

GUIDE ENVIRONMENTAL

News – February, 2016

Dear colleagues,

I hope you find this newsletter informative and interesting. Contents include:

- *Highlights of some Guide Environmental projects.*
- *Musings on the benefits and limitations of “jurisdictional” and “landscape” approaches to deforestation, resource management, and responsible procurement.*
- *The significance of forest degradation, including relative to deforestation, from the tropics to temperate forests.*
- *The new “Sagebrush Rebellion” in the US, and why the attempted privatization of the Malheur National Wildlife Refuge is no laughing matter.*

Best regards,

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Guide Environmental Project Spotlight

One of the first projects I undertook as Guide Environmental is back in the news. Last October, an international coalition of leading environmental and civil rights NGOs wrote to Asia Pulp & Paper (APP), to urge the company to make greater progress towards its forest conservation commitments.¹ The NGOs’ letter addressed several current concerns – and flagged the importance of meeting the independent performance milestones they proposed in 2013.² Having worked with some of the NGOs to help them formulate their objectives, analyze the APP commitments, and identify metrics to address APP’s commitments and outstanding issues, leading to an early version of the milestones document, it is my pleasure to see that effort continue to provide value.

Benefits and Limitations of the “Jurisdictional” Approach to Deforestation, Resource Management, and Responsible Sourcing

Among the responses I received to my last newsletter was a suggestion to look at “jurisdictional” and “landscape” approaches to resource conservation and sustainable procurement, including as potential steps beyond product-by-product certification. This is a topic that should be of interest to corporate procurement officials and market-oriented conservationists alike. My observations are from an initial scan of some of the literature, news, and colleagues (whom I thank for their input). While I focused more on jurisdictional approaches, landscape approaches have some commonalities.

What is the “jurisdictional” approach?

The term can be associated with various conservation and responsible procurement strategies and projects, but core concepts include leveraging zero-deforestation, production or sustainability criteria, or other goals across an entire governmental jurisdiction (e.g., a state, province, or district), rather than by individual forest, farm, or other land management units. The appeal for participating governments and land managers can include opportunities to qualify for international financing, and greater support and reduced pressure from purchasing companies and NGOs.

The adoption of stronger regulations by participating governments may be what most distinguishes the approach, though it’s not clear that all jurisdictional projects involve this feature. Depending on where one draws the line, examples of actual or proposed initiatives can be found in the context of REDD and verifiable greenhouse gas reduction projects,³ palm oil in Indonesia,⁴ agriculture in Africa,⁵ and deforestation in the Amazon (e.g., Acre State’s program).⁶

“Landscape” approaches also meet some jurisdictional descriptions, e.g., *“Jurisdictional approaches have the benefit of bringing all key stakeholders together—including producers, commodity buyers, governments, and standards bodies—to define solutions, which could include definition of [integrated landscape management]. There may be advantages in creating economies of scale, better linking producers to incentives and markets, and better coordinating management interventions.”*⁷ However, landscape approaches are often distinguished by being framed around specific communities, ecosystems, or other geographic units rather than political units, and by not producing or relying upon governmental regulations (though they may result in large-scale land use plans). They may also be more likely to involve collaborative, multi-stakeholder participation.

While it may be early to evaluate outcomes, benefits attributed to jurisdictional approaches include:

- The promise of scaling-up conservation and social equity outcomes to larger geographic areas. In turn, participating governments and resource managers may benefit from the potential for increased support from NGOs and purchasing companies, as well as opportunities to tap into ecosystem service payments markets and international finance mechanisms such as REDD+.⁸
- Opportunities to more comprehensively address the multiple commodities and land uses (e.g., agriculture, forestry, rural development) that can be associated with a particular objective or problem (e.g., deforestation). Similarly, proponents point to how the approach can reduce the risk of environmental and social impact “leakage” that may be associated with smaller-scale projects (e.g., when protections against deforestation in one locale simply shift demand to another locale).

- Opportunities to use the jurisdiction’s regulatory powers, with the promise of securing more widespread compliance than landowner-by-landowner certification might achieve in the same time period – and with the side benefit of providing a more level playing field for progressive producers.
- The promise of economies of scale for commodity processors and direct purchaser companies, including as they can relax their expectations for supply chain verification at the individual supplier level, and instead focus on confirming that an entire jurisdiction is meeting their procurement expectations – at least with regard to deforestation or the other specific topics covered by the jurisdiction’s commitments.
- The promise of reducing entry costs for smallholders and leveraging funds for education and assistance programs.

