

Forest Health Human Health

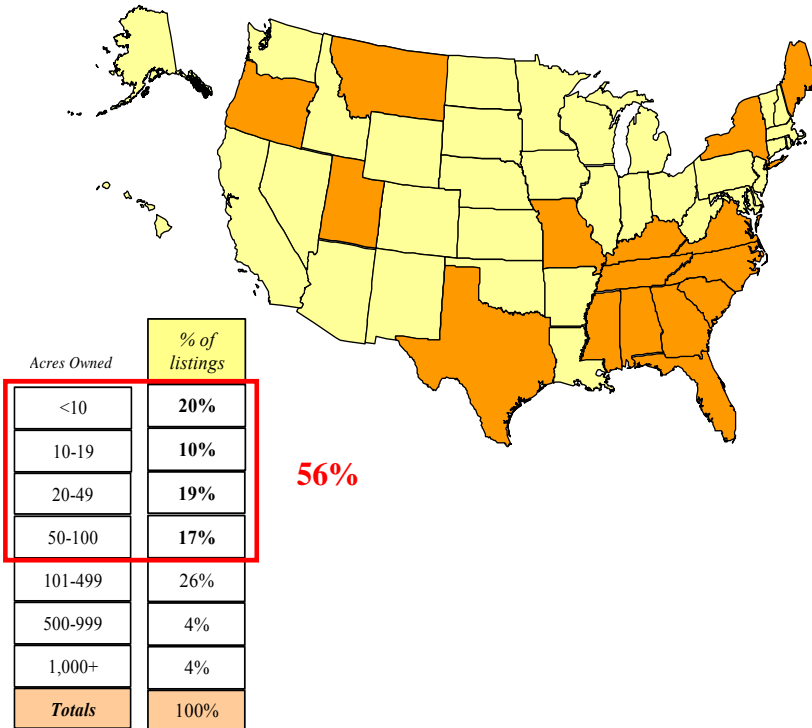
*Linking landowners, carbon markets, and health care
to conserve and sustainably manage family forests.*

**Presented by:
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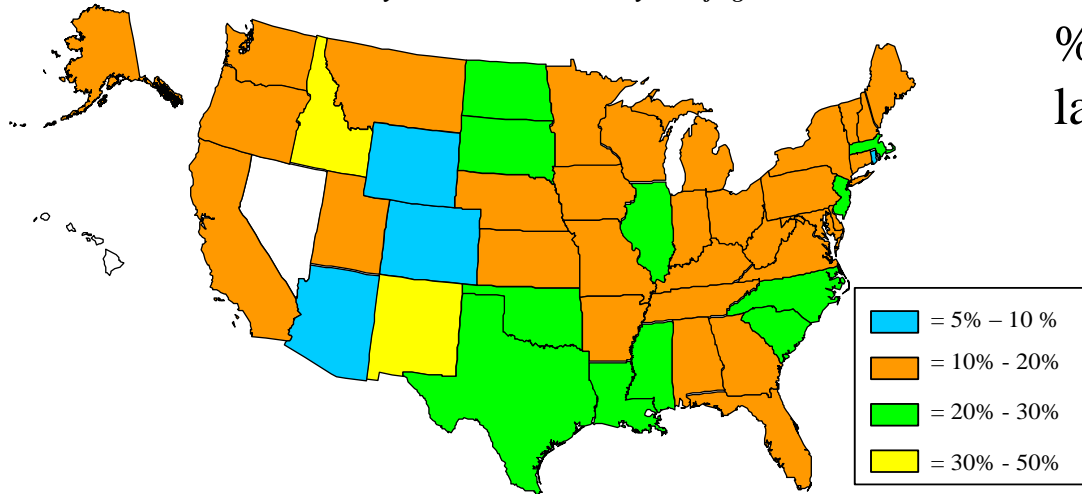
According to *landandfarm.com*: Non-industrial private forestland for sale in the US in *April 2011*:

State	Acres for Sale (rounded)
Alabama	26,000 ac
Florida	19,000 ac
Georgia	95,000 ac
Kentucky	17,000 ac
Maine	13,000 ac
Missouri	11,000 ac
Mississippi	14,000 ac
Montana	48,000 ac
N. Carolina	30,000 ac
New York	395,000 ac
Oregon	30,000 ac
S. Carolina	29,000 ac
Tennessee	45,000 ac
Texas	32,000 ac
Utah	53,000 ac
Virginia	11,000 ac





*% of NIPF acreage in the state owned
by landowners who are 75 years of age or older*

