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Teresa A. Stutesman  
Bureau of Land Management  
Myrtlewood Field Manager  
1300 Airport Lane  
North Bend, Oregon, 97459  
May 25, 2017  
Dear Teresa A. Stutesman:

Please accept this timely protest, from Umpqua Watersheds, Inc., of the Crystal Clear Timber Sale (ORC00-TS-2017.0031).

### **Introduction**

Umpqua Watersheds, Inc. (UW), is a 501 C 3 non-profit conservation, restoration, education organization, with offices in Roseburg, Oregon.

- In this protest, Umpqua Watersheds intends to provide the current and historical management conditions that comprise the context of this protest.
- More specifically, UW also intends to show why this protest was prompted by the chronic, detrimental terrestrial and hydrological conditions of the watersheds within and proximate to the Updated Six Twigs Analysis Area, as elsewhere in this region.

### **Current Management Context**

On October 29, 2014 UW filed timely scoping comments on the Six Twigs Proposal. In this protest, UW asserts that those comments were substantive and both broadly and specifically relevant to issues raised by the BLM in that document. We quote from those comments:

***“ACTUAL CONTEXT FOR THE CONSIDERATION OF IMPACTS OF PROPOSED ACTIONS***  
*Umpqua Watersheds, Inc. (UW) would like to preface its comments with an overview, as UW sees it, of*

*the actual context and true intensity of impacts, one time and cumulative, upon the entire analysis area under consideration in the Six Twigs Regen. harvest proposal.*

*As BLM is well aware, much of the public lands it administers in Western Oregon, such as the Six Twigs parcels, are located in a checkerboard arrangement and, thereby, are often bordered by intensely managed, privately held, industrial timber lands. Thus, Umpqua Watersheds asserts the following: that from a landscape, watershed-wide perspective, this checkerboard arrangement is the true, broadest and most useful context within which the BLM must assess its managerial responsibilities, and out of which it should offer any subsequent harvest and restoration proposals, etc. This wider context should be the basis from which BLM begins any analysis. This, so that its assessments of current and future conditions and the need and purpose for proposed actions are truly representative of the actual ecological state across any given watershed(s).*

*BLM, by any reasonable metric, whether it be sylvan, biological, wildlife (terrestrial and aquatic), hydrological, social/economic, carbon sequestration/release, etc., must consider all ownerships in the watersheds herein under consideration. It is Umpqua Watersheds studied opinion that, to include only the public lands contained within the analysis area as the context surrounding the harvest plan, would be to create a grossly inaccurate picture of current conditions on these watersheds. Further, to consider only these public forests, would be to present a disingenuous prediction of the cumulative effects and their intensity upon the analysis area, as a whole. In that vein, we quote this excerpt from the applicable statute: “Both context and intensity must be considered in determining significance of the environmental effects of agency action (40 CFR 1508.27):” Further, UW notes the following: “Whether the action is related to other actions with individually insignificant impacts but cumulatively significant impacts. - 40 CFR 1508.27(b) (7)”*

### **Sylvaculture**

*Industrial fiber farm plantations are not, in the truest sense, forests. Indeed, and by design, they are sterile, poisoned, even-aged sylvan monocultures. These short rotation private stands are unlike anything occurring with any regularity in nature. Largely deprived of the early seral stage of post fire recovery and mostly devoid of biologically useful standing and down dead wood, they are not the environmental equivalent of any kind of naturally occurring stand replacing event. Under their current and widespread management regime i.e., the Oregon Forest Practices Act (OFPA), they will not be allowed to progress to a mature/late seral stand age condition, regardless of fire return intervals. In watersheds already containing so very many of these clear cut areas, it is Umpqua Watersheds' studied opinion, that BLM should avoid adding administrative insult to ecological injury by creating still more large openings in the already much degraded New Frontal and Sixes River Watersheds, or, indeed, on any other watershed managed by the BLM.”<sup>1</sup>*

From page 1, of the Updated Six Twigs Regeneration Harvest Plan EA, we note the following statement:

*“The O&C Act (Public Law 75-405) requires the BLM to manage O&C Lands for the permanent production of timber.”* We see no comparable reference by BLM, in that EA, to the mandates of the 1937 O & C Act to protect watersheds, regulate streamflows and provide for recreation. Thus, the following substantive and relevant issues alluded to above, include:

- Necessary limitations on current BLM regeneration harvest management proposals due to past

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<sup>1</sup> Umpqua Watersheds Scoping Comments, Six Twigs Regeneration Harvest Proposal, Pp. 1, 2

over-harvest/conversion of primary old growth/mature forest to plantation etc. on public and private holdings in the watersheds where Crystal Clear Timber Sale units are located; and the implications of this past over-harvest for BLM's past non-compliance with the mandates of the 1937 O & C Act to protect watersheds, regulate streamflows and provide for recreation.

- Purported purpose and need as they relate to the obligation of public lands managed by the Coos Bay District of the BLM to supply private enterprises with logs and local governments with revenue.
- Again considering the mandates, codified by the 1937 O & C Act, to protect watersheds, regulate streamflows and provide for recreation, the resultant necessary, if de facto, constraints on BLM management activities on these watersheds imposed by the continued, widespread and environmentally damaging clear cut extraction, and ancillary activities, on adjoining and proximate, privately owned, industrial timberlands. These damaging impacts to public lands in the Crystal Clear Timber Sale Area, as on the entire Six Twigs RH Area, from on-going extractive activities conducted on private industrial holdings, conducted under aegis of the retrograde environmental provisions of the Oregon Forest Practices Act, include but are not limited to:
  - 1) increases in winter peak stream flows and decreases in summer low streamflows;
  - 2) severe and obvious disruptions to connectivity and biodiversity due to gross removal of canopy cover and subsequent sylvacultural simplification;
  - 3) negation of carbon sequestration/mitigation contributions of public lands by extensive clear cut removal of woody biomass, living and dead, from adjoining and proximate private industrial timberlands;
  - 4) airborne drift onto public lands from repeated aerial applications of increasingly toxic suites of herbicides and their ancillary chemicals, as well as in runoff of same from private lands onto public;
  - 5) runoff from private onto public lands of aerially applied nitrogen fertilizers;
  - 6) wildfire threats to public lands from the novel imposition, upon the shared landscapes of the Six Twigs RH, of structurally simple, even age, monoculture fiber farm plantations on adjoining and proximate private industrial properties;
  - 7) de facto negation of the conservation/restoration efforts, made on public lands by the BLM on behalf of ESA listed species, aquatic and terrestrial, by the environmentally retrograde clear cut extraction practices conducted under aegis of the OFPA on private lands, adjoining and proximate to the public lands of the Crystal Clear Timber Sale, lands managed by the Roseburg District of the BLM.
- Timber extracted from BLM holdings is subject to the Oregon Forest Products Harvest Tax (OFPHT). Thus, the continued failure of the BLM to exercise its subsequent right and obligation to publicly and forcefully object, to the applicable agencies of the government of the State of Oregon, on behalf of the people of the United States of America, to the suite of environmentally harmful impacts listed above, which are imposed upon the public lands of the Crystal Clear Timber Sale, by the extractive clear cut management conducted on adjacent and proximate privately owned timberlands, is unacceptable. Umpqua Watersheds protests this failure by the BLM to intervene, on behalf of these public lands, by exercising the right and obligation to speak up and act; a right and obligation, which flows directly from the tax

obligation (OFPH) levied by the State of Oregon on timber sourced from BLM managed holdings, as well as from the mandates of the O&C ACT, codified in that act from its inception, to protect watersheds, regulate streamflow and provide for recreation.

