

# Economics of Soil C Sequestration

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U.S. Senate Briefing, 10 Russell Bldg., March 20, 2009

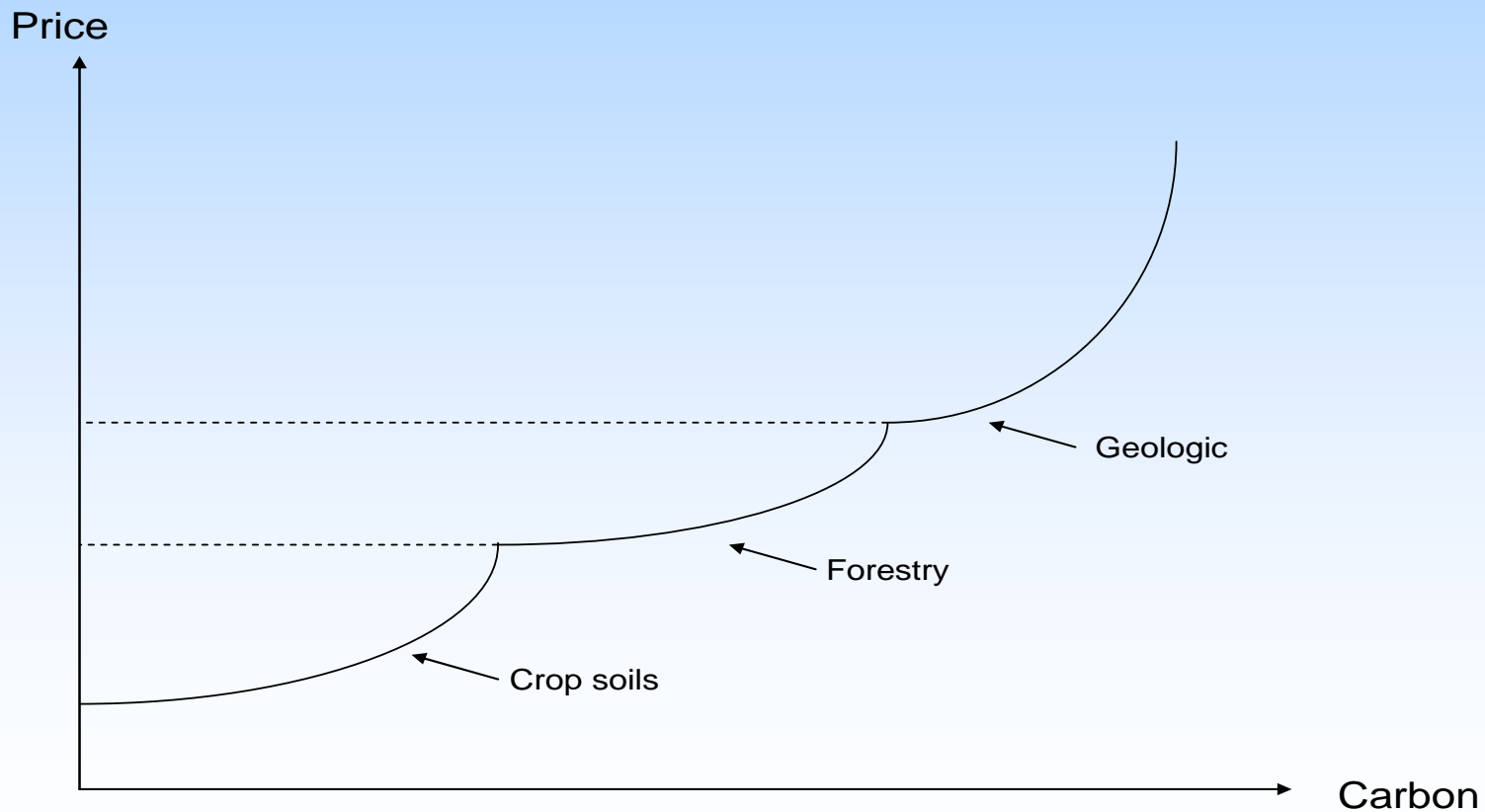


# Farm-level decision to enter C contract

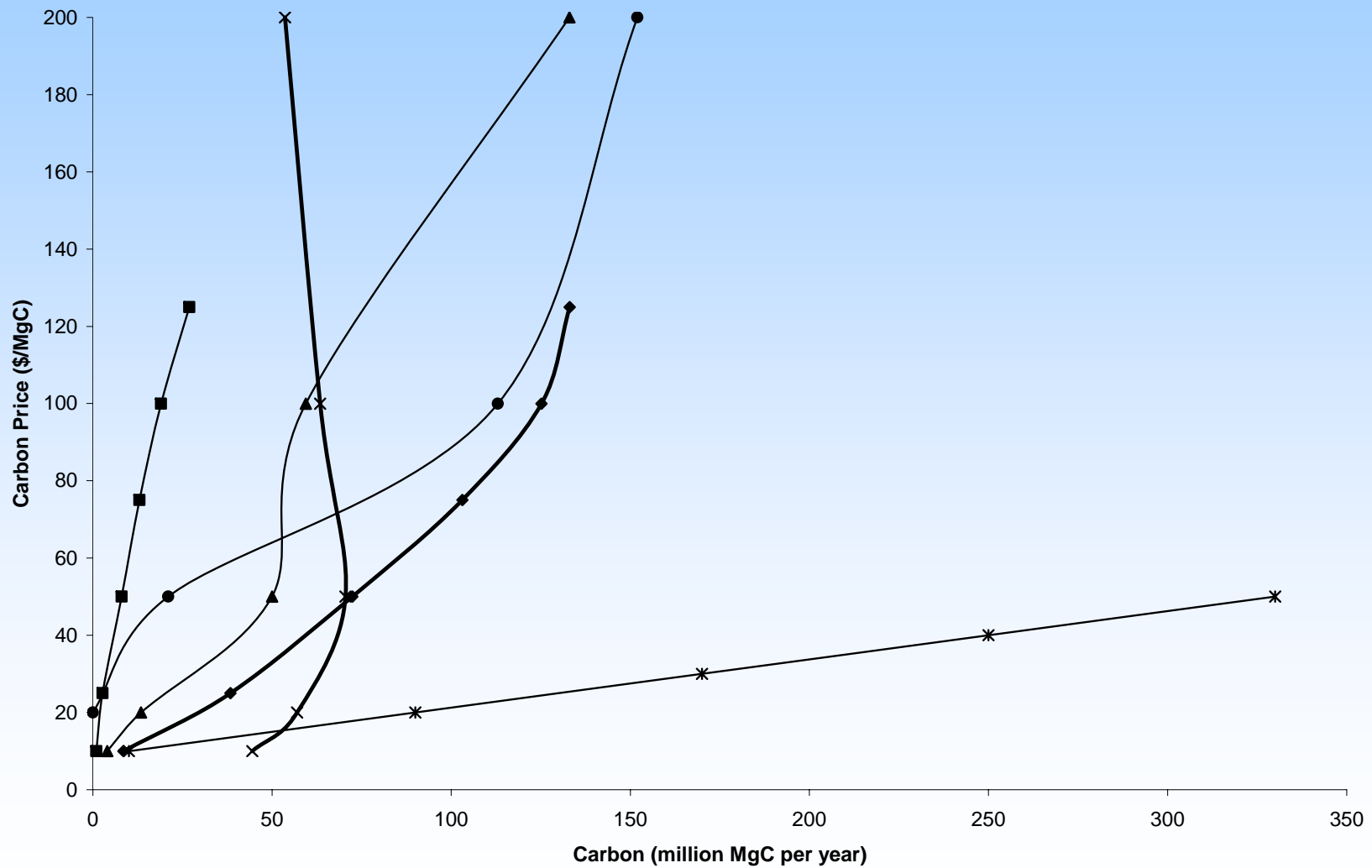
- Soil C an example of an ecosystem service
- Similar to contracts for CRP etc.
- Opportunity cost of changing practices =  
change in returns + other adoption & transaction costs
- For payment  $P$  (\$/ha), expected sequestration rate  $C$  (MgC/ha), farmer will enter contract if  
 **$P > (\text{Opportunity Cost})/C$**
- Opp Cost &  $C$  vary over the landscape so willingness to participate will vary
- Risks/uncertainties in Opp Cost,  $C$  and  $P$
- Permanence: paying for storage (an issue for any mitigation strategy!)

# Technical and Economic Feasibility

- Why offsets? Need a cost-effective, diversified strategy
- Soils: a “cup half full”, feasible now, low-cost & risk, co-benefits, no-regrets, use existing institutions & regulations



# US C supply curves from studies of afforestation and crop soils (from Pew Report)



ERS Afforestation ERS Crops MS Afforestation MS Crops SR Afforestation MS Biofuels