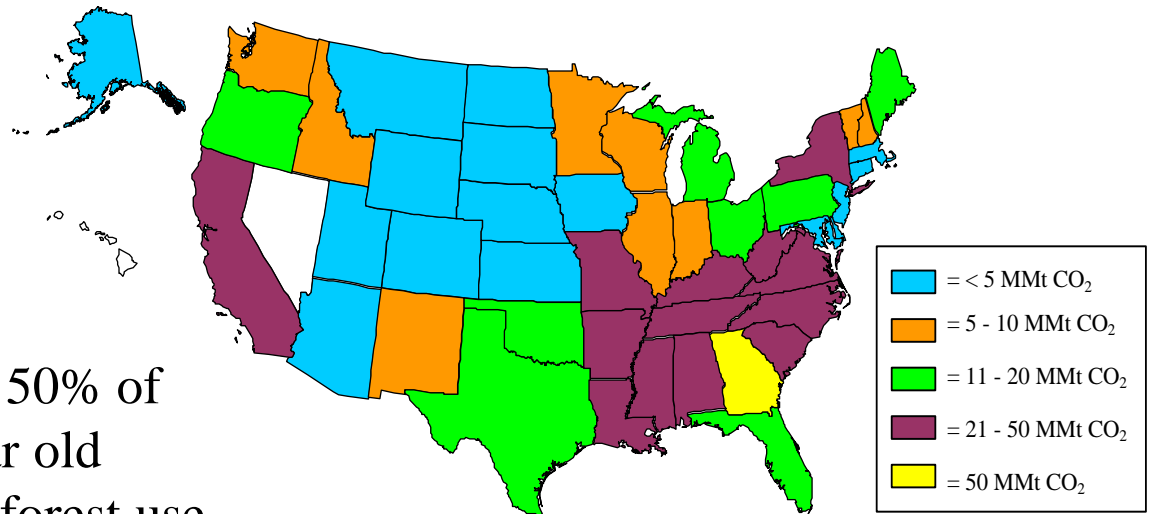


% of NIPF acreage owned by
landowners 75 years and older



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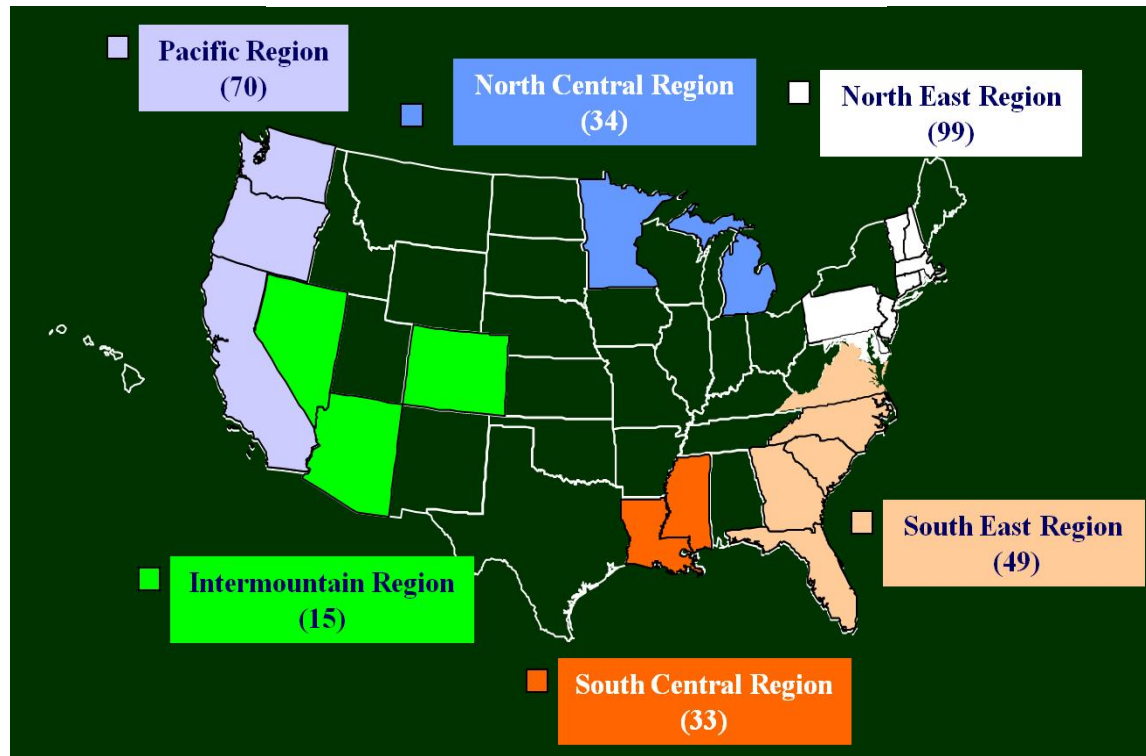
Loss of MMt CO₂ storage if 50% of forestland owned by landowners 75 years of age or older was sold for non-forest use

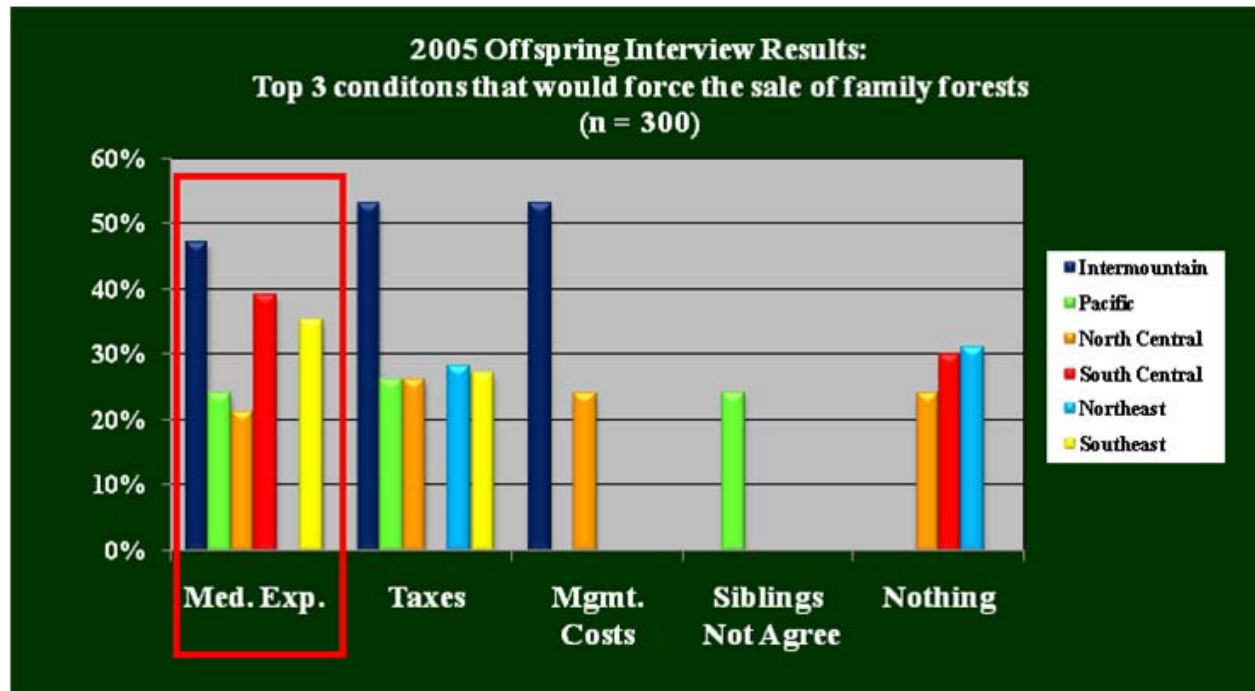


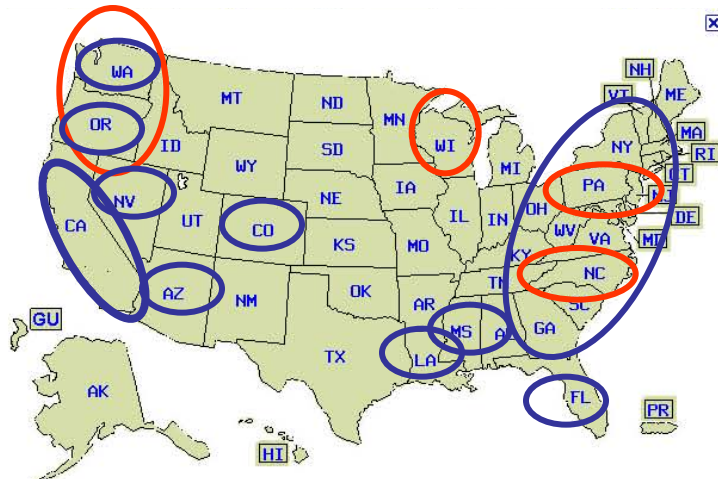
Loss of stored carbon if 50% of acres owned by 75+ year old landowners sold to non-forest use