In short, the “Financial Forestry” version of “Sustained Yield,” so regrettably and widely evident on those same private industrial timberlands today, is made economically possible, to a significant extent, by shifting most of its external environmental and local government funding costs onto the life sustaining watersheds within the “checkerboard” in general, and onto the public lands within that checkerboard, which are managed by the BLM, and onto those of the Crystal Clear Timber Sale, in particular. This environmentally unjust, economically unfair and chronic imbalance needs to be equalized before renewed extractive demands that create still more large canopy openings on public lands are undertaken, yet again. In the wider public interest, because of these current contextual conditions, and in light of its own profligate past practices, BLM has the right and bears a great deal of the responsibility for righting this imbalance. To reiterate: that BLM appears, to UW, neither to acknowledge this right, nor to accept and act upon this subsequent responsibility, is an important aspect of Umpqua Watersheds' protest of the Crystal Clear Timber Sale.

### **Historical Management Context**

On pages nos. 1 and 2 of its scoping comments on the Six Twigs Regeneration Harvest Plan, UW noted the management context of the larger Sixes River Basin. Here, we also refer to the decades long over-harvest of primary old-growth and mature forest by the BLM, in Western Oregon. That region-wide annual average extractive volume converted more than **900 mmbf** from primary forest to plantations etc, for three decades, roughly from 1963 to 1993!

In researching various aspects of the oft-cited 1937 O & C Act, UW came across a paper authored by one Frank N. Price, a former employee, as we understand it, of the Coos Bay District of the BLM. We offer the following quote from his paper: *“I have been curious as to the administrative record and intent behind including the phrases “protecting watersheds, regulating stream flow” and “providing recreational facilities.” Efforts to satisfy this curiosity lead (sic) to investigations into the political and professional conditions and attitudes in the 1930s that lead (sic) up to the passage of the O & C Act, and to a review of the papers written by or for Walter H. Horning concerning the genesis of the O & C Act, and the early policies of the agency charged with execution of the O & C Act provisions.”*<sup>2</sup>

(As regards Horning's primary influence on and understanding of the O & C Act, UW offers the following from the Price paper: *“In this capacity, Horning wrote the substance of the O & C Act, and prepared the forestry arguments and the statistical data for Poole's use during the hearings. Following the passage of the O & C Act, the Secretary of the Interior appointed a three-man committee to write regulations and procedures for implementing the timber program for the O & C Administration. Walter Horning, fresh from the legislative battles for the O & C Act and familiar to the commitments made to Congress, was appointed to the committee.”*<sup>3</sup> UW thus feels confident in believing that Horning's understanding of the intent and vision, going forward, for that act cannot be easily refuted. He, so to speak, is the very fountainhead for that intent and vision, flowing sustainably across the region's watersheds, if you will, and perpetually and cleanly seaward, as well it should have, down the ensuing decades.)

<sup>2</sup> Price, Frank N., 2005, Pg. 3, Protecting Watersheds, Regulating Stream Flow, and Providing Recreational Facilities: The Intent of this Language in the O & C Act, Early Interpretation and Historic Context.

<sup>3</sup> *ibid*

UW's curiosity piqued by this disclaimer, we read a copy of a speech delivered by this same Walter H. Horning to the Annual meeting of the Western Forestry and Conservation Association in Portland Oregon, in December of 1937, which was included by Price, in the aforementioned paper.<sup>4</sup> From that speech we quote the following: “*Utilization of the forest must be managed in such a manner as to avoid depletion of the forest capital; the interest alone may be safely used. The observance of this principle is essential in providing for the stabilization of the economic life of communities, which are dependent upon the forest.*” With that broad recommendation in mind, UW contemplates the decades long over-harvest of primary old-growth and mature forest by the BLM, in Western Oregon, in general, and on the Coos Bay District, in particular. This was an over-application, it appears to us, of the vaunted Sustained Yield extractive model at the obvious expense of watershed protection, stream flow regulation and provision for recreation, thereby obviating much of the spirit and intent of Horning's proven understanding of, and stated vision for, the O & C lands managed by the BLM. That these ancillary provisions of the act, so clearly critical in the mind of a foundational progenitor of that act, were short changed in preferment of sustained yield for decades is proven, ipso facto, by the subsequent necessity of applying the strictures of the Endangered Species Act, The Northwest Forest Plan, The Clean Water Act, National Environmental Policy Act, etc. to those lands managed by the BLM.

In that same Portland speech quoted by Price, Horning further states: “*It is sound national economy to regulate the use of the forest in such a manner as to maintain a continuous forest cover. This is essential for the regulation of stream flow and for the protection of watersheds and further more it contributes to the general satisfaction and happiness of the inhabitants of a region by keeping the landscape in a green and attractive condition.*” (emphasis, UW) A “green and attractive condition” indeed!

Given all of the past primary forest extraction by the BLM, and by the past and present clear cut extraction undertaken by the private timber industry, one must exercise the imagination in order to picture such a “...green and attractive condition...” across the watersheds of Western Oregon in general and the Coos Bay District in particular. For alas, that wholesome, healthy environmental and aesthetic condition, the very one envisioned by this primary author, and an original and fully authorized explicator, of the O & C Act, in too many instances does not now exist on the ground.

Horning further tellingly proclaims to his assembled, 1937 audience: “*It is contemplated that such cutting shall be carried out under rules of forest practice providing for partial or selective logging. Single tree and small group selection will be the preferred practice where ever the forest type, topography and other conditions permit its successful application. Indiscriminate clear cutting or the use of methods which prevent prompt reforestation of the logged areas are contrary to the spirit of the Act and will be discontinued.*”<sup>5</sup> Contrary to the spirit of the Act, indeed!

Finally, this declarative and defining paragraph, excerpted from that same 1937 speech of Walter H. Horning, a “Founding Father” as it were, of the 1937 O & C Act: “*The Department of the Interior is desirous of doing a good job of forestry and forest conservation on the O. and C. lands and to encourage good forestry on the intermingled lands of other owners.*” (emphasis, UW)

<sup>4</sup> *ibid.* Pp. 4, 5

<sup>5</sup> Price, Frank N., 2005, Pp. 4, 5, Protecting Watersheds, Regulating Stream Flow, and Providing Recreational Facilities: The Intent of this Language in the O & C Act, Early Interpretation and Historic Context.

## **Regarding the Need For the BLM To Defend the Public Trust, By Openly and Effectively Criticizing the Suite of Harmful Environmental and Other Impacts Visited Upon the Public Lands It Manages, by Private Clear Cut Timber Extraction, Conducted Under Aegis of the Oregon Forest Practices Act**

This last unequivocal statement by Walter H. Horning, UW has quoted above (“...and to encourage good forestry on the intermingled lands of other owners.”) regarding the requisite interplay between the BLM (as well as, we maintain, the USFS, the USFWS and NMFS et al.) and the private industrial lands of the shared watersheds comprising the infamous and most unfortunate “checkerboard” of alternating ownerships, is indicative of the cooperative understanding implicit in the minds of the O & C Act's principal author and explicator, from the very beginning.

Reading further in the Price paper, we found this statement: “*An intent of the act was to bring both the O & C lands and the intermingled private lands under sustained yield using cooperative management agreements. The act was also intended to bring about conservation of nontimber resources (i.e. protect watersheds and regulate stream flows) across both public and private lands within each sustain-yield unit.*”<sup>6</sup> (emphasis, UW)

Quite clearly, the principal author of the O & C Act of 1937 had no compunction about the federal forest management agency, which was the precursor of the BLM, influencing, in an effective way, the management activities affecting conservation of resources, on adjoining private forest lands in the checkerboard. Nor, for that matter, did the Interior Department, when it issued the following directive to the newly minted BLM, on June 2, 1948: “*Both public and private lands committed to the [sustained-yield cooperative] agreement shall be subject to public recreational use, including hunting and fishing. Adequate safeguards shall be provided for fish and wildlife conservation, for the protection of water supplies, and for preservation of scenic values.*”<sup>7</sup>

That this idea (clearly, in the mind of its author(s), more than mere suggestion) was largely brushed aside in the ensuing decades, in favor of over-extraction of primary forest, is again borne out, ipso facto, by the plethora of degraded, DEQ listed rivers and their tributaries, as well as by the listed and/or diminished or disappeared fish runs and terrestrial species, sadly so much in evidence today, on much of the Coos Bay District, as in Oregon generally. It is proven by the many large clear cuts and monoculture plantations on the private lands of these watersheds; anthropocentric constructs whose ecological properties (or lack of) stand (or fall) in stark and startling contrast to the accepted conservation/restoration practices evident almost exclusively on public lands today.

