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# Draft Forest Project Protocol Version 3.0, August 2009

Public Workshop  
August 17, 2009



# History

- Version 1.0 - June 2005
- Version 2.0 – June 2007
- Version 2.1 adopted by ARB in October 2007
  - Directed CAR to consider further revisions to allow greater participation from industrial working forests and public lands
  - CAR also sought to expand geographic application and improve technical aspects
- New workgroup convened in November 2007



# Public Process

- Workgroup Meetings
  - Every 3 weeks in day-long sessions
  - Meetings open to public observers
- Public Review and Comment
  - Two separate drafts (12/08 & 4/09)
  - Two specific issue documents
    - HWP – 2/09 and PIA – 6/09)
- Four public workshops (7/08, 12/08, 2/09, 4/09)



# Public Process

- Written Comments
  - All written comments on both drafts and on special issues posted to website
    - Written responses to all comments prepared and also posted to website (~ 300 pages)
- Board Hearing – July 1, 2009
  - Public session to address the board on issues and concerns
    - Provide direction to staff on steps to finalize



# Current Steps

- Final Draft Protocol released on August 3, 2009
- Workshop held for small landowner interests on August 12, 2009
- CAR Board Meeting on September 1, 2009 to consider adoption
- ARB Board Meeting on September 25, 2009 to consider adoption(?)
  - For recognition of early voluntary actions



# Key Updates to the FPP

- Expands applicability of protocol
- Improves baseline calculations
- Refines definition of “natural forest management”
- Includes harvested wood products
- Better addresses permanence
- Better leakage accounting
- Improve cost-effectiveness
- Other clarifications and enhancements

# Increasing Participation by Improving Cost-Effectiveness



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- Verification efficiencies
  - Annual report verification and 6-year site audit plus increased direction to verifiers
- Inventory efficiencies
  - Landowner-friendly inventory updating and plot monumenting
  - Inventory of project lands only, not entire forest holdings

# Increasing Participation of Small Landowners



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- Protocol updates represent improved economies of scale for all
- Further improvements sought by developing aggregation systems for small landowners
  - Recommend to Board at September meeting that a small landowner work group convene to develop aggregation rules with public workshop and comment period



# Increasing Participation of Public Landowners



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- Public lands eligible for all project types
- Updated protocols removed previous barriers for public lands (entity reporting, conservation easements, baseline approaches)
- Public lands contribution to buffer pool recognizes low reversal risk



# Staff Changes from Workgroup

- Include landfill carbon when necessary for conservativeness (not for crediting)
- Impose policy on management of deadwood, including deadwood following catastrophic events
- Impose restrictions on site preparation activities for reforestation projects
- Modify approach to leakage on IFM projects from 100-year assessment to annual assessment



# Baseline Calculations

- *Reforestation* now eligible on lands that have undergone a recent natural disturbance
  - Previously only forest land that was unforested for longer than 10 years qualified
  - Projects must occur where reforestation is not likely under baseline conditions
  - Projects must account for site preparation activities (including management of dead pools and remaining live stocks)



# Baseline Calculations

- *Improved Forest Management* baselines is standardized, applies throughout U.S.
- Approach uses national dataset (FIA) and assesses:
  - Initial stocking levels
  - Common practice on surrounding lands
  - Legal constraints
  - Financial constraints



# Baseline Calculations

- *Avoided Conversion* baseline is more standardized
  - Option to use default baseline conversion rates associated with different alternative land uses
  - Requires “uncertainty discount” to compensate for baseline uncertainty where difference in expected land use values is not large



# Natural Forest Management

- Must employ defined sustainable harvesting and natural forest management practices
- Three options for sustainable harvesting
- Natural forest management demonstrated by meeting, or showing progress toward, standard criteria, including
  - Mixture of native species and age classes
  - Requirement to manage for dead wood recruitment/retention



