

Marketing and Branding Objective 6)

Identify other opportunities to increase income from Indian forest management; ECOTOURISM, ECOSYSTEM SERVICES, & BIOENERGY.















Jim Freed – WSU Larry Mason – UW Gary Morishima - ITC

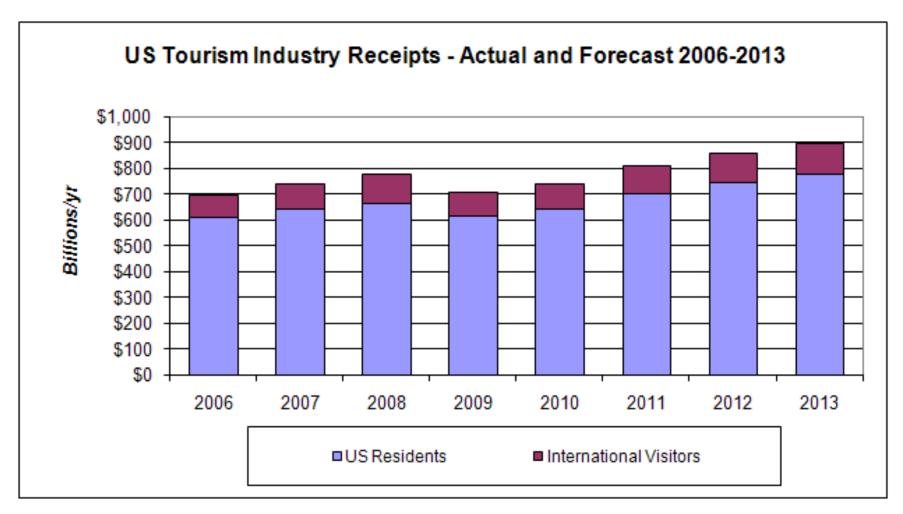
Wild-Harvested NTFPs = \$600 million/year

Table 26-2. Estimated wholesale value of wild-harvested nontimber resources in the US, assuming US Forest Service and BLM sales receipts are 10 percent of first point of sales value; US Forest Service sales represent approximately 20 to 30 percent and BLM sales represent approximately 2 to 15 percent of total supply; and first point of sales value is 40% of wholesale price. (Million 2005\$)

| Product Category | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|--------------------------|------|------|------|------|------|------|------|------|------|------|
| Landscaping | 89 | 73 | 56 | 54 | 51 | 44 | 37 | 35 | 28 | 28 |
| Crafts/Floral | 119 | 105 | 83 | 112 | 134 | 126 | 118 | 87 | 89 | 138 |
| Seed/cones | 6 | 2 | 5 | 5 | 12 | 6 | 3 | 5 | 3 | 3 |
| Edible fruits, nuts, sap | 56 | 38 | 41 | 56 | 47 | 49 | 58 | 46 | 35 | 42 |
| Grass/forage | 15 | 14 | 16 | 19 | 20 | 19 | 17 | 24 | 19 | 19 |
| Herbs, medicinals | 1 | 2 | 2 | 0 | 3 | 3 | 2 | 2 | 1 | 2 |
| Subtotal | 285 | 234 | 202 | 246 | 267 | 247 | 236 | 199 | 175 | 232 |
| Fuelwood | 397 | 367 | 306 | 312 | 323 | 310 | 294 | 271 | 273 | 302 |
| Posts and poles | 89 | 65 | 67 | 35 | 33 | 40 | 29 | 33 | 26 | 24 |
| Christmas trees | 114 | 94 | 96 | 102 | 97 | 96 | 80 | 82 | 66 | 65 |
| Total | 885 | 760 | 671 | 695 | 720 | 693 | 639 | 585 | 540 | 622 |

National Report on Sustainable Forests http://www.fs.fed.us/research/sustain/2010SustainabilityReport/documents/draft2010sustainabilityreport.pdf

Tourism as a Non-Timber Forest Product? \$700 billion/year!





Eco- and Cultural Tourism Assessment

Ecotourism is the fastest growing sector of the tourism industry increasing by 10-15% each year. Preliminary evidence indicates significant ecotourism opportunities for combined benefits of income generation with cultural education.