2005 Offspring Survey (n= 300)





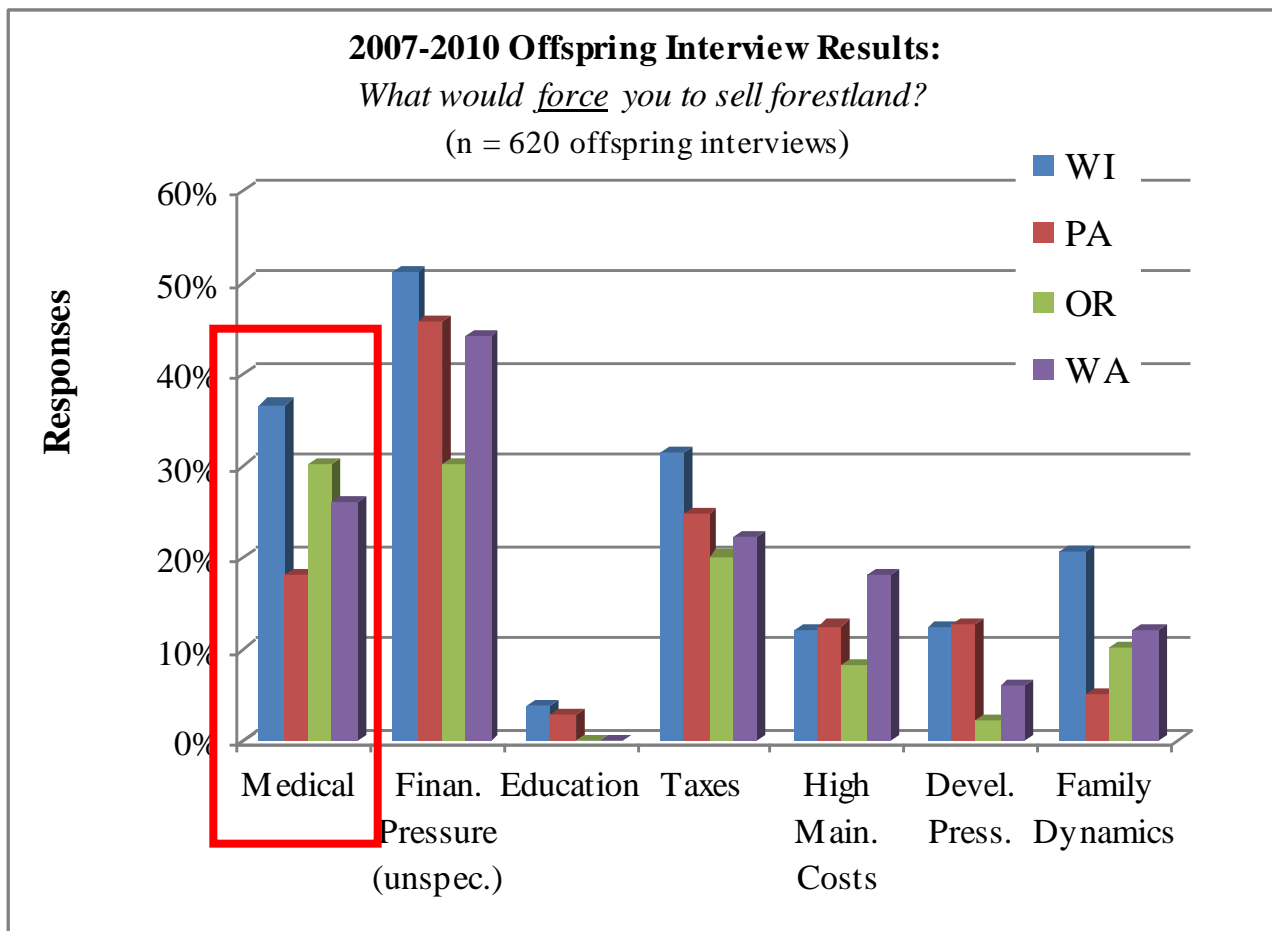


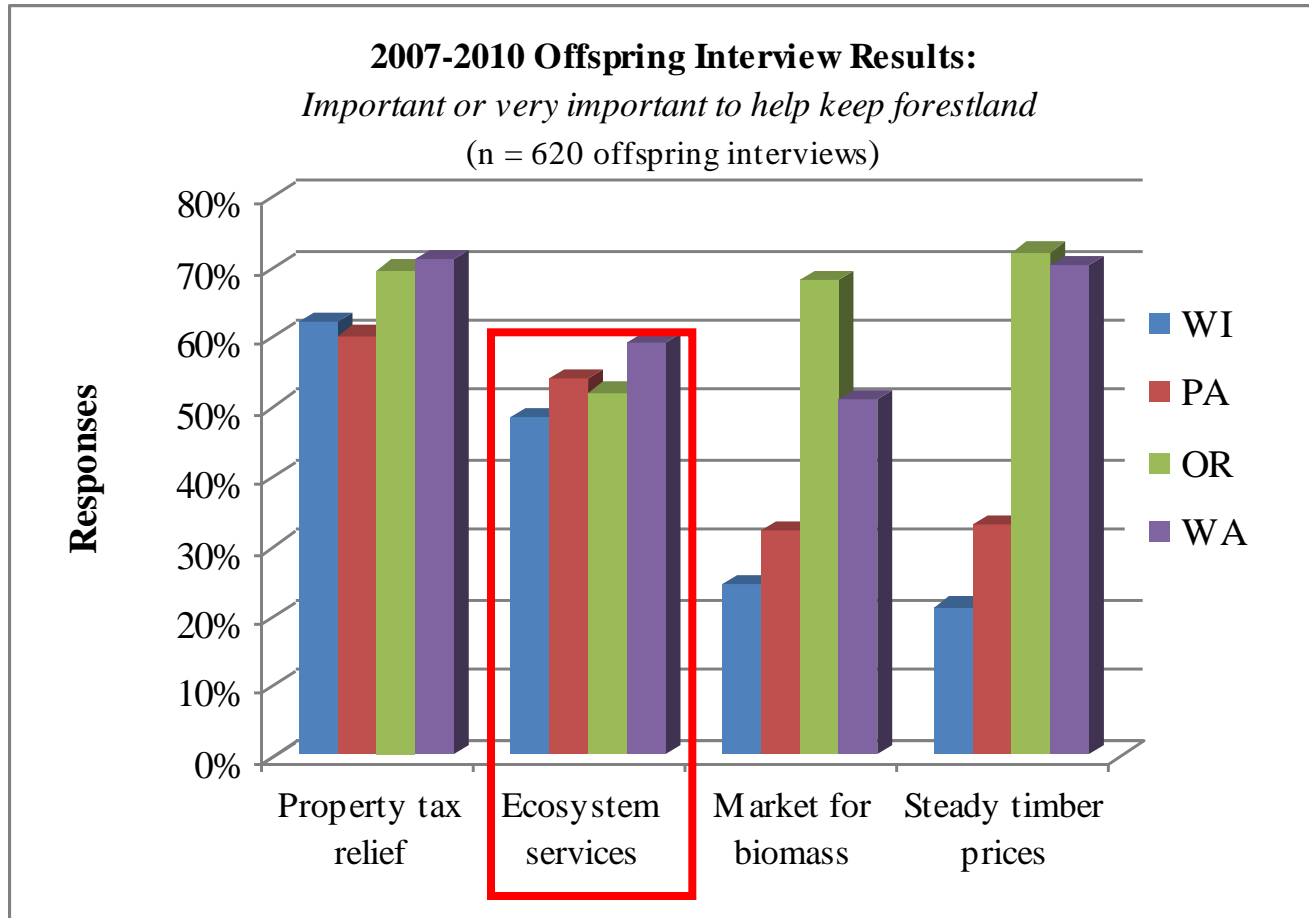
Landowners interviews

Landowners and offspring interviews

Starting in 2007, the Pinchot Institute:

- Began research work looking at family forestland owners and their offspring.
- By 2010 – we had conducted over *1,000 in-depth interviews* with landowners and their offspring across the US.
- *What we discovered surprised us ...*







Is it possible to link *carbon banking*
to *health care payments*?



American Carbon Registry (ACR): Woodlands Carbon listed on registry.

- For first time, protocols established *specifically for family forest landowners*
- *20 year* contract
- Carbon credits generated from certified forest *management not preservation*
- Carbon baseline established on net present value of 5% for NIPF landowners. *Carbon credits earned by managing land above 5% NPV* (usually through longer rotations)



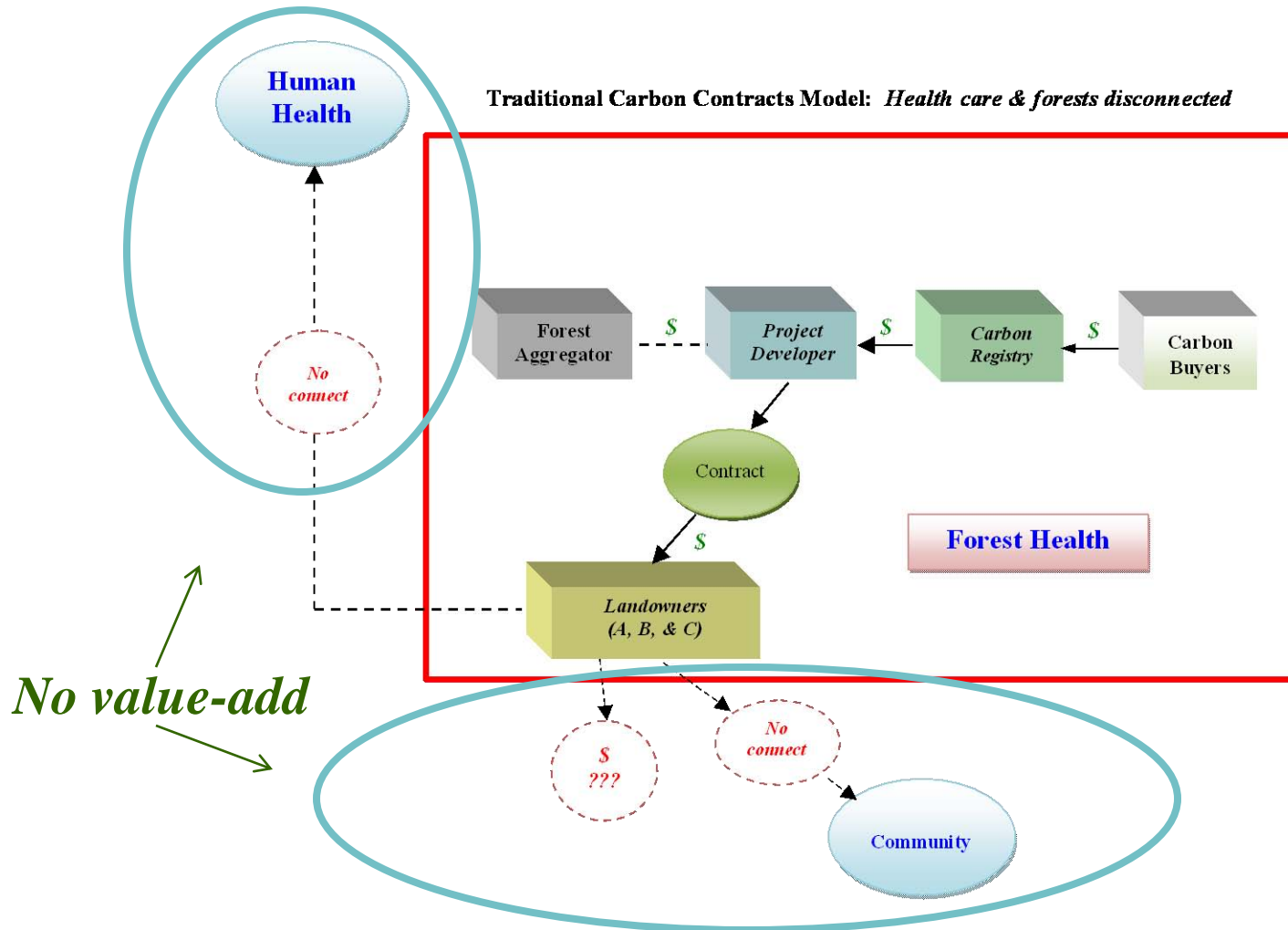
The screenshot shows the Pinchot Institute website. The header includes the logo and navigation links: Who We Are, What We Do, Publications, News, Events. A sidebar lists focus areas: Climate and Energy (highlighted), Water, Forests, Communities, Policy. The main content area shows a breadcrumb trail: Home > Climate and Energy >. Below this is a paragraph about national priorities for mitigating climate change. A sub-section titled 'The Forest Health-Human Health Initiative' is circled in red. It includes a small image of two people walking in a forest and text explaining that low health care coverage is a concern for rural landowners, particularly those aged 65 and older. The text states that the initiative seeks to address this by connecting innovative health coverage options with new markets for forest carbon. A 'More>>' link is provided at the end of the text.

In 2010 . . . The Pinchot Institute introduced the **Forest Health-Human Health Initiative** . . .