In short, the “Financial Forestry” version of “Sustained Yield,” so regrettably and widely evident on those same private industrial timberlands today, is made economically feasible, to a significant extent, by shifting most of its external environmental and local government funding costs (its externalities, that is) onto the life sustaining watersheds within the “checkerboard” in general, and onto the public lands within that checkerboard, which are managed by the BLM, and, in this instance, onto those of the Six

<sup>6</sup> Price, Frank N., 2005, Pg. 7, Protecting Watersheds, Regulating Stream Flow, and Providing Recreational Facilities: The Intent of this Language in the O & C Act, Early Interpretation and Historic Context.

<sup>7</sup> ibid., Pp. 7, 8

Twigs Harvest Plan and its Crystal Clear Timber Sale, in particular. This environmentally unjust, economically and historically unfair and chronic imbalance needs to be equalized before renewed extractive demands that create still more large canopy openings. In the wider public interest, because of current contextual conditions, and in light of its own profligate past practices, BLM has the right and bears a great deal of the responsibility for correcting this imbalance.

These historical and current contextual conditions are, or they ought to be, limiting influences on such BLM management proposals as the Crystal Clear Timber Sale, which would impose still more large openings on watersheds already, and quite obviously, environmentally and aesthetically overburdened with them. UW therefore asserts that the use of ECA or any other metric, which attempts to minimize or obfuscate these clear and present threats to watershed health and the protection of streamflow, must, perforce, only serve to validate chronic, cumulative and increasing violations of the 1937 O & C Act's mandates regarding these critical ecological parameters, as well as the mandates of the Clean Water Act etc.

**Concerning the Right and Subsequent Responsibility of the BLM to Critique Private Timberland Practices Within the Infamous and Most Unfortunate Checkerboard of Alternating Ownerships**

To reiterate what UW has posited in other comments, protests etc. to the BLM (and the USFS), timber harvests originating on BLM managed public forests lands are, and have been, subject to payment of the Oregon Forest Products Harvest Tax (OFPHT), since economic principles teach that bid price is the sum of all taxes. (In 2016, in response to an inquiry made by Umpqua Watersheds to the Oregon Department of Revenue (ODR), that state agency reported to UW that, for the years 2006 to 2015, extraction sourced from Federal forestlands remitted **\$2,486,183.83** to ODR. Clearly, then, the State of Oregon concurs with UW's finding that logs from Federal lands are taxed by Oregon.)

Thus, it directly follows that the BLM enjoys the right and bears the responsibility to, at long last, protest to the Oregon Department of Forestry, the Oregon Board of Forestry and the State Land Board, etc. the continued imposition of these and all of the negative and very cumulative impacts that comparatively retrograde management activities, undertaken on OFPA regulated private lands, impose upon the public forestlands the BLM manages, in trust, for all of the people of the United States of America, within the Updated Six Twigs EA Area. In the end, tax or no tax, this, unequivocally, is very much a public trust issue. UW's research of this issue, outlined above, shows that public trust assignment to the BLM to have been a significant consideration for the authors of the 1937 O & C Act.

This statement of well considered opinion, based on historical and current fact, is offered, in good faith, by conscientious citizens, to Regional BLM authorities as well. In this instance, by Umpqua Watersheds Board of Directors on behalf of its active and concerned membership, that is; citizens concerned for the increased conservation and restoration considerations necessary for the responsible, long-term management of the remaining public portions of the infamous and unfortunate checkerboard of alternating ownerships in Western Oregon. As well, thereby, for a much-improved contribution by private industrial timberland owners to the environmental, financial, social and yes, to the aesthetic concerns and needs of the public, in whose wider interests the BLM, as indeed, all of government is enjoined and empowered by that public, to act.

Timber extracted from BLM holdings is subject to the Oregon Forest Products Harvest Tax (OFPHT). Thus, the continued failure of the BLM to exercise its subsequent right and obligation to publicly and forcefully object, to the applicable agencies of the government of the State of Oregon, on behalf of the

people of the United States of America, to the suite of environmentally harmful impacts listed above<sup>8</sup>, which are imposed upon the public lands of the Crystal Clear Timber Sale, by the extractive clear cut management conducted on adjacent and proximate privately owned timberlands, is unacceptable. Umpqua Watersheds protests this failure by the BLM to intervene, on behalf of these public lands, by exercising the right and obligation to speak up and act; a right and obligation, which flows directly from the tax obligation (OFPHT) levied by the State of Oregon on timber sourced from BLM managed holdings.

Again, in UW's opinion, the most noteworthy historical fact of the period roughly between 1963 and 1993 relating to management of the forest lands in the analysis area under consideration in the Six Twigs EA is this: with limited exceptions (those reflecting national and regional economic downturns), the BLM and private industry clear cut primary old growth and mature forest, with abandon, from each and every watershed in the area, year after year, decade after decade.

Reaching farther back, we found a report by Oregon & Washington BLM State Director, Russell E. Getty to the O&C Advisory Board. Therein, Getty states the following: *“At the outset I should explain that we have now increased the allowable cut declaration 11 times since the original annual cut of 500 million board feet established by the O&C Act of 1937.”*<sup>9</sup> Thus, liquidation of primary old growth and mature forest on the O&C lands by the BLM was increased from the original 500mmbf, a rate of extraction based upon a 100 year region-wide rotation,<sup>10</sup> to a whopping 1,127mmbf in July of 1962! While it is true, that many in the forestry profession at that time believed that this primary old growth and mature forest to be *“old, over-mature and decadent timber...”*<sup>11</sup> today it is universally recognized by all responsible, science-based professionals, as well as by the Conservation Community and by well informed members of the wider public that this purview was an environmentally myopic one, indeed. This short-sighted over-emphasis on sustained yield extraction has left these watersheds badly impaired, as witness the necessity of application of the ESA and the Northwest Forest Plan etc.

We note the disclaimer about the unsuitability of continued thinning given thinning rates in the last twenty or so years, and the permissibility of conducting regeneration harvests.<sup>12</sup> Umpqua Watersheds feels no compunction in reminding the BLM that it participated in the gross over-harvest of primary late seral/mature habitat over the course of some three or four decades, at the expense of a suite of critical environmental parameters. Any extractive shortage it is now faced with is entirely of its own making. To quote scripture: *“The sins of the fathers shall be visited upon the children unto the third and fourth generation.”*<sup>13</sup> We could not have put it any better!

We would like to assume that the Crystal Clear planning team is as aware as UW of the many negative consequences imposed upon these watersheds, environmentally speaking, by its participation in this decades long “great falling”. The long and painful cries, as it were, emanating from these landscapes and their ancient natural systems, so shamefully manifested in the now widely recognized precipitous decline of species and their habitats region-wide, led to an accompanying outcry from an alarmed and

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<sup>9</sup> Getty, Russell, *Increase In the Allowable Cut*, Salem, OR, 8/28/1952, Pg. 1

<sup>10</sup> Horning, W. H., *The O. And C. Lands: Their Role In Forest Conservation*, Pg. 1

<sup>11</sup> *ibid*, Pg. 4

<sup>12</sup> Updated Six Twigs EA, Pp. 2, 3

<sup>13</sup> Numbers, 14:18



aroused citizenry. This environmental awakening of individuals and groups to the dire consequences of such huge and seemingly heedless resource extraction levels from our precious watersheds led to political action. This energy, in turn, helped to produce the land mark Northwest Forest Plan.