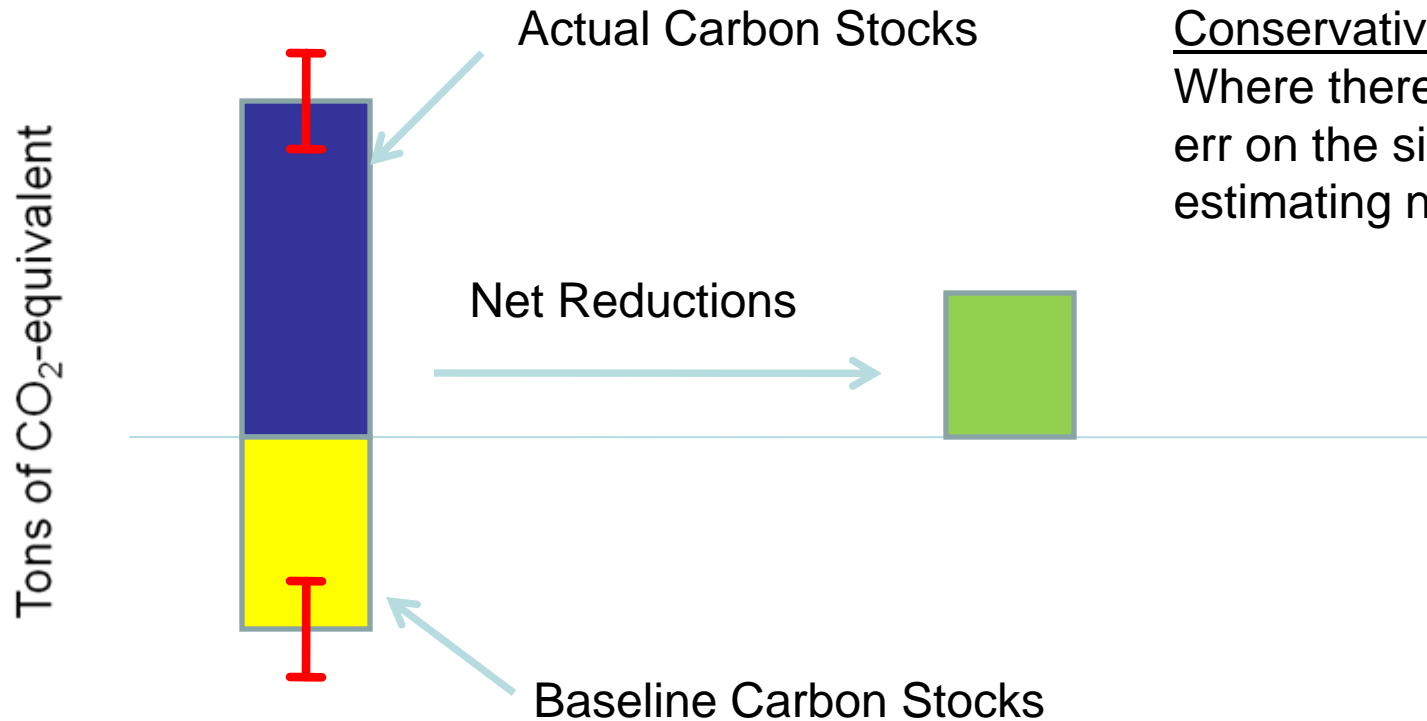
# Harvested Wood Products

- Accounting for carbon in harvested wood products is now required
- Accounting is based on the average amount of carbon expected to remain stored in wood products over 100 years (Data from US DOE)
- Two main “pools” of HWP carbon:
  - Carbon in “in-use” wood products
  - Carbon in wood products sent to landfills
- Accounting depends on whether wood product production is increased or decreased