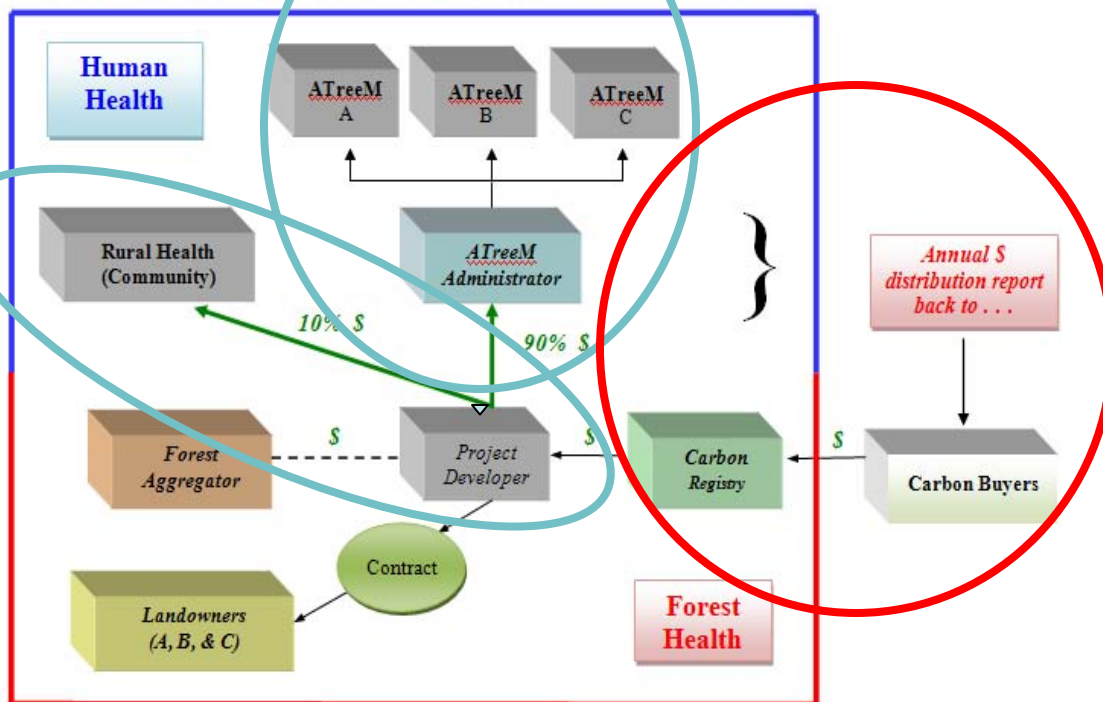
Based on *'value-added'* health care business proposition at three levels:

- Carbon buyer
- Forestland owner
- Rural forest community

Selling carbon alone may not be enough



Forest Health Human Health Model: *Direct link between health care & forests*



All 20 years of payments from carbon buyers go direct to health care accounts.

90% of payments go to landowner **ATreeM Card** (value-add to landowner).

10% of payments goes direct to health care in rural community. (value-add to community).

Quantification of payments to social value (health care) for carbon buyer (value-add to carbon buyer).



Value-Added Carbon Proposition

Carbon buyer:

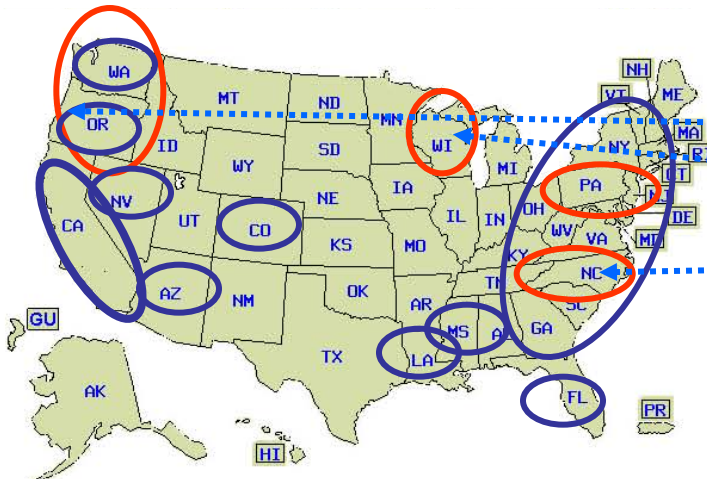
- No payments to landowner.
- All payments to health care accounts.
- Annual quantification of payments to health care accounts for global investor recognition.

Forestland Owner:

- Long-term income stream for family health care.
- No insurance policy required.
- Non-taxable income status.

Rural Forest Community:

- Long-term income stream for community health care (physician training; virtual technology; home medical services)



Back to landowners and offspring, but *laser in on health care costs and carbon contract interest:*

Columbia County, Oregon

Wisconsin

North Carolina

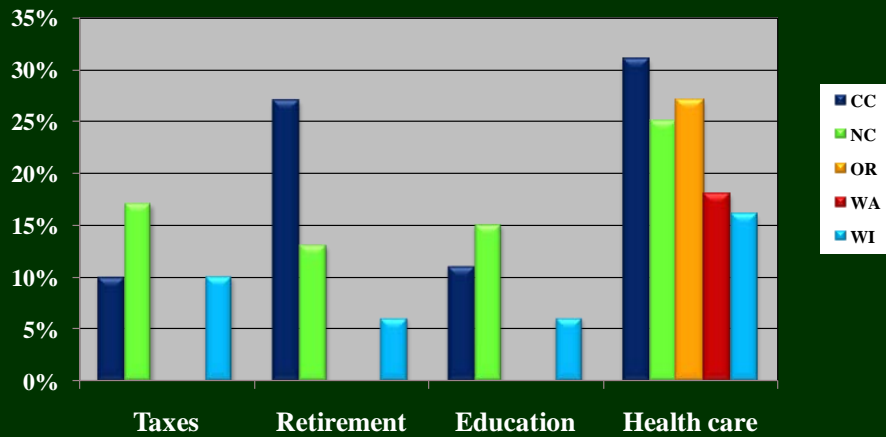


n = 450 landowners and offspring

- Rural forestry community in crisis; rebuilding itself on sustainability platform; national attention.
- Over 700 family forest owners collectively owning over 50,000 acres
- Very limited access to health care in community; 40 miles away from medical centers. Just losing their health care clinic.

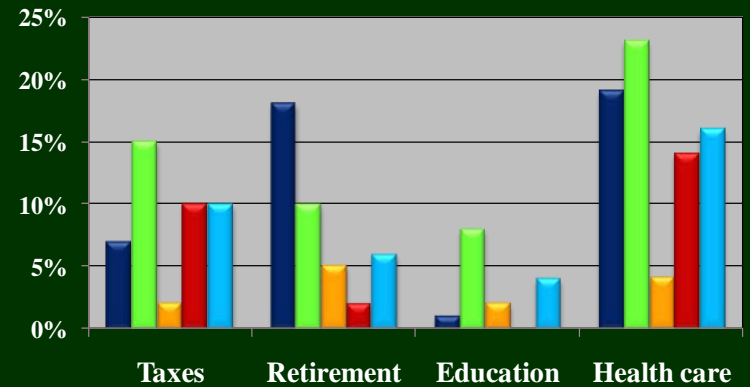


FH-HH 2010-2011 Survey Results: *Landowner*
How likely to accelerate the sale of timber to pay for...
(% who rated likely or very likely)



Likely to **increase harvest** to
← pay for . . .