Table 1. Fastest-growing U.S. nature-based outdoor activities, 2000–2007

| Activity | Total participants (millions), 2007 | Percentage change in participants, 2000–2007 | Total days of participation (billions), 2007 | Percentage change in total days, 2000–2007 | |
|--|--|--|--|---|--|
| Viewing or photographing flowers and trees | 118.4 | 25.8 | 10.2 | 77.8 | |
| Viewing or photographing natural scenery | 145.5 | 14.1 | 11.5 | 60.5 | |
| Driving off-road | 44.2 | 18.6 | 1.3 | 56.1 | |
| Viewing or photographing other wildlife | 114.8 | 21.3 | 5.3 | 46.9 | |
| Viewing or photographing birds | 81.1 | 19.3 | 8.0 | 37.6 | |
| Kayaking | 12.5 | 63.1 | 0.1 | 29.4 | |
| Visiting water (other than ocean beach) | 55.5 | 1.6 | 1.1 | 28.1 | |
| Backpacking | 22.1 | -0.6 | 0.3 | 24.0 | |
| Snowboarding | 11.3 | 7.3 | 0.1 | 23.9 | |
| Rock climbing | 8.7 | -5.5 | 0.1 | 23.8 | |
| Visiting nature centers, etc. | 127.4 | 5.0 | 1.0 | 23.2 | |
| Big-game hunting | 20.2 | 12.8 | 0.3 | 21.2 | |
| Mountain climbing | 11.8 | -12.5 | 0.1 | 20.5 | |
| Visiting ocean beach | 96.0 | 10.5 | 1.4 | 16.3 | |
| Sightseeing | 113.2 | 4.1 | 2.3 | 14.0 | |
| Visiting wilderness | 70.6 | 3.0 | 1.1 | 12.8 | |



Forest-based recreation size and location

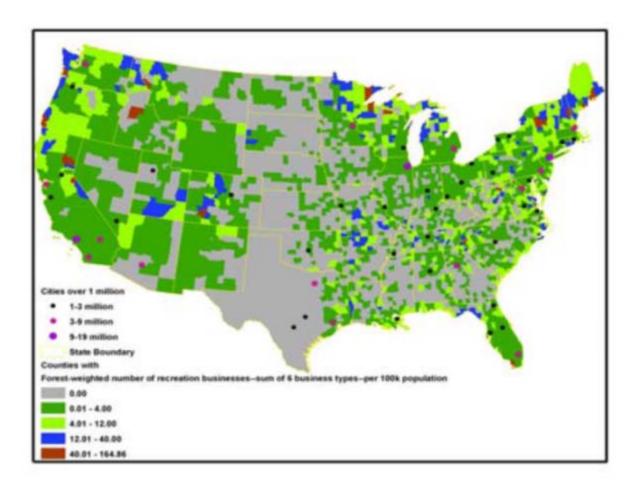


Figure 42-1—Location of cities and forest-based recreation businesses (5 types) per 100,000 population.

50 State Tourism Web Sites

| <u>Topic</u> | Displayed | Front Page | | |
|--------------|-----------|------------|--|--|
| Nature | 50 (100%) | 45 (90%) | | |
| Golf | 46 (92%) | 26 (52%) | | |
| Tribes | 23 (46%) | 8 (16%) | | |



State Tourism Sites and Availability of Native Information –more detail:

Tribes Total 23 (46%)

Historical Sites 21 (42%)

Tribal Enterprises 15 (30%)

Tribal Culture 14 (20%)

Tribes and Nature 4 (8%)

Pow Wows 9 (18%)



Pow Wows

Dante Desiderio, the economic development policy specialist for the National

Congress of American Indians, said since many tribes exist in rural or remote areas, drawing traffic may sometimes be challenging, but the cultural perspective of a pow wow can have certain advantages to include monetary gains. Making stronger efforts to gain attendees could pay off exponentially.

"There is a new impetus for tourism based on eco- and cultural tourism. It's proven that the spend rate for eco- and cultural tourism is almost three times the regular tourism rate. They tend to spend more time because they are there to learn instead of doing a superficial visit."

Indian Country Today March 12, 2010

http://www.indiancountrytoday.com/living/powwow/86651067.html

73 Pow Wows will be held in 31 states during May 2010

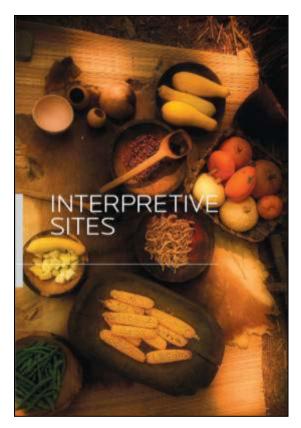
http://powwows.com

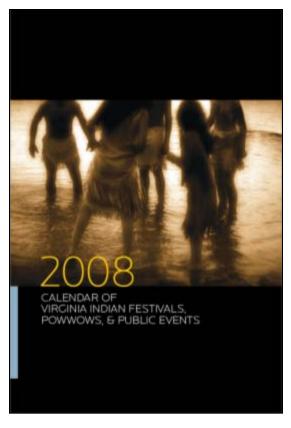


Conclusions: Ecotourism is a growing industry. Tribes and Native corporations have unique ecotourism products to offer. Benefits could include new sources of revenue and employment, augments to resort and casino attractions, and opportunities for historical and cultural education. State tourism offices offer low cost opportunity to elevate Native enterprise and cultural visibility.