With these selling points, it’s no surprise the concept is gaining traction among conservation and corporate sustainability professionals. Of course, just how new and different the approach is will depend on circumstances, and some potential benefits can also be associated with strategies like resource management certification.⁹

Meanwhile, potential limitations and questions for the approach include:

- Along with some governments’ reluctance to restrict deforestation, change land allocations, or adopt other environmental and social goals, there is the risk of changing priorities with the next election or regime change. How much change can be leveraged via increased support from purchaser companies and international finance mechanisms? Some projects’ “net zero deforestation” goals suggests their pragmatism, along with other questions.¹⁰
- Tropical governments often have poor track records on corruption, enforcement of environmental and social laws, and protection of indigenous and local communities.¹¹ Can jurisdictional initiatives counter lax regulatory enforcement, corruption in the issuance of forest and logging tenures, and other drivers of deforestation in which the government partners themselves play a central role?
- Is there risk of single-issue approaches replacing multi-attribute approaches, including comprehensive regulation and/or certification of forestry, agriculture, and other resource management? Curbing deforestation, for example, is immensely important, including from biodiversity, climate, and some social equity perspectives. However, there are a myriad of serious environmental and social concerns often associated with forests beyond deforestation *per se*. Even more broadly defined jurisdictional initiatives will likely lack the capacity to define robust, comprehensive resource management and sustainability standards for forests, farms, and other resources, compared with independent certification systems like the FSC and SAN.
- Will procurement officials be tempted to rely on the jurisdictional concept beyond its proper scope? Companies with multi-layer supply chains will probably still need chain of custody controls. Meanwhile, jurisdictional-scale risk assessments can gloss-over serious concerns.¹²

The bottom line:

There appears to be considerable opportunity and potential value with jurisdictional approaches to resource management and responsible procurement that argue for their careful use – including opportunities to leverage stronger and broader governmental action on deforestation and other priority topics, or even uptake of comprehensive resource certification standards.

Yet like any other single strategy, the approach also has limitations. As some watchdogs point out, initiatives in some key locales will have to tackle entrenched problems with the very governments they partner with. While these initiatives may provide valuable leverage, they also risk being ineffective (or worse) if not designed to address corruption and government-related deforestation drivers.

More traditional approaches to certification and responsible procurement are still needed where jurisdictional projects have not been established or do not address environmental and social concerns beyond goals like zero-deforestation. And certification systems are, by definition, necessary for jurisdictional projects that rely on their standards (as we are starting to see with RSPO).

Meanwhile, “landscape” approaches presumably offer a comparable mix of opportunities and limitations, along with their own unique challenges.¹³

Forest Degradation – Deforestation’s Big Brother

Deforestation gets the press (for good reason), but degradation of forests and other ecosystems can be every bit as problematic, and is far more widespread by some accounts. The following discussion begins to explore why degradation matters, and the extent of the problem. I also begin to describe real world examples in North America – a topic I’ll explore further in future newsletters.

There are many ways to define degradation and deforestation, which exist on a spectrum. However, the basic concepts are easy. Deforestation is often thought of as the outright loss of forests (e.g., below minimum canopy cover levels), as they are converted to other land uses or otherwise wiped-out.

Meanwhile, degradation is the reduction of key forest qualities and attributes, without extensive long-term loss of tree cover.¹⁴ In other words, various other damage to forest ecosystems and the benefits they provide, including: diminished forest structure, habitats, and biodiversity; lost productivity for wood and non-timber products; accumulation of toxins, impacts to soils and water quality; reduced carbon storage; and/or increased fragmentation, presence of non-native species, and other problems.¹⁵ (Violations of indigenous rights and other important social concerns that are less about forest ecology *per se* can also be associated with both deforestation and degradation.)

The climate change implications of forest degradation alone are reason for concern, with some estimates finding that degradation-related carbon emissions can eclipse those of deforestation: While *“tropical deforestation remains a major driver of global warming, emitting 0.8-0.9 Gigatonnes of Carbon (GtC) annually, equating to 8% of global carbon emissions... tropical forest degradation accounts for a further 0.6–1.5 GtC per annum...”*¹⁶ Degradation-related emissions likely also surpass those of deforestation in boreal and temperate forests, given the much greater threat of degradation there.

The scope of degradation:

One recent report used WRI data to find that globally, 27% of the world's forests are already degraded, with an additional 52% being fragmented (see table below). Another study estimates that "...70% of remaining forest [globally] is within 1 km of the forest's edge... well within the range where human activities, altered microclimate, and non-forest species may influence and degrade forest ecosystems."¹⁷ Additional forest areas are probably at risk from degradation beyond edge effects per se, e.g., from commercial forest management and other activities that tend to push deeper into forest areas.