# Project Carbon Accounting



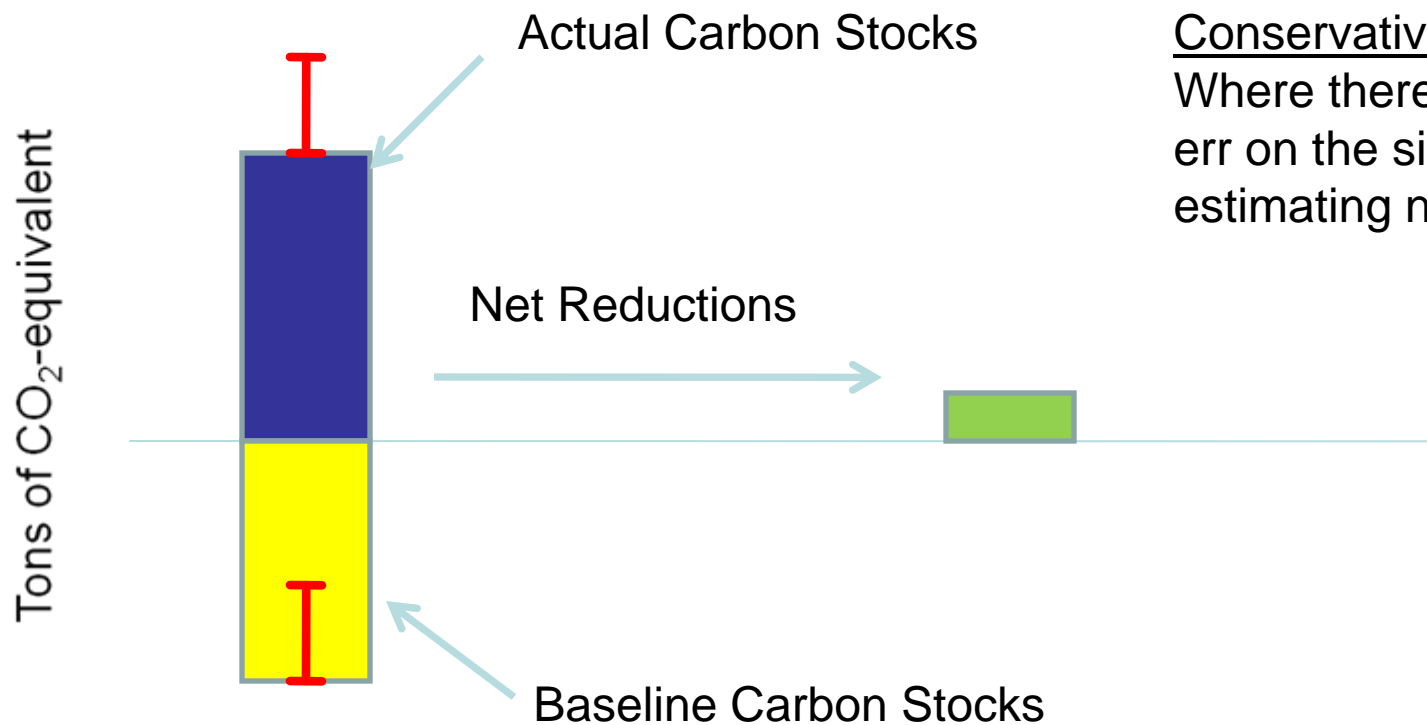
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Conservativeness Principle:  
Where there is uncertainty,  
err on the side of under-  
estimating net reductions