Caveats: Tourism may be intrusive and intellectual property rights must be protected. At what scale might tourism threaten culture?







One Interesting Example of Educational Potential

_by Indians for Everyone__



CONTENTS

Ecosystem Services

Ecosystem services include provisioning services such as food, water, timber, and fiber; regulating services that affect climate, floods, disease, wastes, and water quality; cultural services that provide recreational, aesthetic, and spiritual benefits; and supporting services such as soil formation, photosynthesis, and nutrient cycling.

-Millenium Ecosystem Assessment



Most payments for environmental services are provided by Government and NGO programs. Tribes and Native Corporations currently receive little benefit.

| | 2005 | 2006 | 2007 | _ |
|------------------------|--------|--------|-------------------|--------------------|
| Government | | | | |
| Federal Programs | \$ 248 | \$ 243 | \$ 248 \$ 12.0 | _ \$260 million |
| State Programs | \$ 8.4 | \$ 8.9 | \$ 12.0 | J 7200 mmon |
| | | | | |
| Non-government | | | | |
| Voluntary Carbon | \$ 0.2 | \$ 0.4 | \$ 5.5 | |
| Market | | | | = \$293 million |
| Conservation Easements | \$ 69 | \$ 92 | \$ 111 | γ233 mmon |
| Fee Simple Purchases | \$ 142 | \$ 177 | \$ 177 | |
| | \$ | \$ | \$ | |
| TOTAL PAYMENTS | 468 | 521 | 553 | |

Table 27-1. Total payments for environmental services from Federal and State agencies and non-government organizations and individuals in constant 2005 dollars (\$1000,000s).



Voluntary Carbon Markets - Carbon Credits

- Forestry = Afforestation, Additionality, Preservation
- Accounting complexities
- Costly aggregators, brokers, verifiers, monitors
- Social justice issues (CDMS & REDDS)
- Uncertain politics
- CCX Price 1Q 2009 = \$2/MT CO2e but 1Q 2010 = \$0.10/MT CO2e

Conclusion: Markets and values are very small.

Opportunities appear limited (at least for now).

Conclusion: carbon markets represent < 1% of total govt and NGO payments for environmental services.

GREEN BUILDING STANDARDS



- Variable and arbitrary standards
- Warring labels
- Costly administration
- Complex accounting
- Requires certification
- Little market support
- Public confusion over what's "green"



Conclusion: Tribal benefits from "green" building markets are uncertain but heightened visibility for tribal forestry could bring opportunity.



99% of environmental service payments are to support sustainability through altered practices or conservation purchases. While Govt expenditures have been flat, NGOs are increasing

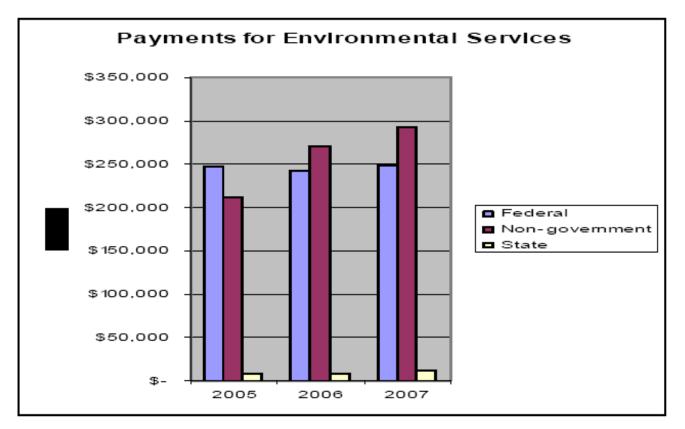


Figure 27-1. Total payments from Federal and State agencies and non-government organizations and individuals in constant 2005 dollars (\$1000s).







Tribal Stewardship provides ecosystem services

- Clean Air & Water
- Species Habitats
- Carbon Storage
- And more...
- A Sense of Who We Are





Native re-acquisition of forestlands

Reduce Costs of Conservation

Ensure Long-Term Stewardship

Reward Ecosystem Services Delivery

Support Anchor Forest Infrastructure

public support for Indian forestry.

