to and through native stream networks.”³⁷

With respect to community stability, even the EIS concedes that additional BLM timber supplies make no sense: “[b]ecause the timber industry has a long, national history of high volatility, alternatives with harvest volumes that exceed current levels are likely to introduce greater instability into local economies, based on past business cycles.”³⁸ Thus, not a single one of the criteria Congress cited as purposes of a timber sale program on lands managed under the PRMP can be met through an increase in logging over current levels.

2. Overcutting on private lands demands a reduction, not increase, in BLM timber sales.

To the extent that BLM timber sales are offered during this planning cycle, Congress requires the timber sale program to be consistent with permanent forest production and the principle of sustained yield. In making this consistency determination, it is essential for the BLM to account for logging on non-BLM ownerships and consider how the pattern of logging on those lands relates to the demand and supply of goods and services provided by BLM lands. This duty is amplified by NEPA’s requirement to take connected actions and cumulative effects into account.³⁹ Moreover, there is nothing in the O&C Act that limits the concepts of forest production and sustained yield to timber only. Indeed, as noted by DellaSala et al. (2005) “the O&C term ‘forest production’ interpreted in today’s climate means more than timber volume and includes multiple natural resource objectives related to watershed health, carbon

³⁵ 43 U.S.C. § 1181a.

³⁶ See, e.g. Oregon Department of Forestry (ODF). 2000. Report of the Ad Hoc Forest Practices Advisory Committee on Salmon and Watersheds to the Oregon Board of Forestry. Section B: Forest Roads. Salem, OR: ODF.

³⁷ Swanson, Fred, Julia Jones, Beverly Wemple and Kai Snyder. 1999. “Roads in Forest Watersheds – Assessing Effect from a Landscape Perspective.” Published in Proceedings of the Seventh Biennial Watershed Management Conference, Charles W Slaughter, editor. Water Resources Center Report No. 98. Davis, CA: University of California.

³⁸ EIS at 702.

³⁹ Connected actions include private timber harvests facilitated by BLM’s programs such as road right of way and log haul permits (40 CFR § 1508.25(a)1) Cumulative impacts analysis requires consideration of non-federal actions affecting the planning area (40 CFR § 1508.7).

sequestration, fish and wildlife habitat, recreation, endangered species, and other values inherent to BLM lands that also contribute to community stability.”⁴⁰

In light of this, if the rate of harvest on private timberlands is unsustainable then BLM must adjust its allowable sale quantities (ASQ) calculations downward to ensure that the overall supply of timber and other goods and services from all Oregon’s forestlands comes closer to a level that is commensurate with maintaining permanent forest production and the principle of sustained yield. If BLM fails to do this, then it will be exacerbating rather than countering the effects of overharvesting on lands outside its jurisdiction.

Unsustainable logging is indeed the situation in Oregon on state and private forestlands within the western Oregon BLM ownership matrix. Using a GIS dataset provided through World Resources Institute’s Global Forest Watch Program⁴¹ CSE conducted a watershed-by-watershed analysis of the rate of forest cover loss versus forest cover gain during 2000-2013.⁴² Net forest cover change is a more important indicator of sustainability than volume-based measures such as growth versus removal since it is forest cover that determines the overall ability to provide a suite of ecosystem goods and services. The results indicate a significant overcutting on state and private forestlands. In particular, as compared with 2000, there are 452,364 fewer acres that meet minimum definitions (30% canopy closure of trees 5 meters in height). This is a result of forest loss (1,476,209 acres) exceeding acres of forest cover gain (1,023,845 acres). If sustained yield is measured by sustained forest cover (forest gain = forest loss) than this implies an overall rate of overcutting of 42%. In some watersheds the rate overcutting is much worse. In the McKenzie River’s Quartz Creek drainage, since 2001, nearly 7,200 acres (2,913 ha) of forest cover have been lost to extensive clearcutting while only 2,576 acres (1,043 ha) have been gained through natural afforestation or reforestation – an overcutting rate of 279%.⁴³

Federal timber sale planners have often adjusted ASQ to compensate for overcutting on private lands, as they should. For example, in 1991 the Lolo National Forest had to adjust its ASQ downward to compensate for “higher than anticipated” rates of logging on private industrial timberlands within its checkerboard ownership pattern.⁴⁴ The BLM should follow suit and revise the ASQ during this planning cycle to compensate for dramatic overcutting on Oregon’s state and private forestlands. To compensate adequately, the ASQ should be set close to zero.

