



What is Fair Market Value in the Timber Industry?

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Outline

- Timberland Appraisals
 - How can I tell if my appraisal is any good?
- Conservation Easements
 - What are they and how are they valued?
- 631(a) & 631(b) Stumpage Valuation
 - What is it and how is it valued?
- Casualty Loss Valuation
 - What are the IRS rules for claiming timber losses?





I. Timberland Appraisals

06/23/2011

Timberland Appraisals

- Current standards:
 - Uniform Standards of Professional Appraisal Practice (USPAP)
 - Maintained by the Appraisal Standards Board of the Appraisal Foundation
- State regulatory agencies:
 - Most states have mandatory certification/licensing
 - OR: Appraiser Certification & Licensing Board
 - WA: State Dept. of Licensing

Who Can Appraise Timber & Timberland?

- State Certified General appraisers certified by the state where the timberland is located
 - In Oregon, professional foresters can appraise timber or timberland under certain conditions
 - In California, appraisers are unregulated unless a federally-related transaction is involved

Scope of Work Questions

- Who is the Client and Intended Users?
- What is the Intended Use?
- What definition of Value?
- What Effective Date?
- Are there Hypothetical Conditions or Extraordinary Assumptions?
- Any other assignment conditions?

Client & Intended User

- Client is the party that retains the appraiser
 - Not necessarily who pays them
- Intended User is the party(s) that the appraisal is written for
- Intended Use is the purpose of the appraisal, describing how it will be used

Example Intended Uses

- Establish (or support) a sale value
- Valuation for financial reporting (VFR)
- Measure investment performance
- Establish or monitor value of loan collateral
- Settlement of an estate
- Establish value of charitable donation or gift
- Valuation of a business or stock value



Type of Value

- Types of Value
 - Market Value
 - Fair Market Value
 - Investment Value
 - Use Value (Value-in-Use)
 - Going Concern Value
 - Replacement Value
 - Liquidation Value

Elements of Market Value (USPAP)

- Presumes a transfer of a property
 - As of a certain date
 - Under specific identified conditions
 - Relationship, knowledge, motivations of parties
 - Terms of sale
 - Conditions of sale

“Market Value”

- “Market value is defined as the most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition are the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:
 - Buyer and seller are typically motivated.
 - Both parties are well informed or well advised and are acting in what they consider their own best interest.
 - A reasonable time is allowed for exposure in the open market.
 - Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto.
 - The price represents the normal consideration for the property sold, unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.”
- Source: Appraisal Institute, *Appraisal of Real Estate*
- Same definition used in FIRREA Section 34.42(f)

“Fair Market Value”

- IRS Definition:
 - “Fair market value (FMV) is the price that property would sell for on the open market. It is the price that would be agreed on between a willing buyer and a willing seller, with neither being required to act, and both having reasonable knowledge of the relevant facts.”
 - If you put a restriction on the use of property you donate, the FMV must reflect that restriction.

Market Value vs. Fair Market Value

- Usually used interchangeably
- FMV is a specific type of market value defined by a legal or regulatory jurisdiction
 - Market Value presumes a sale
 - FMV presumes the property is not sold
- Neither is the same as “Fair Value” as defined and used within accounting (FASB, IVS)



“Highest & Best Use”

- Market value appraisals are predicated on the Highest & Best Use (H&BU) of the property

“The reasonably probable and legal use of vacant land or an improved property that is physically possible, appropriately supported, and financially feasible and that results in the highest value.”