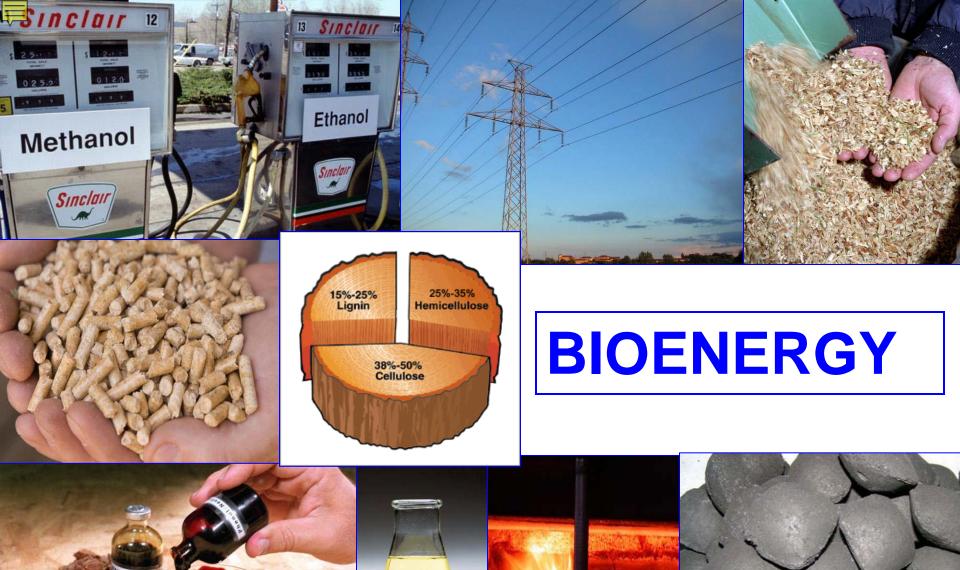
Conclusions:

Ecosystem service payments seek to promote sustainability of managed environments.

Indian forestry programs provide unique and enduring stewardship for sustainability.

Govt and NGO environmental service payments could receive high sustainability return from underwriting Native management costs and land purchases.

Carbon credits, green building standards, and other payment schemes are not significant opportunities at this time.







Tribal Energy Program

http://apps1.eere.energy.gov/tribalenergy/

Tribes should be well-positioned to benefit from woodto-energy development but obstacles remain that hinder progress

Unhelpful Myths Slow Wood to Energy

- Forests unmanaged are protected
- Woody biomass will spur overharvest
- Conversion technologies are immature
- Wood to energy will increase GHG
- Change is too expensive
- A fossil-free future is coming

It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so. -- Mark Twain



Disagreement in policy definitions and objectives

The Energy Independence and Security Act of 2007

15 Billion Gallons/Year Corn Ethanol

21 Billion Gallons/Year Cellulosic Biofuels

BUT!! Not from federal forests!

Forest biomass from federal forests, such as trees, wood, brush, thinnings, chips, and slash are not considered renewable resources.

2/3 of Western Forest **Health Crisis is the Federal Forests**



Rummer B., et al. 2003. A Strategic Assessment of Forest Biomass and Fuel Reduction Treatments in Western States. USDA Forest Service, Research and Development and the Western Forestry Leadership Coalition. 18pp



Agriculture Secretary Vilsack Announces Renewable Energy Initiatives to Spur Rural Revitalization Throughout the Country - USDA Press Release 10/21/10

But recent headlines...

Burning Trees for Power Worse than Burning Coal; Study: Wood-Burning Power Plants Using Biomass Found to Release More Greenhouse Gasses than Coal - CBS News 6/11/10

Is the RFS Broken? Prospective cellulosic ethanol producers are beginning to doubt the usefulness of the renewable fuels standard and fear the impact of lessened federal support. – Ethanol Producer Magazine 10/8/10

(Bio)Mass Confusion, High Costs, and Environmental Concerns Have Pushed Biomass Power to the Sidelines in the U.S. -WSJ 10/18/10



Conclusions:

Energy Policies remain uncertain for investment.

Every potential tribal project is unique (there are no models).

Wood energy development has been difficult for tribes (and the US).

Small projects such as institutional heating or pellet manufacture may be most promising.





In Summary:

- We found many non-timber opportunities to generate new sources of revenue from forests; all of which could benefit from promotion of Indian forestry.
- In the short term, NTFPs and Ecotourism appear to hold the greatest promise for enterprise development.
- In the long term other environmental payments, especially support for land re-acquisitions, may have potential but will require guidance and engagement.