At present, UW notes the frequent citation of the sustained<sup>14</sup> yield harvest provision of the 1937 O & C Act by agencies and advocates of greatly increased extraction from the O & C and other holdings managed by the BLM. We also note the responsibility that nearly eighty year old legislation imposed upon the BLM, from the day of its enactment and first implementation, to protect watersheds and regulate stream flow. It is UW's studied opinion that, for decades, the BLM willfully violated these latter two critical responsibilities by means of its ill-considered clear cut over-harvest of primary forest on lands under its management authority. This negligence contributed significantly to the resultant alarming decline of benchmark species, both aquatic and terrestrial, that flowed from the vast habitat destruction the agency so deliberately and methodically participated in.

UW strongly asserts that, because of this well known record of past mismanagement, the BLM is ethically and legally required to direct its planning and action energies to the conservation of what intact habitats that, despite all odds, remain within its jurisdiction. Further, it is our firm position that the BLM must apply those same energies to the vast restoration effort required to return these lands to something approaching that state of high ecological function, which obtained so widely across the analysis area in the centuries before either industry or government agency applied a particular shortsighted and pernicious variant of the "sustained yield" clear cut/monoculture/herbicide/fiber farm management paradigm to so much of the public inheritance that lay within their respective purviews.

Umpqua Watersheds acknowledges provisions of the Northwest Forest Plan, which allow the BLM to consider regeneration extraction as a management tool. However, UW also notes, emphatically, the vast private industrial acreage that is inextricably entwined, ecologically speaking, in every respect, with the public lands managed by the Coos Bay District of the BLM, within the infamous and most unfortunate checkerboard of alternating ownerships. For the most part, these vast private ownerships have managed their lands following the mercenary principles of financial forestry. This model largely precludes many of the long term management considerations critical to the conservation and/or restoration of the important environmental services that devolve from intact, high functioning watersheds.<sup>15</sup> Needless to say, these environmental attributes are of critical importance to the maintenance and/or recovery of ESA listed species, as well as to all of the flora and fauna, including we human beings and our wider societies, dependent upon their continued and/or restored high-functioning. Given the past history of profligate liquidation of primary forest by the BLM et al. and fully considering the obviously degraded clear cut, monoculture plantation ecological condition of so many of the watersheds within this "checker-boarded" ownership pattern, past and present, including the area of the Crystal Clear Timber Sale, UW protests the renewal of regeneration extraction on public lands under the management authority of the Coos Bay District of the BLM.

### **Purpose and Need**

UW notes the following statement from the Six Twigs Ea: *"There is a need to supply timber (RMP p. 52). The timber volume generated would support local and regional economic activity as envisioned by the ROD/RMP (p. 45)".*<sup>16</sup> This disclaimer, made by BLM relative to the need to supply logs and

<sup>14</sup> Please note the critical difference in meaning between the two words: "sustained" and "sustainable."

<sup>15</sup> See UW Protest, Crystal Clear Timber Sale, Pg. 3

<sup>16</sup> Updated Six Twigs EA, Pg. 2

revenue, certainly appears to render UW's past comments<sup>17</sup> on those issues entirely appropriate and most relevant to the EA, initially, and to this protest, currently.

### **Regarding the need to supply logs**

In its timely comments (10/29/2014) on the BLM 's Six Twigs Project, UW addressed the issue of raw log exports from Oregon, in general, and Coos Bay, in particular vis a vis BLM's claimed statutory need to provide a predictable and sustainable supply of timber etc., as quoted above. In those comments, UW stated: *“To repeat: it is a fact, if unfortunate, that while domestic mills clamor for increased harvest of all age classes of trees from public forest lands, a vast quantity of unprocessed logs has been and continues to be exported from the Port of Coos Bay, alone!”*<sup>18</sup> For example, in the year 2013, some 662mmbf, or 16% of the total Oregon timber harvest was exported as raw logs to the Pacific Rim.<sup>19</sup> In the year 2012, 84,643,000 bf of various softwood species was exported to Communist China, from Coos Bay, alone!<sup>20</sup> To make matters worse, an entity of the Coquille Tribe has commenced the export of ship loads of privately sourced, unprocessed logs from its dock, in Coos Bay. The tribal brokerage estimated roughly 1,000 log truck loads were required to fully lade this vessel. If their estimate is correct, and allowing roughly 6,000 bf/truck load, that one ship alone carried some 6mmbf of unprocessed logs. This Coquille tribal entity expects to send many more such shiploads of raw logs across the Pacific Ocean in the years to come.

How then to explain the advertised pressing and unfilled need, expressed by some domestic enterprises, for logs sourced from public lands, when so many hundreds of millions of board feet are harvested in Oregon and exported to our commercial competitors, every year? Does the Coos Bay District propose to auction lower priced logs to businesses that are unable to compete for logs on this “free” world market; this discount offered as a kind of subsidy granted one aspect of the private sector by the public? While we hope not going forward, facts on the ground certainly suggest that the BLM has done so in the past and will do so again, if society and mistaken governance permits it. At risk of stating the obvious, UW notes, for the record, that it is many thousands of miles farther from Coos Bay to Shanghai and other East Asian Ports, than from Coos Bay to Glendale, Roseburg, Dillard or other domestic locations, where a supply of Oregon-sourced logs is said to be needed for manufacturing.

To reiterate: in the Six Twigs Harvest Analysis Area, as elsewhere in Western Oregon, the requirement to supply a sustained yield of timber to domestic mills from public forest lands has been grossly overemphasized in past decades, much to the detriment of the watershed stewardship obligations specified in the 1937 O & C Act. Therefore, at present and for the foreseeable future, that obligation must be considered to have been met. Further, there clearly exists an abundance of logs available to domestic manufacturing enterprises. Thus UW feels well justified in asserting that the BLM need not, nor should it, impose a further and unnecessary extractive burden on what is obviously an already badly degraded checkerboard landscape, ecologically speaking. UW stands by these reiterations as being factual and most relevant to BLM managed timberlands in Western Oregon in general, and to the Updated Six Twigs EA and the Crystal Clear Timber Sale, in particular.

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<sup>17</sup> UW Scoping Comments, Six Twigs Regeneration Proposal, Pg. 5

<sup>18</sup> *ibid*, Pg. 5

<sup>19</sup> Bureau of Business and Economic Research, University of Montana; Simmons, Scudder, Moragan, et al., 6/15

<sup>20</sup> USDA, Pacific Northwest Research Station, Production, Prices, Employment, and Trade, All Quarters, 2012, Xiaoping Zhou, December 2013

## **Regarding the need to supply revenue to state and local governments**

UW stresses the relevance of scoping comments made by it on the Six Twigs Proposal, and in this protest, to county revenue externalities. These comments relate to the specific raising of this issue, by the BLM, in the Updated Six Twigs EA<sup>21</sup>.

Well funded, for decades, by the generous donative supplied to the affected O & C Counties, including Coos, Curry et al., by extractive timber receipts representing the mass liquidation of the concentrated wealth of centuries, these counties developed an addiction, as it were, to low ad valorem taxes obviated by unsustainable conversion of primary forest to plantation and other stand initiation condition.