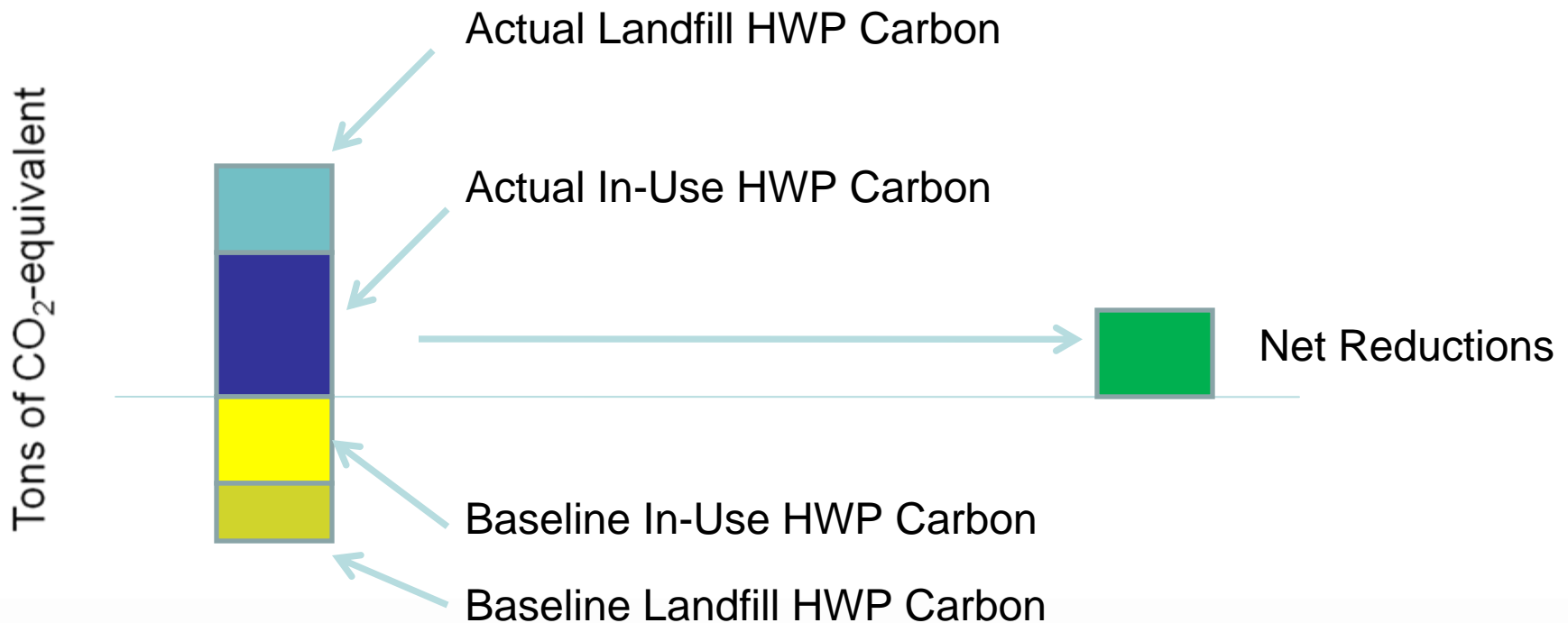
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