Three Approaches to Value

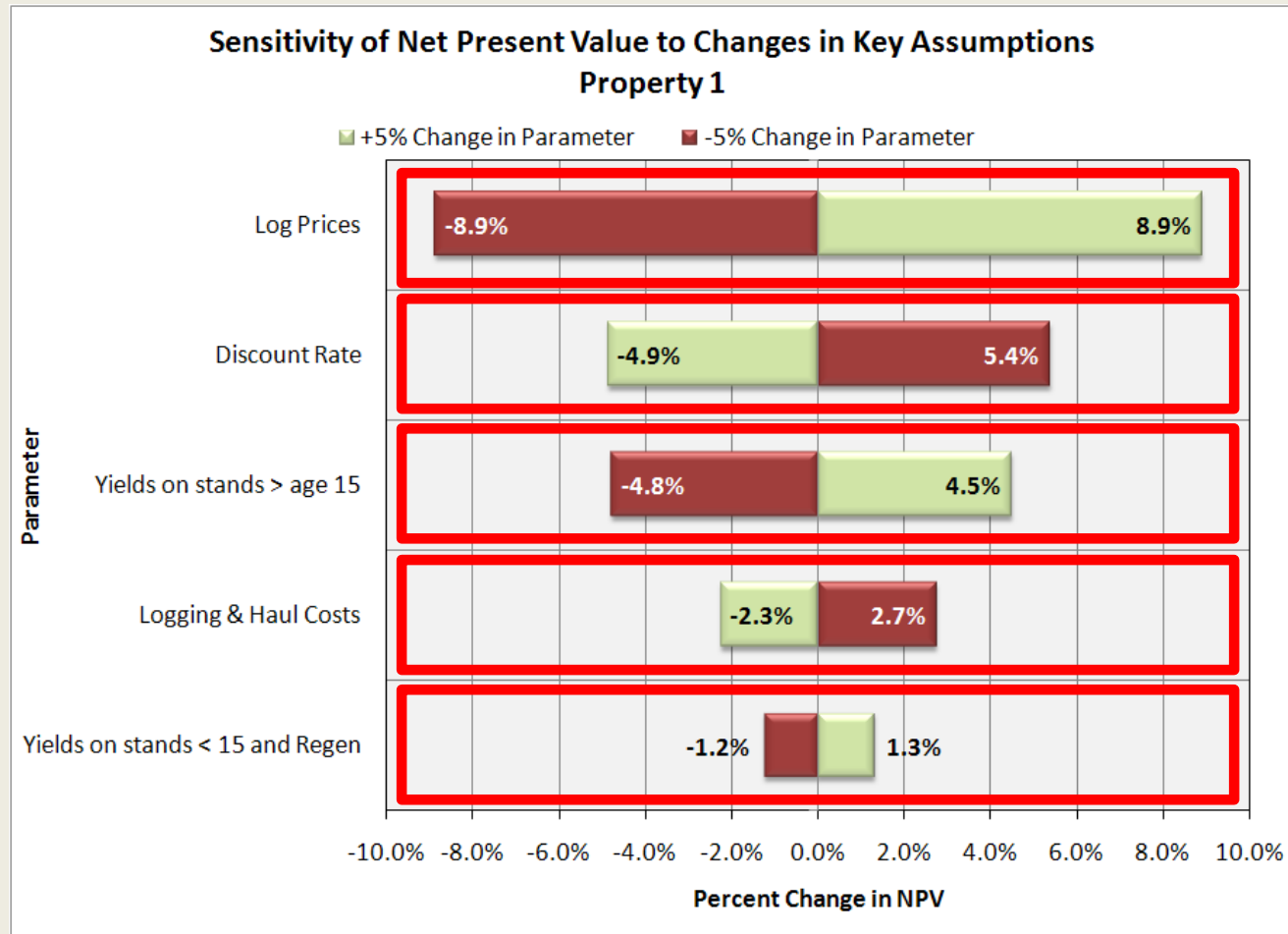
- The **income capitalization approach**
 - principle of anticipation
- The **sales comparison approach**
 - principal of substitution
- The **cost approach**
 - value is equated with the replacement cost

Income Approach

- Discounted Cash Flow analysis
 - Projected income stream and a reversion
- Key elements:
 - Timber growth & yield
 - Projected product prices
 - Projected harvest volume
 - Management costs
 - Discount rate
- Which are most important?

