



the WoodWatch endeavor

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[ARCHITECTURE]

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via email

are there sometimes wrong woods to use?

Before commercial logging and clearing began in the 1850s, coast redwoods naturally occurred in an estimated **2 million acres** along California's coast from south of Big Sur to just over the Oregon border. When gold was discovered in 1849, hundreds of thousands of people came to California, and redwoods were **logged extensively** to satisfy the explosive demand for lumber and resources. Today, **only 5 percent of the original old-growth** coast redwood forest remains, along a 450-mile coastal strip.

Data: Save the Redwoods League, State of California, ESRI, GreenInfo Network

Map produced by Save the Redwoods League using ESRI software

■ Current Old-Growth & Older Forests on Public Lands in CA
■ Original Extent of Old-Growth Redwood Forests in CA

data from Save the Redwoods League

The problem is that trees are cut indiscriminately to meet demand for wood in general and to receive high prices for special species.

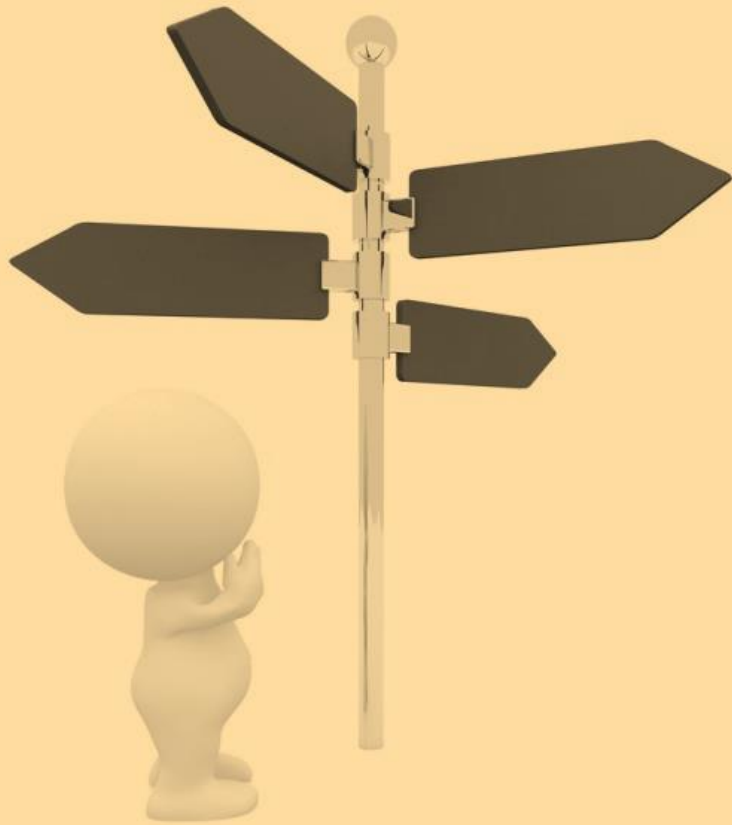
Part of the answer is to not allow indiscriminate cutting through better forest management and to make the logging, and buying, of vulnerable species illegal.



The other part of the answer is to shift demand by teaching about better species to use, and to lessen demand by finding alternatives to, or more efficient, general wood use. And of course, providing a more attractive means of making a living than tree poaching.


what we want to avoid

(woodwatch)



- WoodWatch is focused on the ‘shifting demand’ portion of the deforestation solution.
- Discovering which woods are abundant, harvested responsibly, and under equitable labor and trade conditions, while annual growing conditions vary, markets shift, and companies change, requires a deeper technical dive than the construction industry can undertake. WoodWatch aims to make the discovery feasible by providing guidance based on current conditions.
- Reliable and credible data sources are critical.

(background)



The idea for WoodWatch came out of our frustration as architects always seeing only a single fashionable wood species featured (it's ipe at the moment for exterior applications) in trade and shelter publications and yet not knowing what else we could or should use.

The rest of this presentation will delve into why WoodWatch is needed, how it might work, who it will serve, geographically where it will look, what it will cover and how, and the questions of how it will operate.

Questions are asked for each aspect of this endeavor, and those questions are summarized at the end.

why not just use FSC?