Forest Region	Fragmented	Degraded
Boreal	54%	15%
Temperate	63%	31%
Sub-Tropical	58%	40%
Tropical	46%	30%
Desert/Polar	78%	2%
Total	52%	27%

Source: ISU (2015).¹⁸

Other studies provide more detail on the tropics. Analysts using the FAO's 2015 global Forest Resources Assessment's data on partial canopy cover losses between 2000 and 2012 found that, in the tropics, degradation affected 6.5 times more forest than deforestation, with degradation being up to 15 times more extensive than deforestation in South and Southeast Asia.¹⁹

Forest degradation in the United States:

A quick look at biodiversity begins to tell the tale of degradation in the US. To varying degrees, commercially managed forests in the US have lost significant natural forest structure, range of age classes and wildlife habitats, and diversity of animal and plant species, with some forests even being managed as mono-crop plantations of trees and little else. There are over 1,800 plant and animal species recognized as threatened or endangered in the US.²⁰

Several studies indicate that 60% or more of "at-risk" plant and animal species in the contiguous US are associated to some extent with private forests, where the vast majority of timber harvest occurs.²¹ It's problematic to think of these commercial forests as ecological write-off zones – hence the need for stronger regulation and certification systems that require significantly improved management. Along with some other non-federal forests, private forests comprise the majority of the forest landscape in some regions of the US. Even where federal public forests are more prevalent, private and other non-federal forests still often comprise a large part of important ecological zones, e.g., lower elevations, coastal areas, the ranges of many threatened and endangered species, and the ranges of some forest types, like oak woodlands along the West Coast. Areas of critical biodiversity concentration are also not well represented within protected areas, which are predominately within federal public lands.²²

Business-as-usual management of some private and public forests in the US also continues to harm threatened and endangered species, and old growth forests and other rare ecosystems, and is even less likely to be restoring past damage. Rather, the increasingly short logging rotations used by some companies tend to further restrict habitat values while intensifying watershed impacts and chemical applications. Commercial use of some GMO tree species is also on the horizon, and subject to few regulatory controls.

Public Lands and the Attempted Theft of the Malheur – No Laughing Matter

It's easy to mock Ammon Bundy and his gang of thugs for attempting to turn the Malheur National Wildlife Refuge into private ranchlands at gunpoint and bulldozer blade, while citing mis-readings of the US Constitution and generally coming across as crackpots. But as Quixotic as their effort was, it is part of a broader pattern, including an attempt to resuscitate the "Sagebrush Rebellion" of the James Watt era and transfer National Forests and other public lands to State and local control, and thence to logging, mining, developers, and other private interests.

I sympathize with the difficulty of making a living on family farms and ranches, having grown-up on cattle and sheep ranches in the West. But the Malheur and our other federal public lands belong to all US citizens, and provide important public trust values sorely lacking elsewhere, including wilderness, habitat for rare and imperiled species, and fishing, hunting, and other recreational opportunities. The Malheur is a crucial link in the Pacific Flyway, and an ancestral home of the local Paiute Indians. Meanwhile, the ranching families I knew probably would not have expected to be given land for free, had time for grandstanding, repeatedly threatened public land managers and their families with violence, or aligned themselves with domestic terrorist movements.

Public lands, wildlife, water, and other public trust resources across the country are at risk from campaigns that have not seen many headlines. Examples include state and Congressional legislation and lawsuits to privatize most federal public lands (including American Lands Council and American Legislative Exchange Council sponsored bills), the US Fish & Wildlife Service deferring management of endangered species to States opposing their protection, Congress giving National Forest lands with Indian cultural sites to mining companies for pennies on the dollar, and Oregon selling relatively ecologically intact State Forests to timber companies.

So yes, the Bundy crew deserves derision – and jail time – but they are also symptoms of a deeper problem. Hopefully, a stronger response to this new Sagebrush Rebellion will be one good thing to come out of the attempted theft of the Malheur.

¹ <http://environmentalpaper.org/following-forum-in-jakarta-ngos-send-letter-to-asia-pulp-paper-urging-reform/>.

² <http://environmentalpaper.org/milestones/>.

³ <http://www.v-c-s.org/JNR>.