Key Factors Affecting DCF Valuations

- NPV is most sensitive to:
 - Log price projections
 - Discount rate
 - Near-term timber yields
 - Production costs



Log Price Projections

- At current discount rates, cash flows in the first 5 years represent only 15-30% of the NPV
 - Effect of short-term log market fluctuations are muted by long-term nature of DCF valuation
 - Especially because deferred harvest volume can be stored on stump and will continue to grow

Log Price Projections

Best Practice

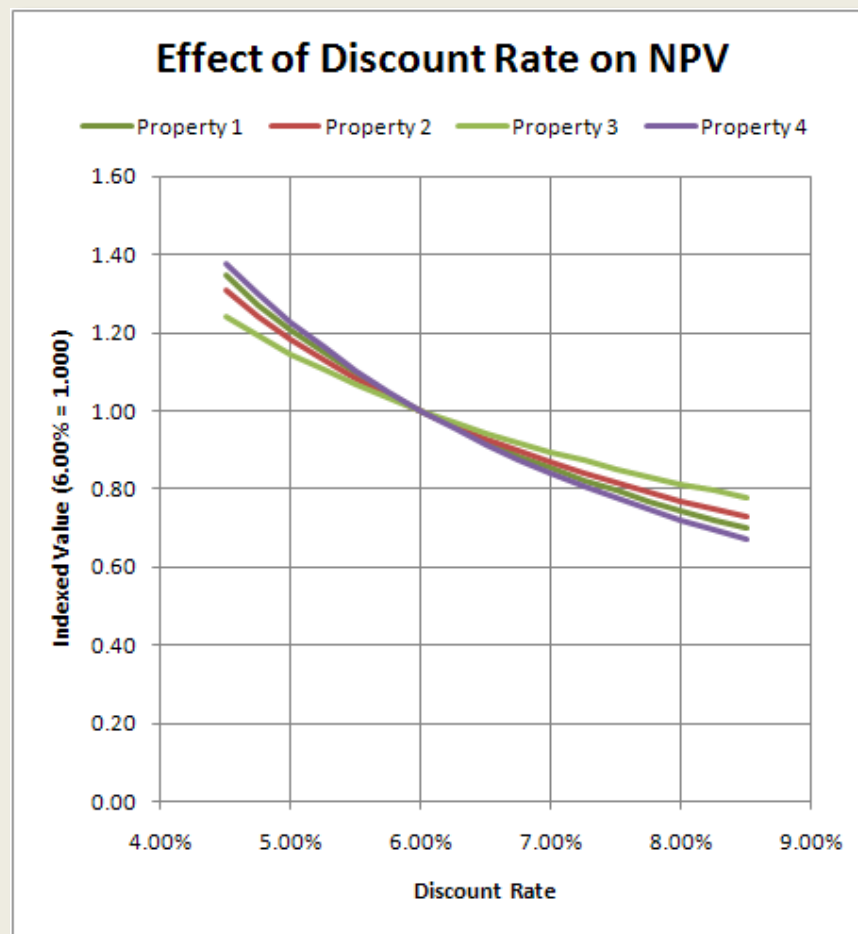
- Projections supported by
 - Macro-economic analysis
 - Property-specific history
 - Reasoned logic
- Log grade or product specific prices

Watch out for

- Unsupported price assumptions
- Over-reliance on trend prices
 - Long-term price appreciation not supported by history and/or an economic rationale

Discount Rate

- Sensitivity to D.R. change varies from property to property
- Depends on profile of income stream over time
- More impact on young forests with back-loaded income stream



Discount Rate

Best Practice

- Rate supported by market evidence
 - Transactions
 - Market participant surveys
 - Other disclosed evidence

Watch out for

- Unsupported rate assumption
- Rate not adjusted to property-specific risk factors



Appraiser Selection

Best Practice

- Third-party, independent general certified appraiser
- Qualified and experienced in timberland asset
- Properly supported opinion
- Developed with generally accepted valuation principles and standards
- Appraiser rotation

Watch out for

- Conflicts of interest
- Lack of timberland expertise
- Lack of geographic expertise