Certainly, the relatively sudden sharp reduction of the availability of logs from Federal Forests has resulted in a withdrawal reaction, these last twenty or twenty-five years. Undoubtedly, the eventual depletion of high value, high volume old growth/mature logs (the pure heroin/cocaine in this analogy) on both Federal and private holdings was bound to produce a significant withdrawal syndrome, eventually. However, as we know, the quite necessary listing of the unfortunate NSO, MAMU, Coho, etc. caused that systemic shock to occur a decade or two sooner than it might have otherwise. In the event, the Secure Rural Schools, Community Self-Determination Act of 2000 (aka SRS or the "safety net") was the methadone supplied to help wean our regional society, including our local governments, off this addiction. At some locations and for many individuals, this and other palliatives fulfilled their intended purposes; today they are different communities and different individuals with altered means of support and perhaps possessed of raised environmental consciousness. Other individuals and enterprises, devoid of their habitual resource "high" succumbed, in one way or another. Still others continued to live off the financial momentum generated by the harvest of several billions of board feet of primary forest. These latter communities and individuals live on in hopes of a return to the "golden years" of, again so to speak, cheap, pure drug, refusing to acknowledge past abuse and present delusion. They know who they are.

Having rescinded the yield, severance and privilege type taxes, the Oregon Legislature has it well within its authority to reinstate them. After all, many of the identical industrial timber entities currently operating in Oregon already pay similar taxes in neighboring states and manage to turn a respectable profit, thank you. Further, a reinstated severance or yield tax levied on private industrial timber lands (i.e., >5,000 acres) could conceivably be structured so that, at harvest, forest land owners delivering logs to domestic mills would be granted a partial exemption to the severance or yield tax. This would help to eliminate any price differential currently offered those owners by log exporters. (A differential that might not exist were the BLM, U.S.F.S., ODF et al to price logs from public lands at levels comparable to those being paid for privately sourced, exported Oregon logs.)

Much as with the putative need to supply raw materials to domestic enterprises, the stated obligation to provide revenues to the O&C Counties by means of increased regen. harvest of BLM administered forest lands is, at present, a politically created necessity and definitely not one arising from a dearth of actual potential revenue sources; sources very much available, given the requisite political will at the local and state levels, in the real world today.

Historically speaking, the affected O&C counties, enjoyed the overly generous revenues obtained from the gross over harvest of primary old growth and mature forest for several decades. Rather than

<sup>21</sup> Updated Six Twigs EA, Pg. 2

insisting on increased revenues derived from a renewal of ecologically unwarranted harvest activities on those same put-upon public lands, while at the same time lobbying the Oregon Congressional Delegation to pressure federal forest management agencies to accede to these unjustified demands, county commissioners, et al. should approach the Oregon Legislative and Executive branches of state government and insist that accustomed levels of timber harvest taxation be reimposed upon the voluminous private industrial timber harvests, in Coos, Curry, Douglas and adjoining counties. Optionally, and as mentioned above, the Oregon Legislature has, well within its purview, the authority to structure such a renewed revenue stream so as to stanch the ongoing hemorrhage of raw logs from Oregon to foreign mills, at a time when some domestic mills clamor for a share of those very logs.

Admittedly, these particular tax issues are the province of the elected government of the state of Oregon and are not within the administrative or constitutional purview of the Federal Government or its agencies. However, the prominent citation of this revenue requirement in the purpose and need section of this EA<sup>22</sup>, and, indeed, as repeated in the purpose and need sections of countless other BLM management proposals at the regional and district levels, makes them an absolutely legitimate and most germane subject for discussion, when commenting upon the purpose and need portions of this proposal.<sup>23</sup>

Umpqua Watersheds stands by these assertions. UW maintains that they were and remain most relevant. The apparent fact that they went unacknowledged and unaddressed by the BLM in its Updated Six Twigs EA and in the Decision Document for the Crystal Clear Timber Sale is a significant factor in UW's decision to protest the this Sale.

## **Hydrological Considerations**

In reviewing the Updated Six Twigs EA, UW was particularly interested in discussions of low summer flow on the analysis area in general, and on the watersheds directly affected by this management proposal, in particular. In that document, we read the following disclaimer: *“In most cases, harvested areas do not permanently change water yield. As trees are replanted and grow, evapotranspiration would increase over time thereby reducing annual yield to previous levels (Jones and Grant 1996, Thomas and Megahan 1998, and Jones 2000). Equivalent Clearcut Area (ECA, see Reid 1993 for a review) has been used to calculate the change in water yield for a basin from past and future harvest activity. The ECA model generates the cumulative effect of harvest by comparing the total vegetative disturbance in a catchment to an equivalent clearcut area. One ECA model on the Umatilla National Forest (Ager and Clifton 2005) uses a post-harvest recovery rate (increase in evapotranspiration) of 4.3 percent per year for moist forests with full recovery at 23 years. These recovery values and harvest history were used to calculate ECA.”*<sup>24</sup>

In the following numbered comments, Umpqua Watersheds intends to offer explanation as to why these disclaimers appear to it to be specious, in several respects. With that purpose in mind, UW makes the following statements, including references:

**1) Continued poor watershed health was a basis of the June 20, 2011 National Marine Fisheries**

<sup>22</sup> Updated Six Twigs EA, Pg. 2

<sup>23</sup> UW Comments Olalla-Camas RH EA, Pp. 6, 7

<sup>24</sup> Updated Six Twigs EA, Pp. 56, 57

Service (NMFS) decision to retain the “threatened” status of the Oregon coast (OC) coho. NMFS concluded that the combined Oregon Department of Fish and Wildlife/NMFS analysis of freshwater habitat trends for the Oregon coast found little evidence for an overall improving trend in freshwater habitat conditions since the mid-1990s, and evidence of negative trends in some strata. It is UW's unfortunate, if inescapable, conclusion that the primary habitat in the Sixes River Basin is the actual water flowing (or not, as the case may be) in that river and its tributaries. If this watery habitat is unable to support well restored and viable runs of Coho Salmon etc., how then does BLM feel justified in making the assertions it does, and which we have quoted above?

2) NMFS also concluded that “relying on active restoration to mitigate for the effects of ongoing land management that degrades OC coho salmon habitat is not feasible” and that “the legacy of past forest management practices combined with lowland agriculture and urban development has resulted in a situation in which the areas of highest habitat capacity . . . are now severely degraded.” Needless to say, this conclusion by NMFS certainly seems to cast in doubt the assumption BLM has made above.

When we read the following alarming, even condemnatory statement in the Roseburg BLM District's Days Creek-South Umpqua Harvest Plan EA, made in reference to the appalling riparian protections afforded by private industrial timber's clear cut extractive management, conducted under aegis of the Oregon “Forest” Practices Act, UW wondered if everyone at Roseburg BLM was on the same page, so to speak. That is, these disgraceful practices seem, in this statement, to be fully acknowledged by the authors of the Days Creek-South Umpqua Harvest Plan EA. Acknowledged yes but, for all practical purposes, ignored: **“Riparian areas of younger stands on private lands generally lack shade, a condition that is assumed to continue. The lack of shade increases the risk for solar heating which can have a host of potential effects on juvenile fish, including but not limited to thermo-regulation and respiration (reduced levels of dissolved oxygen). Fish would continue to be affected by roads that are not maintained, roads that have inadequate drainage, or roads that are unsurfaced which continue to deliver sediment to streams.”**<sup>25</sup> We see no reason to think the same damning assessment of private land clear cut logging would not apply to the watersheds of the Six Twigs Analysis Area.