⁴ <http://www.sustainabletropics.org/news/2015/11/18/indonesias-seruyan-district-leading-global-initiative-on-jurisdictional-certification-approach>, and <http://www.rspo.org/news-and-events/news/central-kalimantan-announces-jurisdictional-certification-for-sustainable-palm-oil>.

⁵ Kissinger, G., et al. (2015). Private sector investment in landscape approaches: the role of production standards and certification. In Minang, P. A., et al, eds. *Climate-Smart Landscapes: Multifunctionality in Practice*. World Agroforestry Centre (ICRAF).

⁶ <http://www.gcftaskforce-database.org/StateOverview/Acre>.

⁷ Kissinger, et. al. (2015).

⁸ Edwards, R., et al. (2014). Jurisdictional REDD+ Bonds: Leveraging Private Finance for Forest Protection, Development, and Sustainable Agriculture Supply Chains. *Forest Trends*.

⁹ For example: Group certification approaches are also reducing entry costs and challenges for smallholders; certification systems like the FSC and SAN also address issues flagged as hallmarks of jurisdictional approaches,

e.g., concern with deforestation, land use conversion, and the rights of indigenous peoples, communities, and workers; the FSC is also developing an ecosystem services payments mechanism; and remote sensing and other emerging tools for monitoring forest cover can be used to monitor deforestation in the context of both certification and jurisdictional projects.

¹⁰ For example, are reforested sites sufficient replacements for deforested native forest sites and their biodiversity and carbon storage values?

¹¹ Watchdogs cite Indonesia and Central Kalimantan as prime examples.

¹² The United States, for example, is often perceived as a lower risk region for issues like deforestation and illegality; however, forest degradation remains a major problem, and serious legal violations do sometimes occur in the forestry sector, as do smaller scale occurrences of deforestation/conversion.

¹³ Questions raised by some observers include: whether landscape initiatives will produce real change in land allocations, deforestation, and degradation, or simply repeat existing patterns; whether they will curb problems with corporate land grabs or become a mechanism for them; whether sufficient incentives exist for land managers to restrict their operations where called for by new land use plans; whether the interests of small-holders, traditional, or indigenous communities will be recognized and protected; and whether deforestation drivers like income disparities will be addressed.

¹⁴ Short-term cover loss in managed forests isn't usually thought of as deforestation when regeneration follows.

¹⁵ See, for example: Thompson, I. et al. (2013). An operational framework for defining and monitoring forest degradation. *Ecology and Society* 18(2): 20. Other definitions and metrics are discussed in: FAO. (2011). *Assessing Forest Degradation: Towards the Development of Globally Applicable Guidelines*. Forest Resources Working Paper 177. Food & Agriculture Organization, United Nations.

¹⁶ ISU. (2015). *Tropical Forests: A Review*. International Sustainability Unit, The Prince's Charities, Clarence House, London. Other reports that have looked at links between degradation and carbon budgets include: Griscom, B., et al. (2009). *The Hidden Frontier of Forest Degradation: A Review of the Science, Policy and Practice of Reducing Degradation Emissions*. The Nature Conservancy.

¹⁷ Haddad N.M., et al. (2015). Habitat fragmentation and its lasting impact on Earth's ecosystems, *Science Advances*, 1 (2) e1500052-e1500052. DOI: 10.1126/sciadv.1500052.

¹⁸ ISU (2015). (Citing data from the World Resources Institute.) FAO (2011) also cites the ITTO as estimating that up to 850 million hectares of tropical forestlands alone are already degraded. The WRI data appears to use the following definitions: "*Fragmented: forest landscape with visible signs of human impact including roads, villages, and clear cuts, but without visible loss of tree canopy cover at the landscape level. Degraded: forest landscape where tree canopy cover has been visibly reduced at the landscape level but not fallen below 10%.*"

¹⁹ Sloan, S. & Sayer, J. (2015). Forest Resources Assessment of 2015 Shows Positive Global Trends but Forest Loss and Degradation Persist in Poor Tropical Countries. *Forest Ecology & Management* 352 (2015) 134-145. They also noted that the ratio of degradation to deforestation was even higher in the boreal and subtropical regions.

²⁰ <http://explorer.natureserve.org>. Includes proposed listed and candidate species.

²¹ Robles, M.D., et al. (2008). The geography of private forests that support at-risk species in the conterminous United States. *Frontiers in Ecology and the Environment*. 6(6): 301-307.

²² TNC. (2000). *Precious Heritage: The Status of Biodiversity in the United States*. Stein, B., et al, eds. Oxford Univ. Press. Protected areas: <http://foreststewardshipcouncil.s3.amazonaws.com/index.html#>.