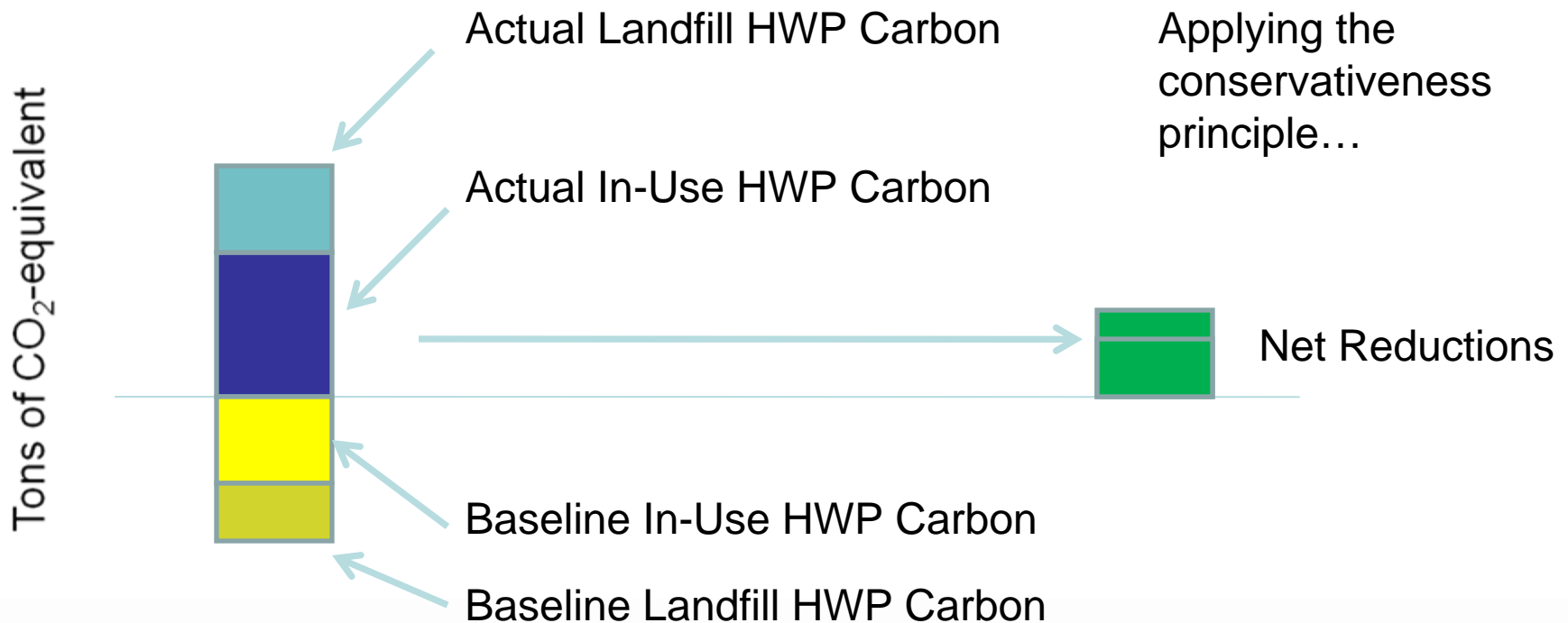
# Harvested Wood Products