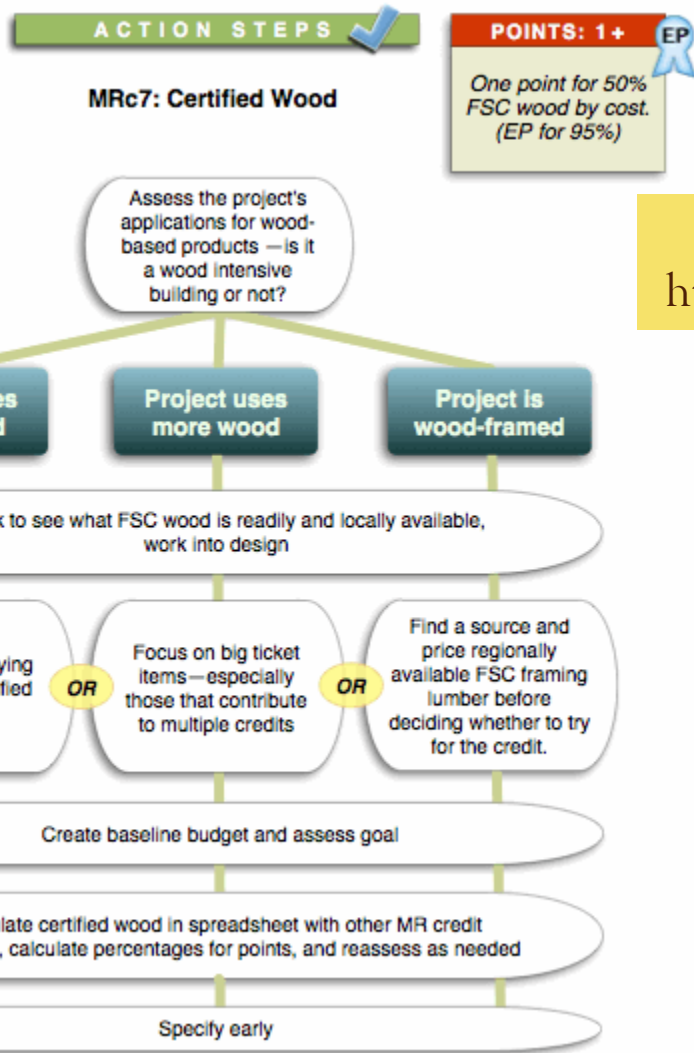
If all the forests of the world were FSC certified, and all the processors were Chain of Custody (COC) certified, there would be no problem.but, in the meantime, suppose someone wants to use only FSC wood but cannot get any or enough due to limited supply. The options are:

- ask for it and wait. *Suppliers are made aware of demand but the wait may be longer than the person can afford.*
- to not use any wood. *This may be possible or it may not. Certainly it lessens demand.*
- to use some other wood. *Then what's the right thing to do?*

There are other forest rating systems. The Forest Stewardship Council is the most rigorous in its standards, the most comprehensive in the issues covered, and the least reliant on self-policing. The other systems are not equivalent and therefore not endorsed.

In another scenario, imagine someone who, unaware of ethical and environmental concerns, simply wants to use a particular type of wood because of its inherent properties, like its beautifully figured grain. *Could they be guided to a good choice?*

[what LEED users do]



The graphic is drawn from <http://www.leeduser.com/credit/NC-v2.2/MRc7>

www.leeduser.com, for the new credit MRc3, says “No longer given their own credit, as has been the case in LEED 2009 and earlier, locally sourced building materials are recognized in LEED v4 as a multiplier. That means that regional credit only kicks in when a product meets the basic credit requirements, such as FSC.” This changes the point scheme but may not affect the working method shown.

sample ratings

AVOID – these species are over-harvested or the harvesting itself is accomplished in harmful ways, or both. The only exceptions are woods and wood products which are FSC certified.

GOOD – okay but with some concerns about how the forest is managed or overall species numbers.

What guidance should be given for this choice?

BEST – abundant, well-managed and harvested in an environmentally-friendly way that can maintain or increase production in the long term without jeopardizing the ecosystem.



Should there be a different number of ratings? Should they be expressed differently?

the who and the why

Amy, wishing to design furniture, consults WoodWatch and learns which wood types are abundant and in good shape. She then selects a few woods and designs her pieces to take advantage of their properties.

Bob, a cabinet-maker, consults WoodWatch for alternatives because he cannot find responsibly harvested woods at his local lumberyard.

Cathy falls in love with some exotic-wood-veneer flooring in a catalog but wonders if buying it would be the right thing to do. She checks WoodWatch.