Working with an Appraiser

Data to Provide

- Legal description or GIS that identifies the property
- Legal ownership info
- Mineral ownership information
- Ownership history
- Sales/acquisitions last 3 yrs
- Pending sales, listings, or offers to purchase
- Assessed value & prop. taxes
- Timber inventory & acreage data as of appraisal date
- Timber sale data – prices, volumes, production costs
- Projected harvest levels
- Non-timber income sources
- Management costs
- Significant easements & encumbrances
- Anything else you think is significant



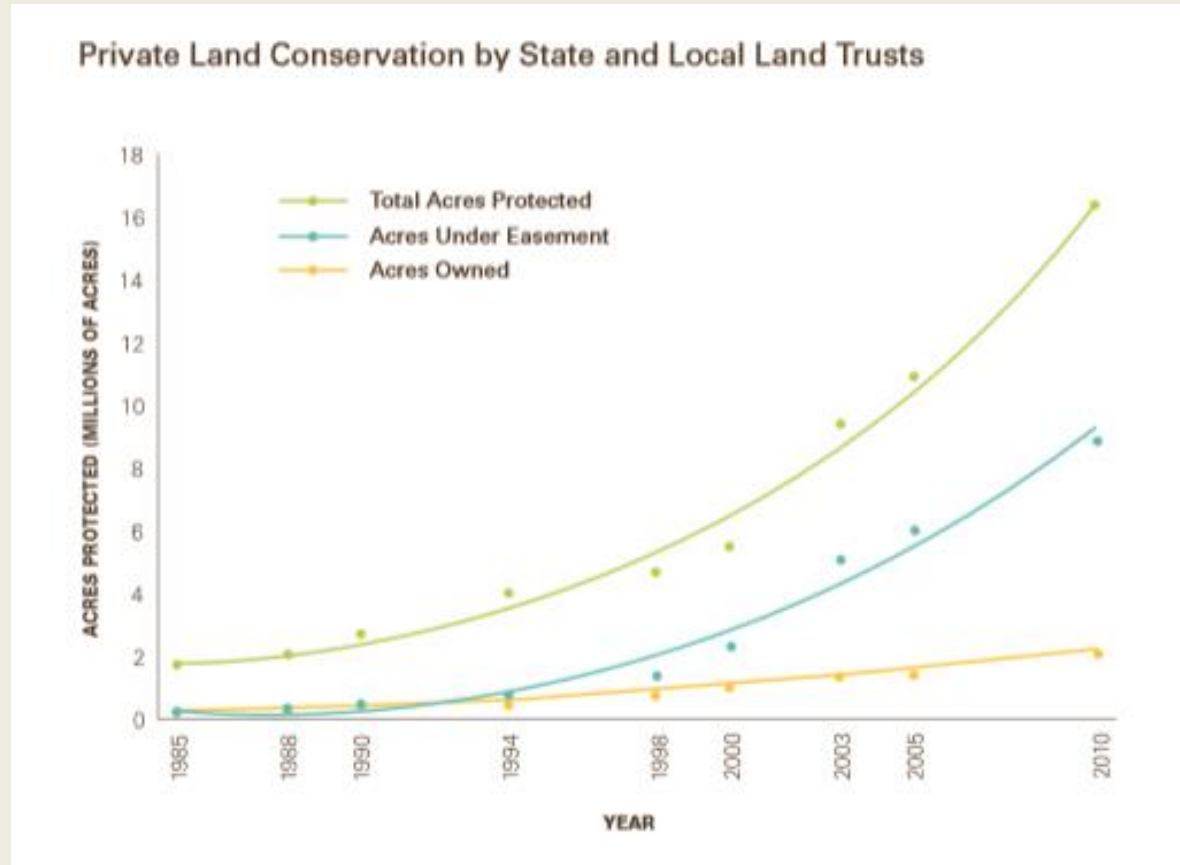
II. Conservation Easements

Conservation Easements

- What are they?
 - Voluntary legal agreement between a landowner and a qualified land trust or government agency that permanently limits uses of the land in order to protect its conservation values
 - Sale or donation of a portion of the “bundle of rights” held by the landowner
 - A legal interest in real property (recorded)
 - Perpetual, runs with the land