FH-HH 2010-2011 Survey Results: *Landowner*
How likely to sell forestland to pay for...
(% who rated likely or very likely)



Likely to **sell forestland** to
pay for . . . →



We also learned a few other important things:

- *For a high percentage, only high-deductible insurance policies available to them (\$5,000 or more per year). As a result . . .*
- *Underinsured: 40% landowners; 60% offspring*
- *\$5,000 in out-of-pocket expenses for health care: 47% landowners; 54% offspring*
- *No long term care insurance: 70% landowners; 80% offspring*



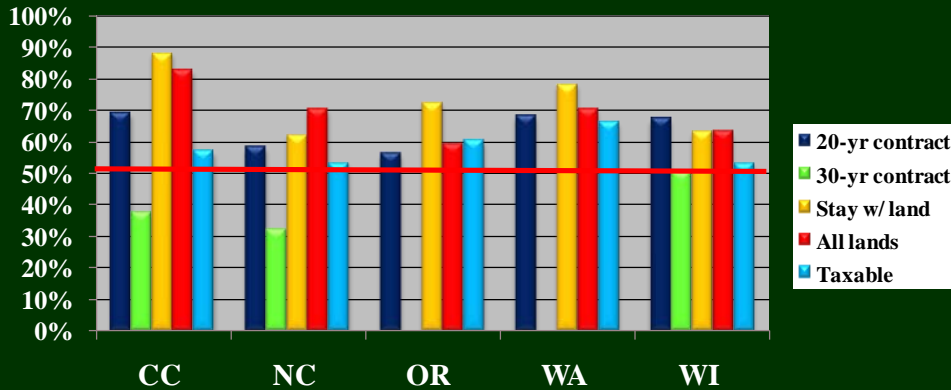
Devil-in-the-detail issues.

Show-stoppers for landowners and/or offspring?

- Contract length (20 years)
- All lands
- If taxable, what then?
- Contract stays with land
- 10% redirect to community health care



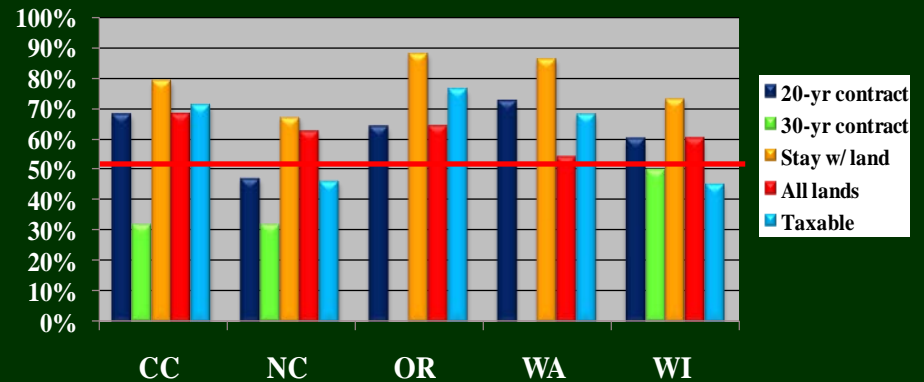
FH-HH 2011 Survey Results: *Landowners*
Potential carbon contract requirements: Show Stoppers?
(% of who said no)



*Show-stoppers for
landowners?*

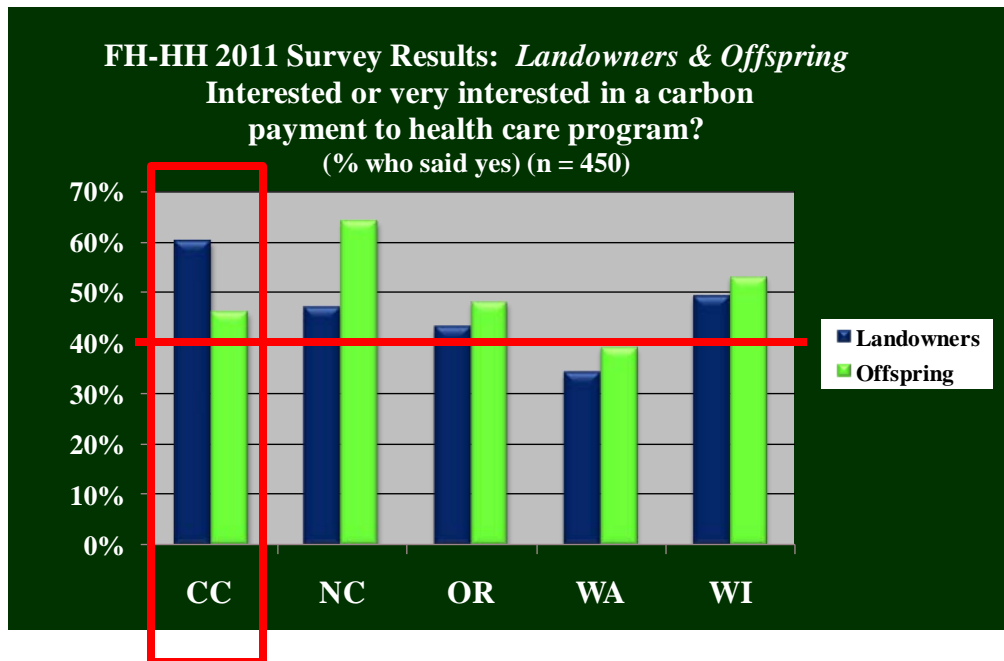
*Show-stoppers for
offspring?*

FH-HH 2011 Survey Results: *Offspring*
Potential carbon contract requirements: Show Stoppers?
(% of who said no)





Interested in participating in a carbon payment to health care contract?