Dennis, under a green building mandate, turns to WoodWatch when he learns that he must use FSC-certified woods for his building project.

Eventually to be available in English, Spanish, Portuguese and French,
for the Americas.

(strain your eyes)

user scenario	FSC forester	other forester	poacher	supply chain	end user	ecosystem	local forest community
does not use any exotic woods	☹️ lost sale to lessened demand	☹️ lost sale to lessened demand	☹️ no value if no market demand	☹️ lost sale to lessened demand	? good conscience	😊 left alone	☹️ good environment, poor economy
picks an exotic wood, FSC only	😊 sale	☹️ lost sale to competition	😊 high value, tricky market	😊 sale	☹️ good conscience, higher cost	😊 well done	😊 good all around
picks a medium wood, FSC only	😊 sale	☹️ lost sale to competition	☹️ moderate value, tricky market	😊 sale	☹️ good conscience, higher cost	😊 well done	😊 good all around
picks a medium wood	☹️ maybe lost sale to competition	😊 sale	😊 moderate value, easy market	😊 sale	☹️ okay conscience, lower cost	☹️ probably not great	☹️ poor environment, okay economy
picks a good wood, FSC only	😊 sale	☹️ lost sale to competition	☹️ low value, tricky market	😊 sale	☹️ good conscience, higher cost	😊 well done	😊 good all around
picks a good wood	☹️ maybe lost sale to competition	😊 sale	☹️ low value	😊 sale	😊 good conscience, lower cost	☹️ okay enough	☹️ okay environment, okay economy

then what happens

Once we understand the pressures for change or maintaining status quo, we can identify the most effective “pressure points” for betterment.



If foresters perceive a sale is lost to competition, their next moves may be to match the competitor's qualifications (perhaps gain FSC status), try to win by underbidding prices, or to cheat. If they perceive sales are down because of low demand, they may switch to another product (or species), find new markets, pull what political/business strings they can, or slash prices.

The strongest disincentive for poachers, particularly in the mid-value range, is tight COC and market controls. If they are also part of the local community, improving the local economy may also effect their actions.

Suppliers who are COC certified usually also sell non-FSC products. They're happy either way. Those who are not will want to see enough demand to match the costs. Removing cost premiums, along with education on the issues, will lower the change barriers for end users.

how specifiers select woods

- Architects write specifications for building material products, trying to satisfy aesthetic, functional, safety and environmental concerns, along with an eye to the client's budget and schedule constraints.
- They research products online, look through design publications, attend trade shows, browse through their in-house sample and literature libraries, and receive sales calls. A few belong to materials selection subscription services or hire consultants, while many more ask contractors about their sources and capabilities.
- Architects' knowledge about particular wood species comes from published testing results and code tables for structural properties, from the materials classes of their school days, and from the gleanings of their personal interests.
- *Unfamiliarity is a barrier!* If availability or delivery times are uncertain, it is unlikely that the risk will be taken. If a finish sample is not available for matching with other materials, that's no good. If there are problems with the performance of installed wood products, the architects will hear about it.



the users



- Architects and other design professionals
- Carpenters and cabinet shops
- Furniture manufacturers
- Woodworkers, makers of musical instruments
- Builders and developers
- General consumers: DIYers, building owners
- Lumberyards and home supply or hardware stores
- Environmentalist and similar think tanks, advocate organizations, green rating programs
- State architects; county and municipal governments who build

What should the disclaimer, that the specifier/user is still responsible for their choice, actually say?

regions

The initial region will be centered in Northern California, because that is where we are.

Whose input from outside the initial region be sought now, if it might be expanded later?

Certainly to begin, WoodWatch should be particular to one region. If we are thoughtful about creating it as a template, then it can be duplicated in other regions.

Regions could be defined by:

- political boundaries (for “domestic only” procurement rules)
- by established markets (for ease of availability)
- by arbitrary distances
- by the smallest area which includes different forest types (for greatest choice)
- by transportation mode limits (for carbon footprint reduction)



What definition of a region makes the most sense?

criteria

Criteria for how things will be listed and thus the rationale provided to users still need to be developed.

Preliminary thoughts are that:

What should this WoodWatch idea NOT be?

Information on endangered species—those to be avoided entirely unless FSC certified—could be drawn from the international CITES Appendices I, II and III or the IUCN Red List. Likely more problematic, perhaps an argument can be made for basing it on national programs, such as the US Endangered Species List.