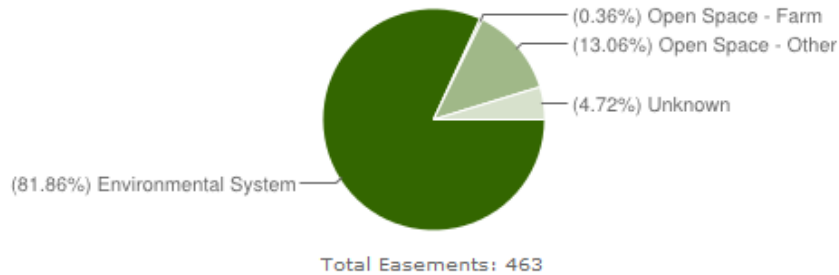
Conservation Easements

- 8.8+ million acres are under conservation easements



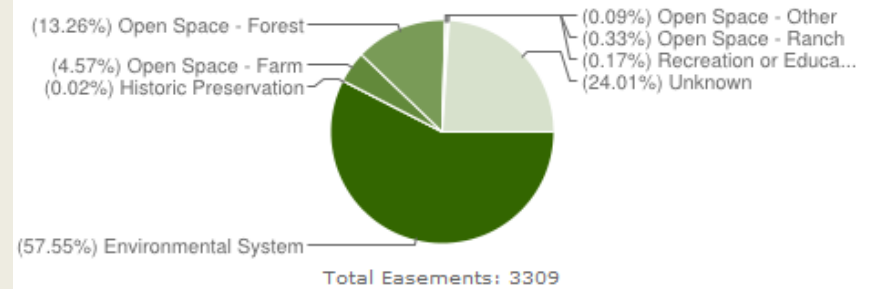
CE's in Oregon & Washington

Oregon – 137,027 acres



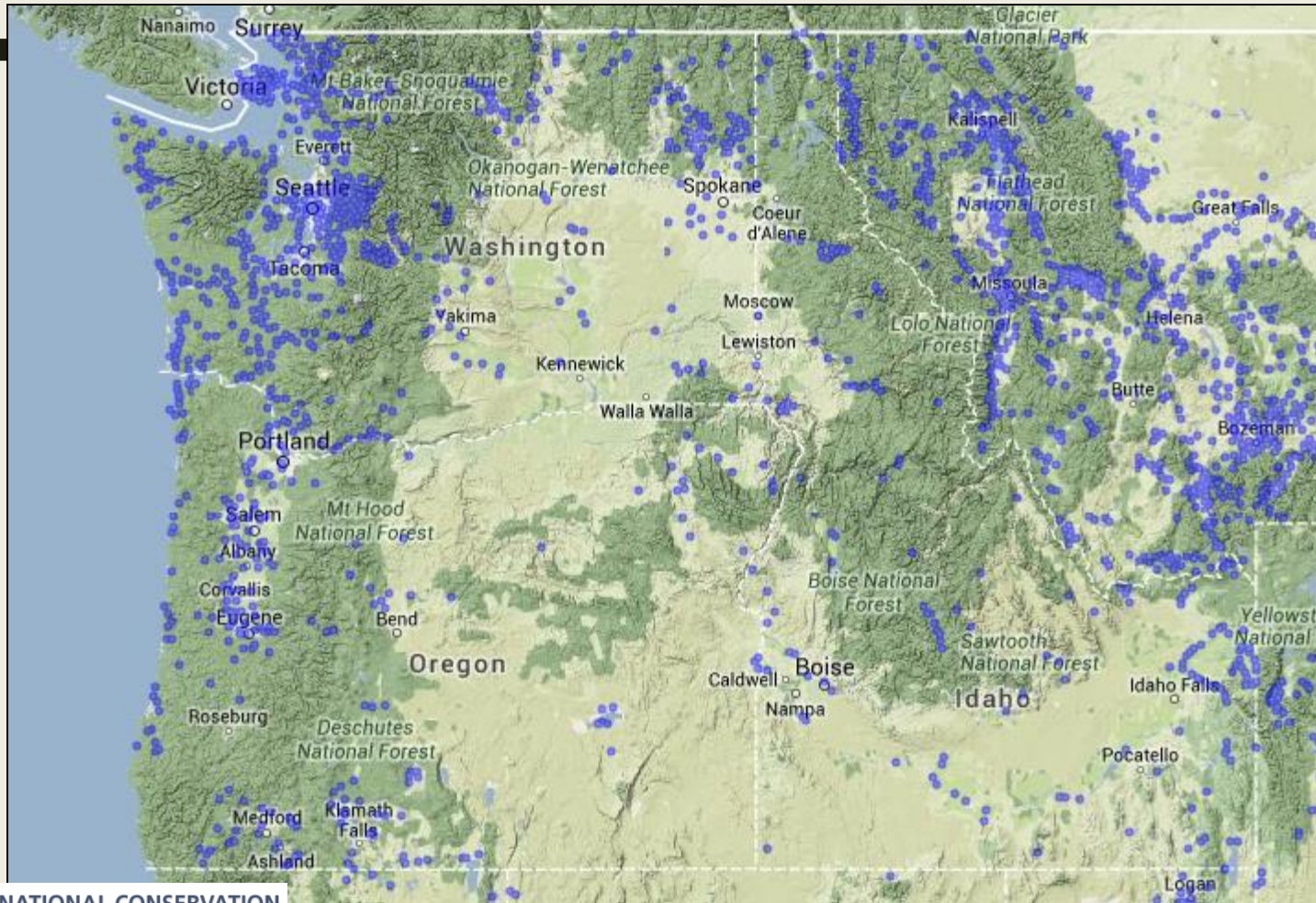
▲ Purpose	◆ Count	◆ Acres
Environmental System	352	112,165
Open Space - Farm	1	492
Open Space - Other	7	17,898
Unknown	103	6,472