## Projects That INCREASE Production of Wood Products



# Harvested Wood Products

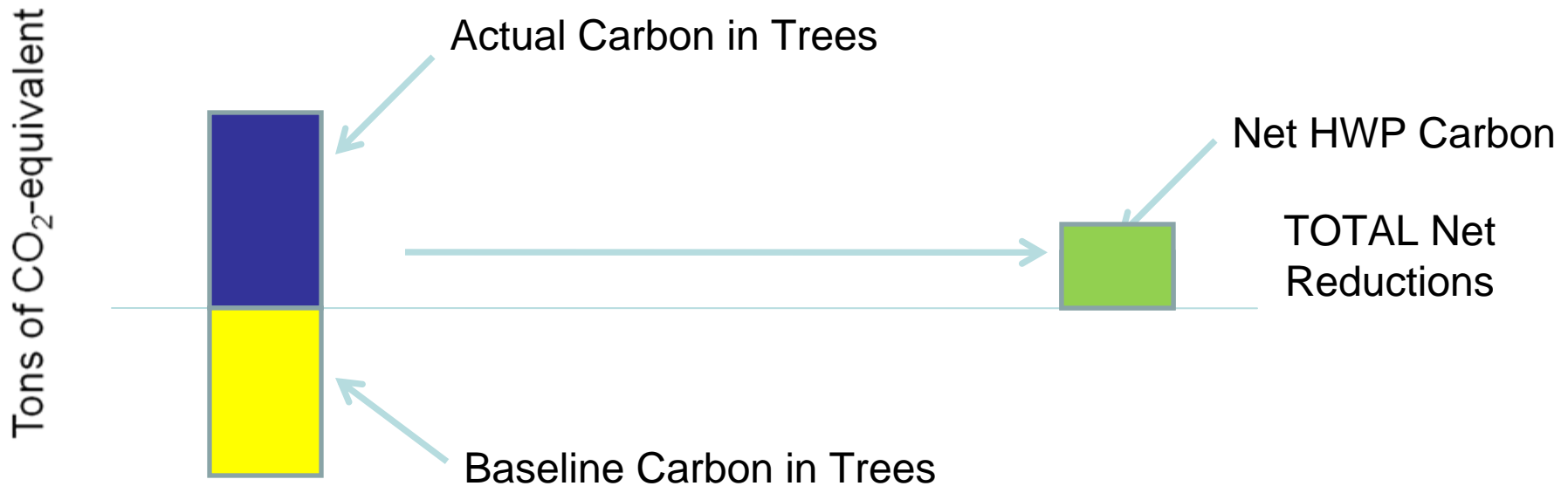
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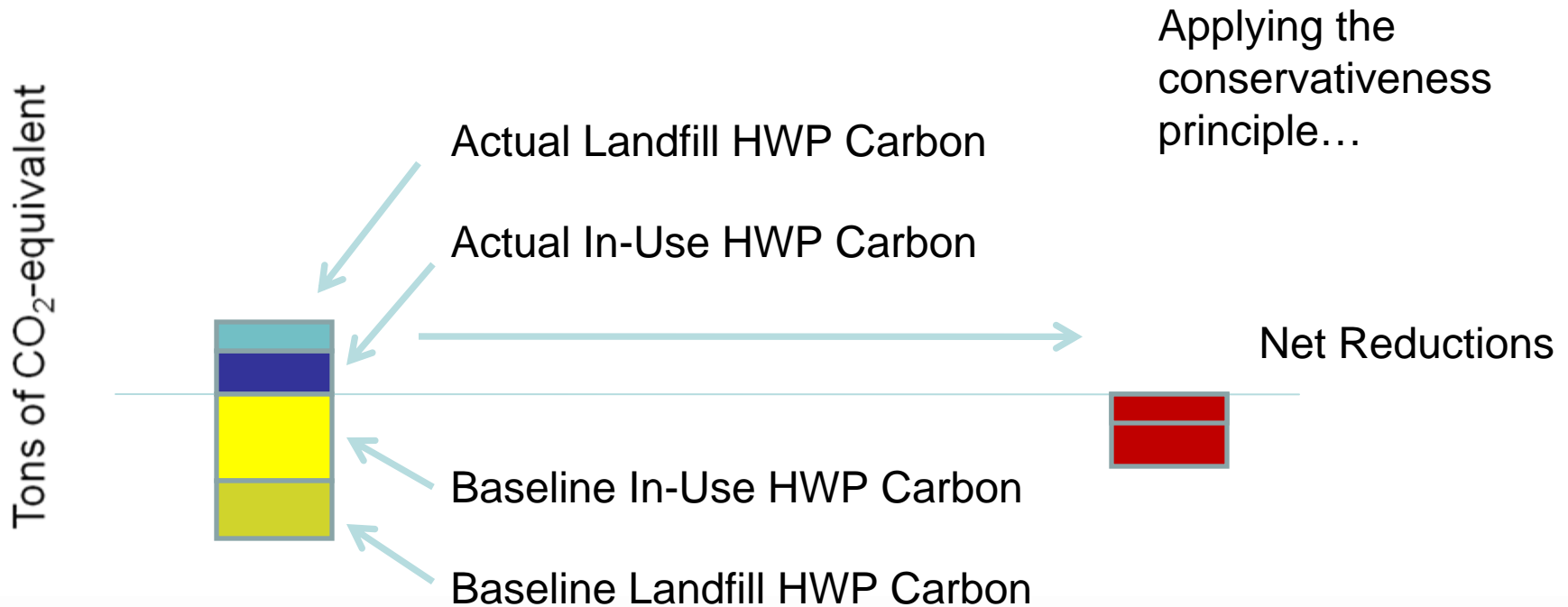
## Projects That INCREASE Production of Wood Products