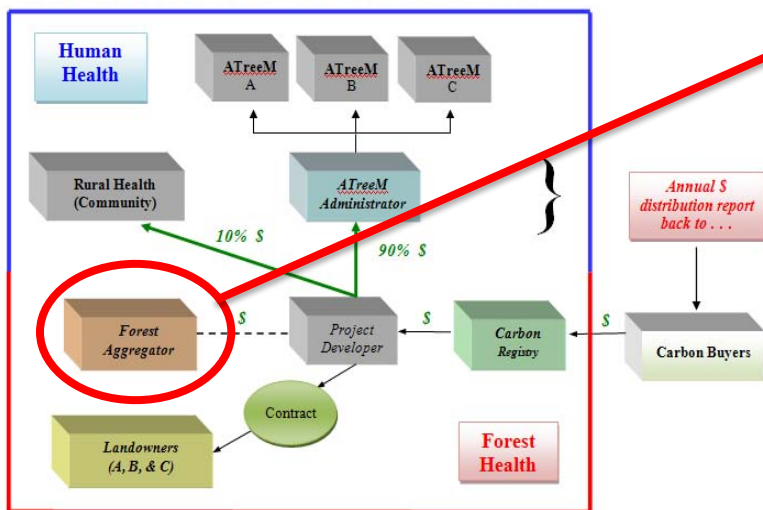
... but minimum of \$1,000/yr. to ATreeM card required

With a minimum of \$1,000 per year to the ATreeM card . . .

Location	\$/MtCO ₂ e	Acreage served	# of landowners	# of acres	Avg annual \$ deposit to ATreeM™	Added MtCO ₂ e For 20-yr & avg yearly	Avg annual carbon payment	Avg annual \$ deposit to rural health
Columbia County Oregon	\$15	51-100	101	6875	51-100: \$2,438	1,672,866 63,643	\$950,000	\$36,500
		101-500	44	8033	101-500: \$6,507			
		501+	4	3181	501+: \$36,992			
Columbia County Oregon	\$8.50	101-500 501+	44 4	8033 3181	101-500: \$2,749 501+: \$18,287	789,089 39,454	\$340,000	\$10,500

Partnerships currently formed to take next steps . . .

Forest Health Human Health Model: *Direct link between health care & forests*



American Forest Foundation
We grow stewardship every day.



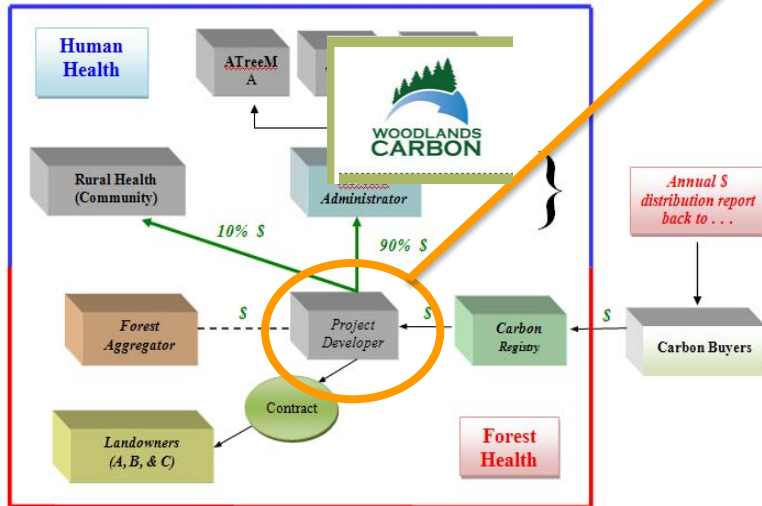
- Foundation houses the American Tree Farm (ATF) forest landowner certification program.
- ATF serves over 90,000 family forestland owners; 32 states; over 24 million acres of forestland.

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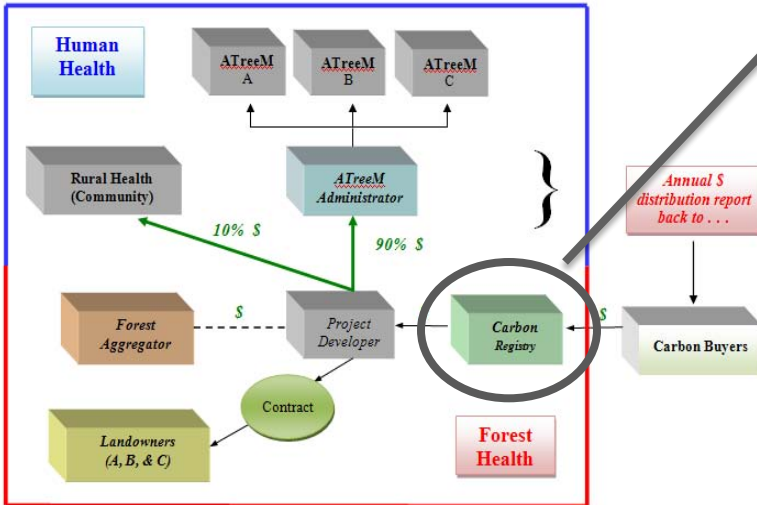


- Woodlands Carbon in Oregon
- National carbon project developers with NW subsidiary L&C Carbon.

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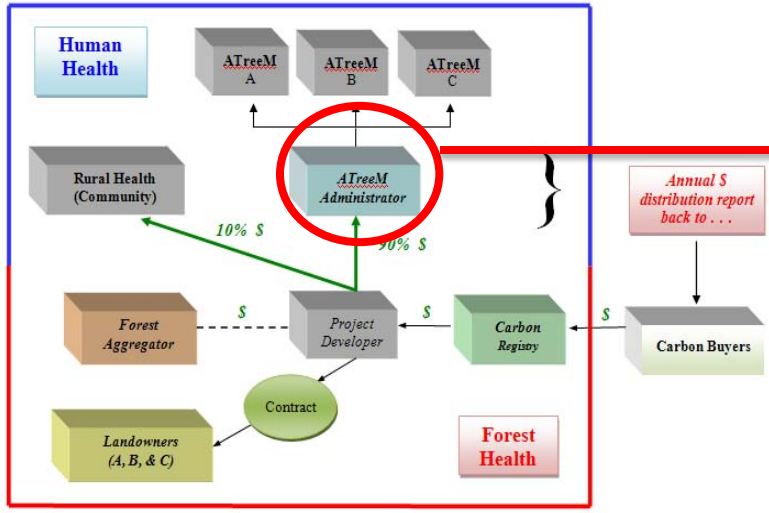


- Internationally recognized carbon registry
- Nation's first carbon protocols specifically adapted to family forestlands.
- MOU with Pinchot Institute as FHMH carbon verifier