Washington – 315,208 acres



▲ Purpose	◆ Count	◆ Acres
Environmental System	904	181,413
Historic Preservation	2	72
Open Space - Farm	567	14,403
Open Space - Forest	82	41,789
Open Space - Other	16	291
Open Space - Ranch	3	1,032
Recreation or Education	113	542
Unknown	1,622	75,666

Conservation Easements in NW



NCED NATIONAL CONSERVATION EASEMENT DATABASE

Conservation Easements

- Why would you do one?
 - Benefit to landowner is ability to maintain working forest while capturing H&BU value of the land
 - Always based on negotiation of terms with easement buyer
- But consider...
 - Liquidity risk and impact on value of a future sale
 - Forecloses future options

Sources of Funding

- Forestry-related sources
 - Forest Legacy Program (U.S. Forest Service)
 - Land & Water Conservation Fund (Park Service)
 - Wetland Reserve Program (NRCS)
 - Endangered Species Act Section 6 (USFWS)
 - Tax deductible charitable donation
- Most federal programs require “matching” donation (bargain sale)

Working Forest Easements

- “Working Forest” easements typically include
 - Limits on subdivision of the land
 - Prohibition on development for any economic use other than timber production
 - Prohibition on mineral exploration & development
 - Require approved Forest Stewardship plan
 - Might include protection of special areas, e.g. wetland
 - *May* require or prohibit public recreational access
 - Require compliance monitoring

Market Value of CE's

- Valued through a “Before and After” market value appraisal
 - “Before” value based on H&BU prior to encumbrance with easement with all existing landowner rights intact
 - “After” value based on H&BU as encumbered, considering easement restrictions and their effect on market value
- Market Value = diminution in value



Diminution in Value

- Diminution in value can range from 10% to 75% or more of the “before” value
- Dependent on rights granted in the easement and the difference in before and after H&BU



Conservation Easements

- Appraisal considerations
 - Differences in appraisal standards between federal agency (“Yellow Book”) appraisals and IRS Qualified appraisal of charitable donations
 - Value is theoretically the same
 - May require two appraisals
 - IRS closely scrutinizes charitable donations of conservation easements
 - Can be severe consequences for inflated values