# Harvested Wood Products

## Projects That DECREASE Production of Wood Products

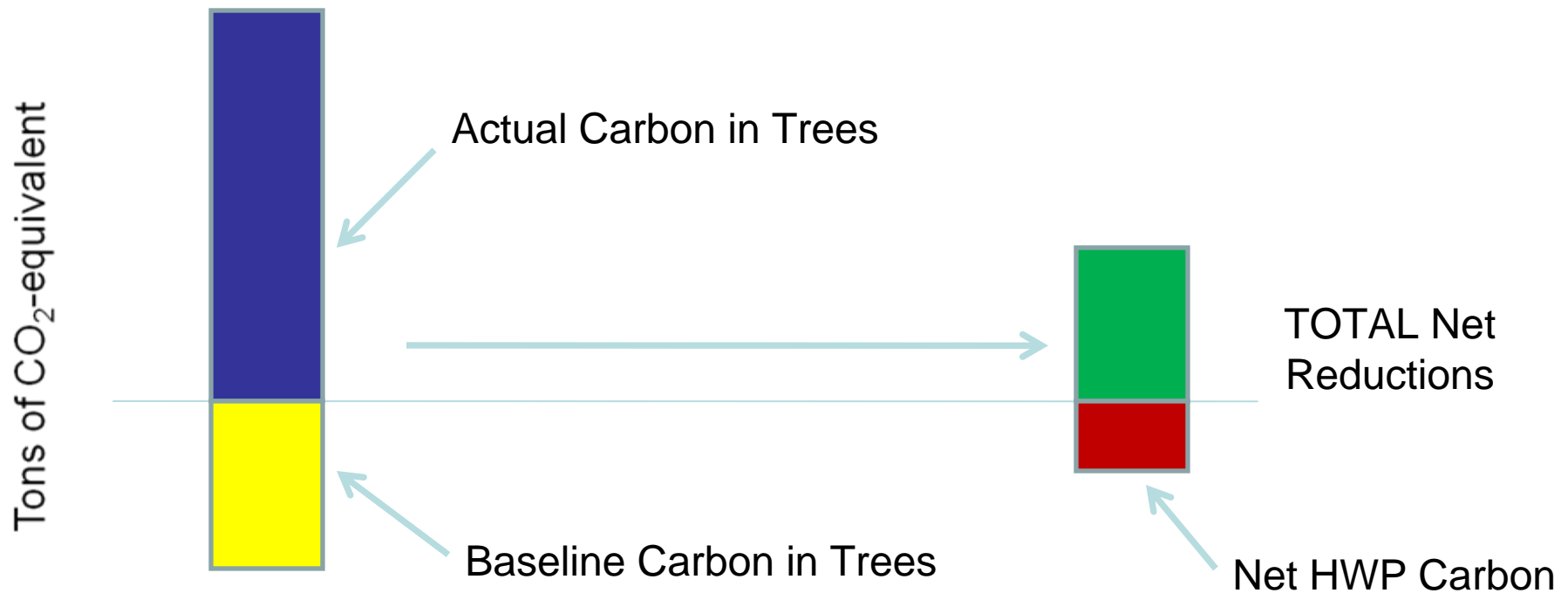


# Harvested Wood Products



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## Projects That DECREASE Production of Wood Products





# Addressing Permanence

- The Issue:
  - Carbon stored in forests can be released back to the atmosphere (i.e., “reversed”), negating carbon offset claims
- FPP Approaches:
  - Long Term Monitoring and Verification
  - Compensation for reversals
- Two Types of Reversals
  - Unavoidable: fire, pests, disease, wind, etc.
  - Avoidable: over-harvesting, financial failure, project termination



# Addressing Permanence

- Unavoidable Reversals
  - Establishment & Operation of a Buffer Pool
    - Contribution to pool based on risk assessment of project
    - Reserve to administer (using third-party)
    - CRTs retired from pool to compensate for unavoidable reversals
    - Reserve seeking re-insurance





# Addressing Permanence

- Avoidable Reversals
  - Project developer must surrender (retire) CRTs equal to the amount of CO<sub>2</sub> reversed
  - Can be own CRTs, or CRTs purchased from other forest projects
  - Failure to do so results in project suspension and/or termination
    - Other legal remedies can be applied



# Addressing Permanence

- Project Implementation Agreement
  - Protocol enforced by requiring forest owners to enter into a long-term contract with the Reserve
  - Requires adherence to the terms of the Forest Project Protocol, including
    - Specifies remedies in the case of an “avoidable” (intentional) reversal
    - Specifies conditions under which projects can be terminated prior to the end of their 100-year commitment under the FPP



# Addressing Permanence

- Conditions for Project Termination
  - All projects must retire a number of CRTs equal to the total quantity issued to them
  - For improved forest management projects, CRTs must be paid back at a greater than 1:1 rate if termination occurs before 50 years
    - Special clause for termination to enter state or federal regulatory program where ongoing permanence is guaranteed by government
  - All CRTs retired to compensate for termination must come from forest projects



# Addressing Permanence

- Ensuring Contract Enforceability/Longevity
  - Requires that counterparty seek assignment of PIA to subsequent forest owner
  - Requires recording of notice of PIA on title to inform potential purchasers
  - Requires additional contribution to buffer pool to address risk of financial failure
    - Contribution is reduced if forest owner:
      - has a qualified conservation easement or deed restriction, or is publicly owned
      - subordinates all other agreements to PIA



# Leakage

- The Issue:
  - Reducing harvests in one area can lead to increased harvesting somewhere else
  - Reforesting on crop or grazing land could lead to clearing of other forest land for those uses
  - Avoiding conversion on one piece of land could lead to conversion somewhere else



# Leakage

- Approach:
  - Leakage accounting has been broadened to take into account market effects
  - It is no longer required to look at shifts in activity on a particular forest owner's own land
  - Default factors are used to estimate how the entire market will respond, depending on the project type



# Other Changes

- Clarification of project start dates
- Standardization of required carbon pools
- Improved guidance for estimating the risk of land use conversions (avoided conversion projects)
- Clarification on the definition of the project area
- More specificity for modeling and monitoring carbon stocks
- Clarifying monitoring, reporting, and verification requirements