Rough Seas Ahead for the foreseeable future

Fiber Market Turbulence Drivers:

- Consumer Operating Rates
- Consumer Approach to PNW Fiber Procurement
- Transportation
PNW Pulp Mill Operating Rates

• The PNW Pulp & Paper industry is now relatively small from a global perspective.

• The Brown paper market has softened after many years of solid performance.

• Brown paper producers are focusing almost exclusively on product price vs full mill operating rates.

• The PNW is considered a high cost raw material region thus generally takes the most market related downtime.

• When a mill is selected for unplanned downtime, the Fiber manager is often one of the last to be notified.
Wide range of approach to PNW Fiber Procurement

- Inventory space limited physically or by company policy.
- Truck Dump infrastructure is generally old, fragile and a low priority.
- Long truck wait times deemed acceptable.
- Broad interpretations of:
  - “Long term”
  - “Relationship”
  - Pricing period (Qtrly, Monthly etc.)
- Competitor Trades and Buy / Sell agreements rare.
- PNW Fiber managers losing autonomy and authority.
  - Key decisions made in another market geography.
- Residuals vs. WLC
Truck Transportation Capacity

Limited availability to support upset conditions
- Unrelenting Driver shortage.
- Long Hauls with large volumes.
- Long turn times.
PNW Impact

• Wide range in fiber pricing.
  • Note PNW vs. US South
• Sudden changes in fiber flow conditions.
• Poor decisions often made under stress.
• Higher transportation rates.
• Stressed wood with no place to go.
• Costly reload satellite yards established.
• Unreliable fiber cost forecasting.
  • Assumptions?

The distance between too much and not enough has never been so narrow.

BUCKLE UP AND HOLD ON TO THE RUDDER!