Conservation Easements

- 5 Rules in Substantiating a Deduction
 - Date of appraisal no more than 60 days prior to contribution and not after due date of tax return
 - Appraise all property owned by taxpayer or related party contiguous to easement
 - Use a “Qualified Appraiser”
 - Have appraiser sign & date Form 8283
 - Hire an appraiser experienced in conservation easement appraisals



A logging truck with a red and yellow cab is parked on a gravel road in a forest. The truck's trailer is heavily loaded with large, cut logs. The logs are stacked high, showing their circular ends. The truck has a license plate that reads "10451". A semi-transparent green box with white text is overlaid on the center of the image.

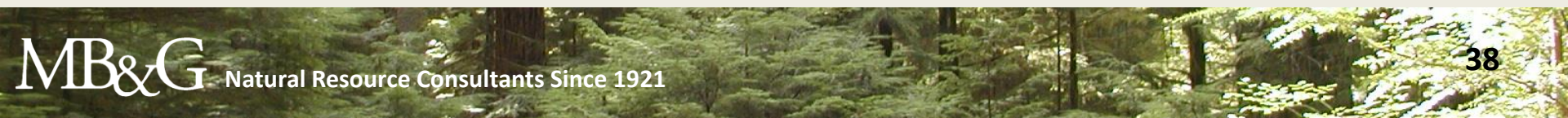
III. Capital Gains Treatment of Timber

Timber Under §631(a) & 631(b)

- § 631(a) sales - taxpayer cuts timber, converts to salable products, and sells products (or uses them in a business)
 - Requires an election to treat as capital gains
- § 631(b) sales – taxpayer sells standing timber
 - “lump sum” or “pay-as-cut” sales
- Timber sellers are taxed on net income by subtracting the timber depletion allowance and sale expenses from gross sale proceeds

Timber Under §631(a) & 631(b)

- Capital gain = Fair Market Value as of the first day of the taxable year in which it was cut less the adjusted basis of the standing timber
- Can use market price data 6 months before & after the first day of the tax year (e.g. Jan 1)



Timber Under §631(a) & 631(b)

- Fair Market Value definition:
 - “The price at which the standing timber that was sold would have changed hands between a buyer and seller on the first day of the tax year in which the trees were cut, assuming both parties had reasonable knowledge of all the necessary facts, and neither was required to buy or sell.”



Timber Under §631(a) & 631(b)

- Fair Market Value
 - Determined by the taxpayer in light of most reliable and accurate information available
 - with reference to the condition of the property as it existed at that date, regardless of all subsequent changes, such as changes in surrounding circumstances, and methods of exploitation, in degree of utilization, etc.



Timber Under §631(a) & 631(b)

- Factors to consider
 - Character & quality of the timber - species, age, size
 - Quantity per acre and the total quantity
 - Location relative to markets
 - Accessibility, topography
 - Probable cost of harvest & delivery
 - Market conditions



Timber Under §631(a) & 631(b)

- Our general process
 - Delivered log prices from published reports & purchase orders \pm 6 mos. from Jan. 1st
 - Estimate price by species, sort, and grade
 - Subtract actual logging and haul costs (incl. some road costs) from the property for sales during the year
 - Equals FMV of stumpage as of Jan 1st



Timber Under §631(a) & 631(b)

- Sources of Delivered Log Prices in OR & WA
 - Forest2Market (subscription)
 - Forest2Market.com
 - RISI Log Lines (subscription)
 - <http://www.risiinfo.com/risi-store/do/product/detail/log-lines.html>
 - Oregon & Washington Log Price Reports (subscription)
 - logmkt@comcast.net
 - ODF Pond Price Report (free)
 - http://www.oregon.gov/ODF/pages/state_forests/timber_sales/logpage.aspx
 - Washington DNR Log Price Report (free)
 - http://www.dnr.wa.gov/BusinessPermits/Topics/timbersaleauction/pages/psl_ts_query.aspx