Indeed, looking at the Sixes Watershed Assessment, prepared for the Sixes River Watershed Council one reads the following:

**“Table 4 Sixes River Watershed Council Issues**

**Land Use Practice Issue**

**Forestry**

*I Timber harvest by various industrial timber companies*

*1) Increased sediment inputs: A Loss of pool habitat from increase in sediment B Suffocation of spawning eggs from fine sediments C Loss of topsoil from surface runoff*

*II Weed Management - spraying of herbicides & pesticides*

*1) Degraded water quality - for fish and people*

*comments: extensive clearcuts are generally perceived as harmful to the watershed, affecting both water quality and fish habitat*

**Road Network**

*I Road and culvert failures*

*1) Increased sediment inputs*

*comments: "Our river and tributaries have been trashed; the roads are washing into the river."*<sup>26</sup>

<sup>25</sup> Days Creek-South Umpqua EA, pg. 119

<sup>26</sup> Sixes River Watershed Assessment, Pg. 6

When we study the map for Crystal Clear, we see similar contextual ownership/management issues. This is especially true for Unit 5. UW also notes the following from the Sixes Watershed Assessment:

“Water Availability Summary

- *The net water available at the 50% exceedance level, from May to October, is less than or equal to zero for the entire Sixes River basin.*

Streamflow Restoration Priority Areas

- *According to the ODFW/OWRD Streamflow Restoration Priority Areas there are two priority Water Availability Basins in the Sixes River. They include Crystal Creek...”<sup>27</sup>*

**(Roads**

Having visited this area and looking at it again, via Google Earth, it is no exaggeration to say that it is currently a spider web of forest roads. We concur with the comment from the Six Rivers Watershed Assessment, quoted above: *“Our river and tributaries have been trashed; the roads are washing into the river.”* For BLM to propose yet more roads, in its Six Twigs proposals, only adds ecological insult to environmental injury; not the least of these environmental harms being hydrological. UW protests the imposition of yet more forest roads, however construed, on this watershed.)

Considering the full import of the above excerpts from the Sixes Watershed Assessment, and the statement from the Roseburg District, Umpqua Watersheds feels no compunction in expressing the following observation concerning the Coos Bay BLM and its reaction to the suite of environmentally harmful effects imposed on these shared watersheds by these same OFPA “regulated” clear cut activities: We take BLM's silence for its assent. UW protests that apparent assent.

**3)** The Oregon Department of Fish and Wildlife (ODFW) agrees many freshwater environmental impacts on Oregon coast coho and other anadromous fish and aquatic species are human related, including “rearing and spawning habitat loss.” Even the Oregon Department of Forestry has found its logging practices violate water quality standards.<sup>28</sup> This last, referring, in part, to the infamous “Rip Stream Study,” which indicated that extraction conducted under the current rules of the Oregon Forest Practices Act (OFPA) resulted in regular and long standing chronic violations of the Clean Water Act.

**4)** The Sixes River and many of its tributaries, including some named as being within the analysis area that includes this proposal, are cited by the Oregon DEQ as being 303 (d) listed, under the Clean Water Act. We quote: *“The following streams within the analysis area are listed on the Oregon Department of Environmental Quality 303(d) list for high water temperatures: Crystal Creek, Dwyer Creek, Edson Creek, Sixes River, Willow Creek, Floras Creek, West Fork Floras Creek, and South Fork Floras Creek.”*<sup>29</sup> From his participation in the Coquille Basin TDML citizen advisory committee in 2014, '15, UW's Conservation Chair is fully aware that temperature and all of these parameters and limitations are often precipitated by, and are always directly, and adversely, influenced by, low summer flows.

**5)** In this EA, there was extended discussion and analysis by the BLM of the potential for

<sup>27</sup>Sixes River Watershed Assessment, Pg. 82

<sup>28</sup> See e.g., Groom, J.D., L. Dent, and L.J. Madsen. *Stream temperature change detection for state and private forests in the Oregon Coast Range*, Water Resources Research, 47.1 (2011), <http://www.science.oregonstate.edu/~madsen/files/GroomDentMadsen2011.pdf>.

<sup>29</sup> Updated Six Twigs EA, Pg. 50

sedimentation of streams, and for such post-harvest hydrological effects as peak flow. We noted limited mention of low summer flows and the suite of deleterious impacts it most certainly delivers to streams and rivers, and to the aquatic and terrestrial life forms dependent upon their high-functioning, including we human beings. As with so much of the Coast Range that encompasses portions of the Coos Bay District of the BLM, in UW's estimation (based on citation "Perry-Jones" in part 6 of this section) the Sixes River drainage, likely also suffers from chronic low summer flows.

It is an historical, if lamentable, fact that a great deal of the primary forest, which once grew upon and protected the hydrological and other natural functions of this region, has been converted to plantation, or other stand initiation condition, on public and private forest lands in the decades preceding adoption of the Northwest Forest Plan Amendment. This has resulted in an apparent loss, in this area, of societal, agency and industry memory regarding what healthy summer stream flows actually look like. Given all of the immense sylvacultural changes on these watersheds and the resultant hydrological impacts they entail, is it any wonder that several native salmonids, including Oregon Coastal Coho, continue to be listed as threatened or at risk?

The BLM's NEPA, O & C Act, Clean Water Act, ESA and general public trust obligations require a serious consideration of this on-going condition by the agency before adding to this lamentable condition by timber sales, which include the creation of yet more large openings. Or by BLM's continued silence in the face of the suite of harmful hydrological and other environmental impacts imposed upon the shared watersheds of this portion of the Coast Range by more large clear cuts on adjoining and proximate private timberlands; clear cuts conducted under aegis of the environmentally retrograde Oregon Forest Practices Act. It is apparent to us that these watersheds stand in dire need of remediation, and not of further extraction.

**6)** UW refers now to recently published paired stream research<sup>30</sup> obtained by Umpqua Watersheds. This, the Perry and Jones (2016) Special Issue Paper, reflects fifty or more years of hard data recorded on the H.J. Andrews Experimental Forest of the Willamette N.F.; and on the South Umpqua Experimental Forest, of the Umpqua N.F.

Perry-Jones uses its acquired data to show, definitively, that on watersheds where primary forest has been converted to plantation at a rate of 50% or greater, summer low streamflow remains at only 50% of dry season streamflow in the respective, untreated, reference streams; this impacted streamflow persisting from about fifteen years following initial conversion to the present<sup>31</sup>, a period of some fifty or more years. (Peak winter flows likewise remain outside the baseline norms, which were observed on those same respective reference streams.) To quote from Perry-Jones: *"This study showed that, relative to mature and old-growth forest dominated by Douglas-fir and western hemlock or mixed conifers, forest plantations of native Douglas-fir produced summer streamflow deficits within 15 years of plantation establishment, and these deficits have persisted and intensified in 50-year-old forest stands. Forest stands in the study basins, which are on public forest land, are representative of managed (including thinned) forest stands on private land in the region, in terms of basal area over time (Figure 3), age (10 to 50 years), clearcut size (20 ha), and average rotation age (50 years) (Lutz & Halpern, 2006; Briggs, 2007). There are no significant trends in annual or summer precipitation*

<sup>30</sup> Perry, T.D., and Jones, J.A. (2016), Summer streamflow deficits from regenerating Douglas-fir forests in Pacific Northwest, USA, *Ecohydrology*, doi: 10.1002/eco.1790

<sup>31</sup> *ibid.* Pp. 7, 8 "By 20 to 25 years after clearcutting, summer streamflow was lower in all plantation forests compared to reference basins."

*(Abatzoglou, Rupp, & Mote, 2014) or streamflow at reference basins over the study period. This finding has profound implications for understanding of the effects of land cover change, climate change, and forest management on water yield and timing in forest landscapes.*<sup>32</sup> (emphasis, UW)

And: “Long-term paired-basin studies extending over six decades revealed that the conversion of mature and old-growth conifer forests to plantations of native Douglas-fir produced persistent summer streamflow deficits of 50% relative to reference basins, in plantations aged 25 to 45 years. This result challenges the widespread assumption of rapid “hydrologic recovery” following forest disturbance. Widespread transformation of mature and old-growth forests may contribute to summer water yield declines over large basins and regions around the world, reducing stream habitats and sharpening conflict over uses of water.”<sup>33</sup> (emphasis UW)

7) Furthermore, logic strongly suggests that the dire hydrological inferences UW believes it has justifiably made for this portion of the West Slope of the Cascade Range, and which are based on its careful reading of the Perry-Jones paper, must be amplified here, in the Updated Six Twigs Harvest Plan EA analysis area, where so much of the primary forest has been converted to plantation, during the decades cited above, under a misguided version of the over-applied and often over-optimistic sustained yield model of forest management. This must be especially so, where so very much of the landscape, which is the physical context of the Crystal Creek Timber Sale, has been and continues to be treated to the full suite of environmental insults, hydrological and otherwise, currently so evident on privately owned industrial lands, within the checkerboard. Hydrologically speaking, chief among these are the continued, relatively short rotation liquidation of large plantation stands and their replacement with still more monoculture replanting. Thus, hydrologic recovery of low summer flows is, by logic, chronically prevented.