⁴⁰ DellaSala, Dominick, Nancy Staus and Erik Fernandez. 2005. Importance of Western Oregon BLM Lands and Reserves to Fish and Wildlife Conservation. Ashland, OR: World Wildlife Fund.

⁴¹ Available online at www.globalforestwatch.org.

⁴² Talberth, John and Erik Fernandez. 2015. Deforestation, Oregon Style. Lake Oswego, OR: Center for Sustainable Economy. Available online at:

⁴³ Talberth, John and Catherine Koehn. 2015. The Liquidation of Forests in McKenzie’s Quartz Creek, Oregon. Lake Oswego, OR: Center for Sustainable Economy. Available online at: <http://sustainable-economy.org/forest-liquidation-in-quartz-creek/>.

⁴⁴ Hirt, Paul W. 1994. A Conspiracy of Optimism. Management of the National Forests Since World War Two. Omaha, NE: University of Nebraska Press.

B. The BLM’s rejection of the No-Harvest, Natural Selection, Small Diameter and Maximize Carbon Storage alternatives is irrational.

As the foregoing suggests, neither a continuation of nor an increase in BLM’s timber sale program can be economically justified during this planning cycle. A reasonable price for BLM timber that offsets agency costs and internalizes the negative externalities of logging would be too high at current market prices to attract timber sale purchasers. But the law, DOI policy, and BLM guidance all require such a reasonable price. Nor can the BLM justify its timber sale program in the face of markets that are not normal but severely distorted by negative externalities, subsidies, missing markets, and other well-known sources of market failure. Nor can the BLM demonstrate that its timber sale program meets Congressionally imposed sideboards designed to ensure that the timber sale program protects watersheds, water flow, economic stability, and recreation.

Because of this, BLM’s decision to reject the Natural Selection, No Harvest, Small Diameter, and Maximize Carbon Storage alternatives is groundless.⁴⁵ Each of these alternatives has the potential to yield a steady supply of timber over the planning period as a byproduct of restoring timber plantations to natural forest conditions and conducting ecologically-sound salvage projects while meeting all other statutory sideboards.

In each case, the BLM simply rejects these alternatives out of hand, ostensibly, because they do not meet the goal of supplying timber at a level consistent with what the BLM has determined to be annual sustained yield capacity. For example, with respect to the Natural Selection Alternative, the EIS states that “[t]o limit the harvest of timber to trees that die or are dying would not reflect the annual productive capacity for such lands.”⁴⁶ True enough, but limiting the harvest to trees that die or are dying and to otherwise limit timber harvest to projects associated with plantation restoration activities may be the only appropriate response at this time when markets are severely distorted by negative externalities, subsidies, and missing markets for environmental goods and services. BLM has the obligation of adjusting its allowable sale quantity downward to account for these market distortions, but has failed to do so. When and if normal market conditions return BLM always has the option of updating or amending the RMP to return to a more regular timber sale program.

C. The decision to adopt the PRMP and EIS was arbitrary and capricious.

Courts have consistently found that an agency would be arbitrary and capricious if the agency has (1) relied on factors which Congress has not intended it to consider; (2) entirely failed to consider an important aspect of the problem; (3) offered an explanation for its decision that runs counter to the evidence before the agency, or (4) is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.⁴⁷

In finalizing the PRMP, the BLM entirely failed to address two important aspects of the problem before it: (1) whether or not normal markets exist in the planning area, and (2) how to set

⁴⁵ EIS at 77, 79.