Species in the middle category might be of the “Near Threatened” level of the IUCN list, while those with the green light are drawn from the “Least Concern” status.

categories

Hard versus softwoods? How else might this be made easy to use? Is the distinction between a natural forest or a plantation source important?



interior finishes

Because people are likely to be searching for woods with particular uses in mind, it would be helpful to have them sorted by suitability for those uses into a few broad categories. Suggestions for what those might be are below.

exterior



structure



business structure



How often to update

Every six months, or annually, or every five years? The considerations are:

- how much change there is in the underlying conditions and the markets
- How often our data sources are updated
- How much work in supporting updated ratings can be afforded.

Who is going to keep it up?

Laurel Architecture is willing to set up and launch and oversee this but cannot support the long term financial burden. A stand-alone non-profit organization or perhaps a consortium seem the most likely entities to maintain the program.

How should this be funded?

Grants and volunteerism are great for beginnings but are not so robust for the long term.

Subscription fees could be levied if they do not prove a barrier to adoption.

Business partners could be sought and charged for participation if there is no threat to integrity.

marketing

right off the bat

We already have established relations with editors of magazines, policy makers at trade organizations, decision makers at major AEC firms, and leaders in the green building and sustainability movement.

However, we will be coy about names until all parties are fully committed.

we can reach out to

other trade magazines, writers, speakers, bloggers, some of the larger corporations, smaller local businesses, governmental agencies....a long list can be developed

Any suggestions or contacts are welcome.

input needed from

3-5 from each
category

People who know forests and the environment

People who run forests and sell wood

People who process and make wood products

People who understand wood properties

People who design with wood

People who check and inspect wooden structures and products

People who purchase wood



Academics and
thinkers

Scientists and
engineers

Wood suppliers
and purveyors

Manufacturers
Architects and

designers

Forest and trade
monitors

Regulators, AHJs,
and testing agencies

Who do you suggest?

other ideas

- Although the primary means of communicating WoodWatch would be a website, there could certainly be applications for phones and tablets.
- Display signs (dated) within shop floors and promotional hang tags (which could have QR-codes) are options, but sound expensive and difficult to both introduce and maintain.
- Explanatory videos, and those telling special place-based stories, could be available online.
- Regular updates of information sent to green building and business journalists would be very effective, but only at reaching some of the target users.

WoodWatch needs to be where and when people are making decisions about purchasing or specifying woods. What suggestions do you have for reaching them?

potential further content

Which ideas do you like? What else might be added? What might be too much?

Of course: lots of background links to the FSC, to legal labeling regulations, and our data sources; explanation of the mission of WoodWatch.

Find your local forest type on a map. See what dominant trees are grown in the region of your project.

Generic suggestions about environmental and fair trade issues to consider.

Other information which would be of use to specifiers, such as properties of particular species, available sizes of lumber, photos, narratives about forest types, and comparisons to commonly known species, would likely to need to come from published books, with permission from the authors.

conclusion

We want to help shift market demand for wood in the construction industry toward economically and environmentally sustainable types by providing guidance to the decision-makers.



We believe that there is a need for a tool such as WoodWatch, until such a time as all forests in the world are well managed or fully protected and people are fully aware of all the impacts of their wood-consuming decisions.

(goal statement)

We were inspired to do for wood what the Monterey Bay Aquarium's Seafood Watch program has done for consumers of fish. This is an endeavor still being formed, which means now is the time to be sure it is done right. Now is your chance for influence.

Please tell us what you think.

If you are interested in getting involved more, topic-specific working groups will be formed soon. Start with an email to DDC@LaurelArch.com.



(feedback)

Reactions, suggestions, and questions on the issues presented are all welcome. Feel free to raise other topics, including the best means of having a discussion.

- *How should the ratings be expressed? What actions should be taken by someone who uses a species that is in the “somewhat okay” category?*
- *How shall we caution users that they still need to bring their own expertise to bear?*
- *What definition of a region makes the most sense and should we think globally from the outset?*
- *What criteria and rationale shall we use for listing and what will be the data sources?*
- *How might the information be best presented so it is easy and most relevant for users?*
- *What other content would you like to see?*
- *How often should this be updated?*
- *What is the best method of funding and operating the program?*
- *Do you know anyone who could help spread the word?*
- *Who should we ask for their input?*
- *What suggestions do you have for reaching the people who make wood buying and specifying decisions?*

THANK YOU for your attention so far

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minding the place

the end

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