Arguably, mitigating factors, vis a vis negative stream flow impacts, are present on the South Umpqua Experimental Forest at the Coyote Creek Paired Stream Study site today, which are not currently present in the Updated Six Twigs Harvest Plan EA analysis area. That is, it has been a considerable time since the Forest Service, or the Tiller Ranger District in particular has regenerated any of its holdings (nor does it currently propose to do so, at or near this or any location which UW is aware of). The Forest Service has not employed Variable Retention Harvest (VRH) on its holdings here, or elsewhere on the Umpqua National Forest. Likewise, the ubiquitous, large and arguably damaging private land clear cuts, so evident this analysis area are largely not to be found proximate to the South Umpqua Experimental Forest. Given this contextual consideration, UW believes it is most doubtful that harmful impacts to streamflow, quantity and quality, can be anything but comparable or worse within the Updated Six Twigs Harvest Plan EA analysis area, in general and the Crystal Clear Timber Sale area, in particular.

8) UW strongly asserts that this latest scientifically rigorous study, Perry-Jones (2016), raises serious questions about the validity of BLM's repeated use of Equivalent Clear Cut Area (ECA) etc., to justify the post-harvest hydrologic integrity of such actions as are proposed in the Updated Six Twigs Harvest Plan EA analysis area and other extractive activities; management actions, which must be inappropriate on such obviously degraded watersheds, where adequate summer low streamflows must, by simple application of logic, be already severely compromised? Here, in the year 2017, even a cursory reading of the 1937 O & C Act, with its mandates concerning watershed protection and

<sup>32</sup> *ibid.*, Pg. 8, Discussion

<sup>33</sup> *ibid.*, Pg. 11, Conclusions



streamflow regulation, would appear to indicate, to any reasonable citizen participant of average intelligence, in the NEPA and other regulatory processes, that major chronic violations of those conservation mandates included in the O & C Act already exist before even a single acre is subjected to regeneration extraction by the BLM.

9) Needless to say, this chronic hydrological impairment is accompanied, in the checkerboard of alternating ownerships, by severe impacts to connectivity, biodiversity, maintenance and restoration of listed species, carbon sequestration/mitigation, etc. not only by the past conversion of primary forest to plantation on a grand scale on public and private forestlands in the Updated Six Twigs Harvest Plan EA analysis area, but continuously by the on-going clear cut harvest activities so ubiquitous on adjoining and proximate private industrial timberlands to this very day.

Certainly, in most respects, clear cuts conducted under aegis of the Oregon Forest Practices Act (OFPA) impose significant negative impacts<sup>34</sup> on neighboring public lands, such as those included in this proposal. This cumulative suite of harmful impacts is incontrovertibly demonstrated on these surrounding, privately owned industrial lands by the paucity of conservation measures and the remarkable absence of true restoration provisions included in harvests conducted thereon; impacts which are not mitigated but only exaggerated by the unnatural and repeated imposition of monoculture fiber farm plantations on these watersheds. Clearly, these private land clear cut activities run counter to the recovery strategies outlined in the landmark Northwest Forest Plan.

Again borrowing from UW's comments to the Roseburg District of its Days Creek-South Umpqua Harvest Plan EA, the following disclaimer: *“Based on past and present practices, it is expected that timber harvest would continue at current rates on private lands. As a result, older harvested areas would reach a point of hydrologic recovery as newer areas are harvested which maintains a constant level of watershed disturbance into the future. No measurable change in hydrologic response would be expected from the proposed action compared to current conditions.”*<sup>35</sup> (emphasis, UW's) Thus, the Roseburg BLM appears to acknowledge this baseline hydrologic condition, but offers no mitigating measures to offset it. We see no good reason to doubt the applicability of the above disclaimer to the private industrial lands adjacent to the various units that comprise the Crystal Clear Timber Sale. How, precisely, does this kind of inaction help to protect watersheds or regulate streamflow? After all, the O & C Act talks not about “BLM Watersheds,” or, conversely, privately owned watersheds, but simply tasks BLM with protecting watersheds and regulating stream flows, period.

And again from those same comments to the Roseburg District: *“Timber harvest on non-Federal land would continue to occur in the analysis area, although BLM is not aware of any specific timber harvest location or schedule, it is assumed that timber harvest would remain consistent with current non-federal harvesting trends.”*<sup>36</sup> (emphasis, UW's) As stated immediately above this, UW observes the BLM acknowledging this contextual landscape condition. Again, however, very like the Roseburg District, the Coos Bay District offers no constructive or corrective comment on adjacent or proximate OFPA “regulated” extraction, nor does it offer the requisite restorative actions on public lands but rather, proposes the creation of still more large canopy openings and further stand initiation, however construed.

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<sup>34</sup> See UW Protest Crystal Clear Timber Sale, Pg. 3,4

<sup>35</sup> Days Creek-South Umpqua Harvest Plan EA, Pg. 14

<sup>36</sup> *ibid.* pg. 113

10) The Water Quality portion of the Updated Six Twigs EA discusses flow, temperature, turbidity etc. Low flow is analyzed thus: “**Annual Yield, Low Flow, and Forest Harvest** Timber harvest can increase annual water yield and the magnitude of low flows by reducing evapotranspiration and interception (Harr et al. 1982). In an overview of several studies, Satterlund and Adams (1992, p 253) found that the effect on streamflow is generally proportional to the amount of vegetation removed. From looking at several paired watershed studies, Stednick (1996) found that about 25 percent of a watershed in the Pacific Coast region needed to be harvested to detect an increase in annual yield. A review of studies by Moore and Wondzell (2005) found that periods of extreme low flow decreased for at least the first few years after harvest in rain-dominated areas. An increase in water yield, especially during summer and early fall low flow periods, is perceived as a net benefit in most cases (WDNR 1997, p. C-44). In some cases, vegetation removal has been used as a tool to increase available water.”<sup>37</sup>

Other than a reference from research on the Umatilla N.F. (*One ECA model on the Umatilla National Forest (Ager and Clifton 2005) uses a post-harvest recovery rate (increase in evapotranspiration) of 4.3 percent per year for moist forests with full recovery at 23 years. These recovery values and harvest history were used to calculate ECA.*), which we noted on page 16 of this protest, there appears to be no further significant discussion or analysis concerning summer low streamflow. Clearly, low summer flows often equate to high temperatures, increased algae growth, decreased dissolved oxygen levels, increased bacterial presence and subsequent impaired survival chances for fish and other aquatic species. Indeed, Crystal Creek, as mentioned above, is listed by the Oregon DEQ as being 303 (d) impaired under the Clean Water Act for temperature.<sup>38</sup>

At the same time, Perry-Jones strongly suggests that these watersheds are likely impacted, to a significant extent, by such harmful low flows, low flows not accounted for in the Updated Six Twigs EA. Having been an active participant Oregon DEQ's TDML citizen advisory panel for the Coquille River, in 2014/15, UW's Conservation Chair is all too well aware that low flows exacerbate already deficient dissolved oxygen levels, bacterial presence, excessive elevated temperature and other parameters essential to the persistence of aquatic species, as well as for the health of terrestrial species, including human beings. UW strongly suggests that a credible discussion and subsequent analysis of the detrimental impacts of private land clear cuts, short or long term, on low summer streamflows etc. be undertaken before any decision documents are issued for this proposal. Clearly, if the extensive U.S.F.S. data referenced in the Perry-Jones Special Paper has any validity at all, low summer flows do not recover, as we have been so often told by agency and industry, after twenty-three or twenty-five years. Rather, as Perry-Jones so definitively shows, they persist.

