Based on the discussion about the carbon pools and using the graph of data from those pools (see page 2 of this handout), answer the following questions.

1. Where does the carbon come from when trees grow?

2. When the forest is cut (years 2045, 2090, and 2135), which carbon pools decrease immediately? Which carbon pools increase immediately? For each carbon pool, explain why it increases or decreases.

3. What happens immediately to the total carbon (represented by the black line that follows the top edge of the colored area on the graph) during the years that trees are harvested? Explain why in terms of your answer to Question 2.

4. What happens to the total carbon sequestered during the decade after each harvest year (2045–2055, 2090–2100, and 2135–2145)? Explain this behavior in terms of the carbon pools.

5. What happens to the total carbon sequestered at year 2125? Which carbon pool is responsible for this behavior? Explain why this carbon pool changes during this year.

6. Describe the carbon-saved pool. Why is this the biggest component on the graph? If it is so much bigger than the forest pool, can we obtain these benefits without the forest carbon pool?

7. Which carbon pools tend to grow over time and which ones are cyclical, rising and falling over time? What insights about carbon sequestration does this provide?
Combining Carbon Pools (2 of 2)

Forest + Dead Wood + Short-lived Products + Long-lived Products + Carbon Saved Pool

![Graph showing the combination of carbon pools over time](image-url)