Forest Health Human Health Model: *Direct link between health care & forests*

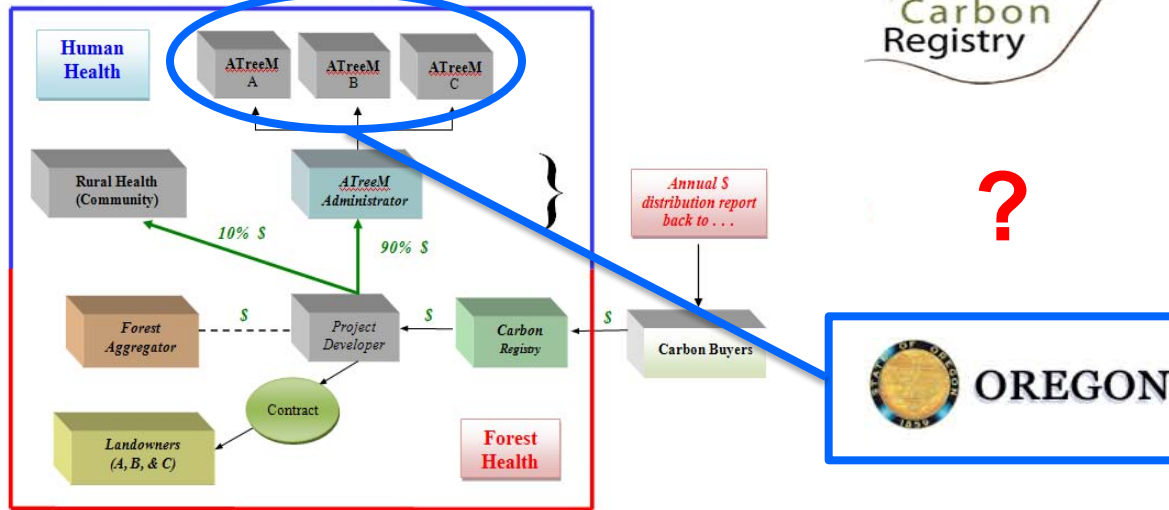


Card administrator ?

Trademark for ATreeM card secured by Pinchot Institute.



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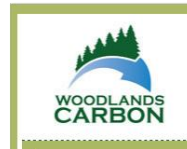
Oregon Department of Forestry first in the nation to look at carbon contract on state forestlands.

Legislative action in process to secure non-tax status for ATreeM card

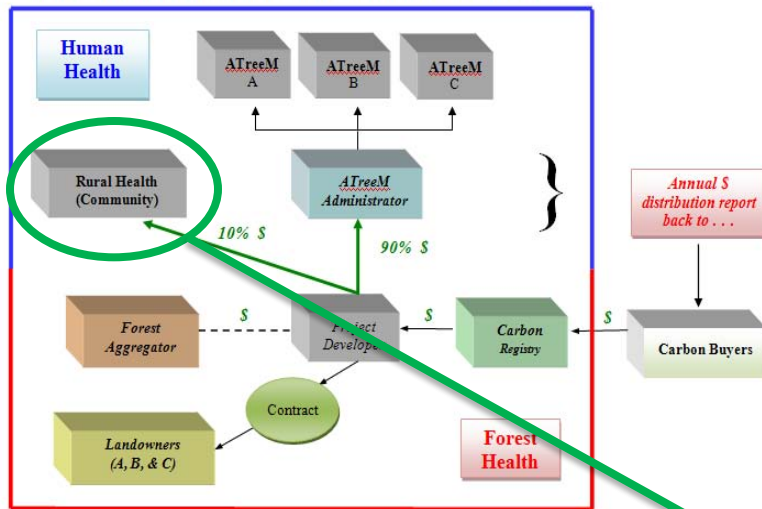




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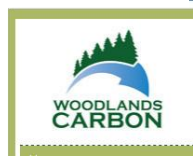
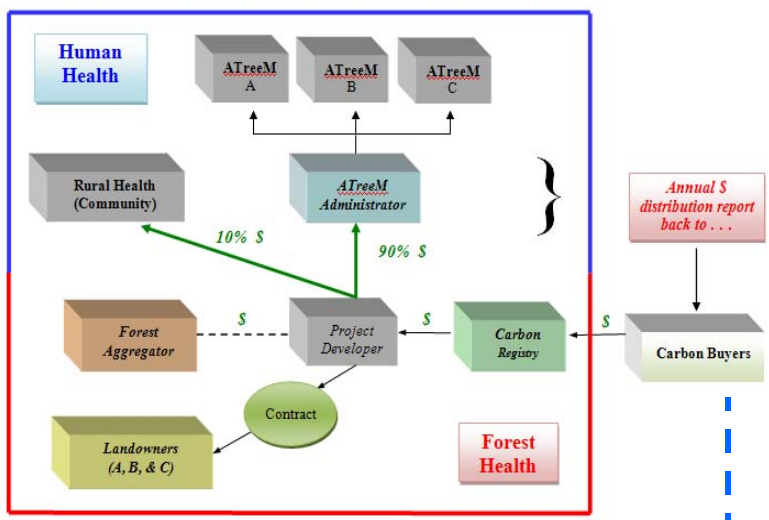


Forest Health Human Health Model: *Direct link between health care & forests*



- COMP-NW
- Committed to training NW students to service NW communities.
- Established FHHH priority admittance placement position.

Forest Health Human Health Model: *Direct link between health care & forests*

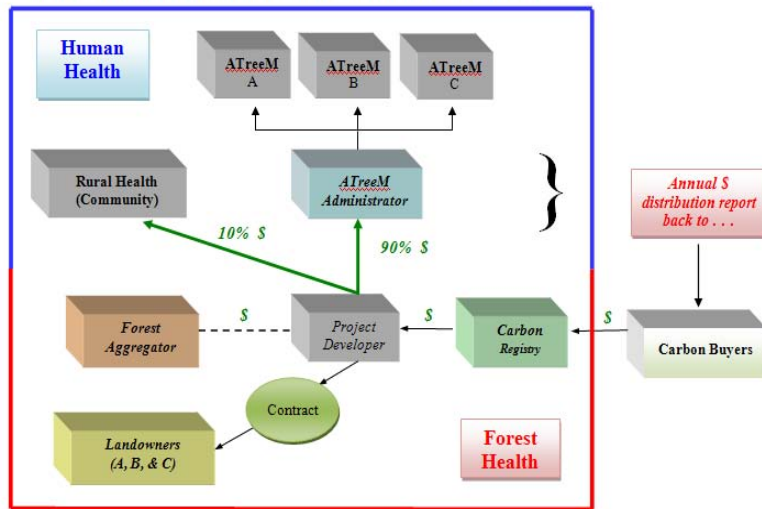


Targeting health care sector companies that participate in the **Carbon Disclosure Project Global 500** report for Wall Street investors





Forest Health Human Health Model: *Direct link between health care & forests*



**FHHH Institute
new 501 (c) (3)**

Innovation

Expansion



Next Steps:

- *Finalize business plan* for launch in Columbia County by end of 2013
- *Complete ground work* with Columbia County landowners for carbon contract development
- *Secure lead health care sector carbon buyer*
- Secure Oregon Legislative *non-tax status for ATreeM card* (in process).
- *Expand forestland owner participation* opportunity in other regions.



**Forest Health
Human Health**

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