“Riparian areas of younger stands on private lands generally lack shade, a condition that is assumed to continue. The lack of shade increases the risk for solar heating which can have a host of potential effects on juvenile fish, including but not limited to thermo-regulation and respiration (reduced levels of dissolved oxygen). Fish would continue to be affected by roads that are not maintained, roads that have inadequate drainage, or roads that are unsurfaced which continue to deliver sediment to streams.”<sup>39</sup> Considering this generally applicable denigrating description of harmful riparian, and by extension, damaging hydrological impacts to water quality/quantity attributable to the clear cut extractive practices conducted on private industrial timberlands under aegis of the OFPA, UW takes

<sup>37</sup> Updated Six Twigs Ea, Pg. 56

<sup>38</sup> Updated Six Twigs EA, Pg. 50

<sup>39</sup> Days Creek-South Umpqua Harvest Plan EA, Pg. 119

exception to the lack of consideration and analysis by the BLM of how these harms impact the public lands it manages in trust for all of the people of the United States of America.

Finally, again citing Perry-Jones, UW strongly suspects that low summer flow and the suite of detrimental conditions precipitated and exacerbated by such low flows are chronic in this portion of the Six Twigs Analysis Area. At this point, it is no stretch of the available data to believe that this unfortunate environmental state is unlikely to have been mitigated by on-going insults to hydrologic function via extractive activities on so many of the private timberlands in the project area, as elsewhere in the wider Sixes River Watersheds. In the interest of public and wildlife health, no more large openings should be sited in these badly impaired watersheds at this time. Past and current extractive activities thereon have rendered these watersheds out of compliance, not only with the 1937 O & C Act, but with the Clean Water Act, as well! UW protests their renewed creation by the BLM.

Exceptionally low rainfall, high temperatures and low humidity during the summer months of 2014, and even more so during the same period in 2015 resulted in exceptional low flows throughout southwest Oregon, as in so many of the rivers in our region. While the drought-like conditions experienced in these two years has been attributed, in some measure, to the cyclical weather pattern known as el Nino, a preponderance of credible scientific opinion predicts the strong possibility of longer, deeper and more frequent seasonal droughts in Oregon. Logic suggests that the low summer flows definitively reported by Perry-Jones can only be exaggerated under these predicted climate change effects. *“Species that spend all or part of their time in rivers, including salmon, steelhead and trout, will suffer from decreased summer flows and increased flooding and winter flows.”*<sup>40</sup>

These contextual conditions are, or they ought to be, limiting influences on such BLM management proposals as the Crystal Clear Timber Sale, which would impose still more large openings on watersheds already, and quite obviously, environmentally and aesthetically overburdened with them. UW therefore asserts that the use of ECA or any other metric, which attempts to minimize or obfuscate these clear and present threats to watershed health and the protection of streamflow, must, perforce, only serve to validate chronic, cumulative and increasing violations of the 1937 O & C Act's mandates regarding these critical ecological parameters, as well as the mandates of the Clean Water Act etc.

To reiterate, timber harvests originating on BLM managed public forests lands are, and have been, subject to payment of the Oregon Forest Products Harvest Tax (OFPHT), since economic principles teach that bid price is the sum of all taxes. (In 2016, in response to an inquiry made by Umpqua Watersheds to the Oregon Department of Revenue (ODR), that state agency reported to UW that, for the years 2006 to 2015, extraction sourced from Federal forestlands remitted **\$2,486,183.83** to ODR. Clearly, the State of Oregon concurs with UW's finding that logs from Federal lands are taxed by Oregon.)

**Thus, it directly follows that the BLM enjoys the right and bears the responsibility to, at long last, protest to the Oregon Department of Forestry, the Oregon Board of Forestry and the State Land Board, etc. the continued imposition of these and all of the negative and very cumulative impacts<sup>41</sup> that retrograde management activities undertaken on OFPA regulated private lands impose upon the public forestlands the BLM manages, in trust, for all of the people of the United**

<sup>40</sup> United States Environmental Protection Agency, Climate Impacts In the Northwest, Impacts on Ecosystems and Agriculture <https://www.epa.gov/climate-impacts/climate-impacts-northwest>

<sup>41</sup> See UW Protest, Crystal Clear Timber Sale, Pg. 3

**States of America, within the Six Twigs Area, as well as on the remaining portions of the infamous and unfortunate checkerboard of alternating ownerships in Western Oregon. Umpqua Watersheds herein protests the BLM's continued and inexcusable silence in the face of this chronic and most damaging environmental assault on our public forest lands.**

## **CONCLUSION**

From 1963 through 1993, and before, the Coos Bay District of the BLM participated, along with private industrial timberland owners, in the widespread liquidation of much of the primary old growth and mature forest on that district<sup>42</sup>, including on the watersheds within and surrounding the area of the Crystal Clear Timber Sale. Overemphasizing a distorted version of the vaunted “Sustained Yield” (mis)management paradigm, at the obvious expense of its codified responsibilities relative to watershed protection, streamflow regulation and recreation, the BLM thereby fully and willingly participated in the environmental degradation of this same landscape. The existential impact, resultant from that “great falling,” upon habitat and much of the flora and fauna dependent on that habitat is, sadly, all too evident to this very day.

In more than one ecological respect, the situation continues to deteriorate. Water quality in the Sixes River and several of its tributaries, including Crystal Creek, remains impaired. Anadromous fish runs have not recovered. Threats to the continued survival of the NSO and MAMU persist and worsen. Cumulative reductions in the carbon-fixing capacity of public and private lands is compounded by the proposed renewed use of regeneration extraction by the BLM, and via the on-going, greatly damaging, short rotation clear cut model on the private industrial lands of the Updated Six Twigs watersheds. Damaging impacts from carbon release and diminution of carbon sequestration, at the scale of Crystal Clear, may not be of sufficient relative intensity to excite regulatory umbrage. However, project after project on public and private lands, taken together, cannot help but create an accumulation of harmful impacts; a cumulative impact BLM is tasked to consider and, hopefully, to avoid.<sup>43</sup> Thus the increasingly existential threats posed by resultant anthropocentric climate change go largely unaddressed, as they relate to forest management as a whole.

What chance then is there for meaningful ecological recovery, on the watersheds included in the Updated Six Twigs Analysis Area in general, and the Crystal Clear Timber Sale in particular, from the management practices of those several decades (1963-1993 and before) referred to in this protest, when financial and political convenience take such obvious precedence over environmental necessity? In light of BLM's regeneration proposals, environmentally regressive in themselves, and considering the impacts, uncontested by BLM, on these same watersheds by the retrograde clear cut practices on adjoining and proximate private industrial timberlands, Umpqua Watersheds is forced to conclude that there is small chance of such recovery. Regrettably, UW is compelled to view BLM's silence in the face of this on-going contextual environmental assault on the ecological integrity of the public lands it manages, in trust, for all of the people of the United States, as acquiescence in that same environmental assault. For this reason, and for the reasons discussed above, in this document, UW is forced, most reluctantly, to file this protest of the Crystal Clear Timber Sale.

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<sup>42</sup> See UW Protest Crystal Clear Timber Sale, Historical Context, Pg. 4, 5

<sup>43</sup> *Environmental Assessment Item 7: Whether the action is related to other actions with individually insignificant impacts but cumulatively significant impacts.* - 40 CFR 1508.27(b) (7).

Sincerely,

Joseph Patrick Quinn  
Volunteer Conservation Chair,  
Umpqua Watersheds, Inc.