IV. Timber Casualty Losses

Timber Casualty Losses

- Under §165(a) a deduction is allowed for loss sustained during the taxable year
 - From fires, windstorms, hurricanes, theft
 - Not insect and disease losses
- Business casualty losses are determined by reference to the “single, identifiable property” (SIP) damaged or destroyed
- For timber, the SIP is generally the depletion block

Timber Casualty Losses

- The amount of deduction is the lesser of:
 - The diminution in fair market value of the SIP, or
 - Its adjusted basis
- Requires a fair market value appraisal of the depletion block (SIP) “before and after” the casualty
Treas. Reg. § 165-7(a)(2) and (b)(2)



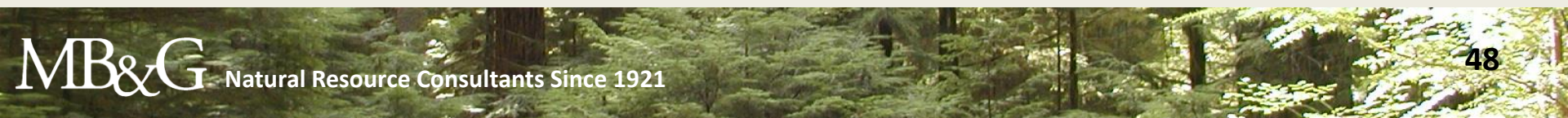
Timber Casualty Losses

- Damages are NOT:
 - Timber volume lost \times stumpage value per unit
- This gross timber value does not reflect the reduction in market value of the SIP as a whole



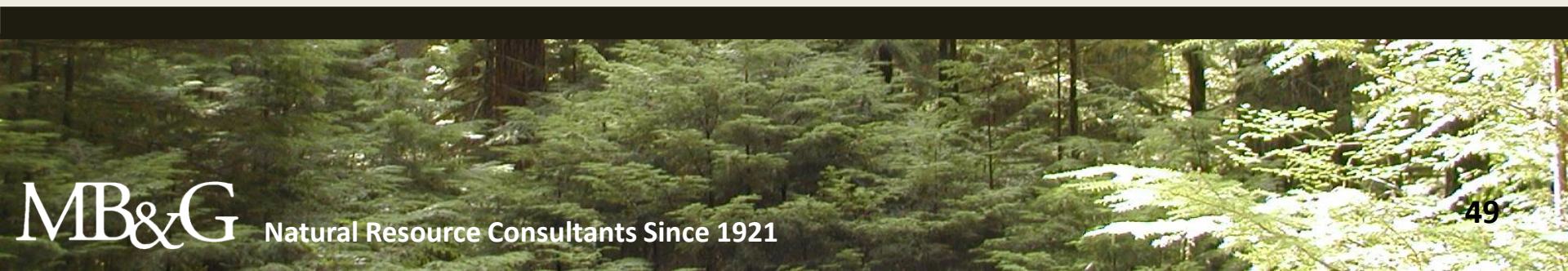
Timber Casualty Losses

- Implications
 - Deductions for timber casualty losses in large or heavily depleted depletion blocks may be highly discounted relative to the market value of the damaged/lost timber





Questions?



About Mason, Bruce & Girard

MB&G began as a forestry consulting business in 1921 under David Mason. Mason began his first forestry consulting firm soon after the 1920 publication of his research on the timber industry and lumber production in the Pacific Northwest.

As a result of his efforts to move the timber industry toward a more professional and sustainable approach to forestry, he became widely known as one of the nation's first leading advocates of sustained yield forest management.

In 1936, Mason created a partnership with Donald Bruce — Mason & Bruce. Not long thereafter, James Girard joined the group, and in 1948 the firm adopted its present name — Mason, Bruce & Girard.

By the middle of the 20th Century, David Mason's and MB&G's influence on the forestry industry was second to none. In fact, in 1952 Frederick Weyerhaeuser said of David Mason: "No single person has been more influential in promoting sound forest management on private forest lands than he."

Over the years, MB&G has expanded its range of services, and today has diversified into a full-service natural resources consulting firm, with expertise in forestry, environmental services, and geospatial analysis.



David Mason