⁴⁶ EIS at 103.

⁴⁷ *Motor Vehicles Manufacturers Assoc. v. State Farm Mutual*, 463 U.S. 29, 43 (1983).

reasonable prices for BLM timber sales that take into consideration the agency's own financial costs and the economic costs passed on to others. The normal markets issue – including an analysis of market failures associated with negative externalities, subsidies, and missing markets – was entirely overlooked. In response to CSE's comments on this issue, the agency merely replied with this off-point statement conceding that an analysis of market failures is something the agency chose to ignore:

Because the BLM sells timber by auction in competitive markets, which represents the highest standard for establishing prices, market failures in the western Oregon timber markets do not constitute a substantial issue that would alter the analysis of effects of the alternatives on timber supply and demand as analyzed in the Draft RMP/EIS. The BLM does not agree that a detailed assessment of “externalities, subsidies, missing markets and other timber market failures” is necessary to analyze the effects of the alternatives on timber supply and demand.⁴⁸

What this response indicates is the BLM's fundamental lack of understanding about market failures and the agency's options for responding to them. The issue is not about how the presence of externalities, subsidies, and missing markets change the BLM's analysis of EIS alternatives – it is about the BLM adjusting the volume it offers for sale each year to correct for market failures such as overcutting on private lands and the associated negative externalities that come with it. This includes suspending the timber sale program altogether until the day when market conditions are normalized.

With respect to timber prices, the EIS merely reports a set of stumpage prices (the value of standing timber) the agency expects over the planning horizon and says nothing at all about whether or not the actual prices received at auctions will be reasonable. In particular, while the EIS presents expectations for gross revenues, total costs, net revenue and net present value in the EIS, the gross revenue calculation is simply made by multiplying harvest volumes under each alternative by assumed stumpage prices modeled on a district-by-district basis and not historical prices actually received at auctions.⁴⁹ Because of this, the BLM offers an important caveat with respect to these gross revenue figures: “they are only a proxy for the actual revenues (harvest value) that the government would receive.”⁵⁰ The question remains as to whether or not the actual revenues received reflect reasonable prices, and if not, what system the BLM plans to put in place to ensure that minimum bid prices received are, in fact, reasonable.

Moreover, the BLM's cost projections ignore all public costs – such as the costs of downstream sedimentation, carbon emissions, or loss recreational value. As set forth above, historically, the prices BLM collects for its timber pale in comparison to the agency's true costs and the many externalized costs these timber sales pass on to other sectors. Despite being a factor Congress clearly identified, the question over what constitutes a reasonable price for BLM timber taking into account all agency and public costs was thus entirely overlooked.

⁴⁸ EIS at 1952.

⁴⁹ Table 3-158 of the EIS at 632.

⁵⁰ EIS at 630.

VIII. Request for relief:

To remedy these deficiencies in the PRMP and EIS, CSE requests the following:

1. A detailed explanation of the process the agency intends to use to ensure that when offered for sale, its timber receives reasonable prices that compensate for all agency costs and negative externalities.
2. A detailed assessment of the negative externalities generated by timber sales under each action alternative. As discussed above, the methods and sources of information are readily available.
3. A detailed assessment of the ecosystem service values generated by BLM forestlands in their natural state. Again, the agency has at its disposal both the methods and sources of information to do so.
4. A detailed assessment of externalities, subsidies, missing markets and other timber market failures in the planning area that distort normal market conditions. In light of these market failures, the FEIS should discuss how the final RMP offers corrections.
5. A detailed assessment of the rate of harvest on adjacent state and private forestlands and the implications this has for the relative value of goods and services from BLM lands. As part of this analysis, the BLM should discuss adjustments needed to its long term allowable sale quantity estimates (ASQ) needed to compensate for unsustainable timber harvesting on these lands and meet the goal of sustainable forest cover.
6. A detailed consideration of the No-Harvest, Natural Selection, Small Diameter and Maximize Carbon Storage alternatives.