



**WEST COAST COLLABORATIVE**  
A public-private partnership to reduce diesel emissions



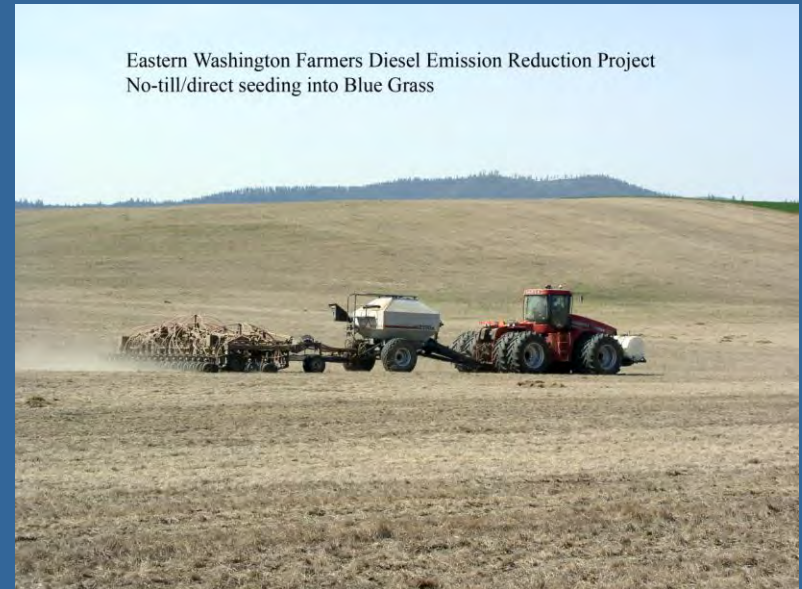
# Passenger Locomotive Upgrade Project

- » Project partners: Sacramento Metro AQMD, Bay Area AQMD, EMD, and Caltrans
- » Upgrade of tier 0 EMD passenger locomotive to tier 2
- » First project of its kind for this type of locomotive
- » Project cost: \$900,000; Very cost-effective: Approx. \$2,000 per ton.
- » Significant emissions reductions:
  - › 62% reduction in NOx
  - › 45% reduction in ROG
  - › 47% reduction in PM, and
  - › 39% reduction in CO2.
- » Next steps: Sacramento Metro AQMD will work with Bay Area AQMD and other partners to pursue additional retrofits



# Eastern Washington Farmers Diesel Emissions Reduction Program

- » Project Funding: \$100,000 EPA and \$400,000 leveraging
- » Project Partners:
  - › 21 Eastern Washington farmers
  - › 9 Conservation Districts
  - › 2 Resource Conservation & Development Councils
  - › 1 Private Firm
- » 16,900 acres converted
- » Project Results:
  - › 59% fuel savings
  - › 61% tractor time Savings
  - › 61% crop preparation labor savings
  - › emission reductions: 292 tons CO<sub>2</sub>, 3.7 tons NO<sub>x</sub>, 2 tons CO





# Plug-In Hybrid School Bus Project

- » Project Funding: \$30,000 EPA; \$185,000 leveraged
- » Project partners:
  - » Napa Valley Unified School District;
  - » Bay Area Air Quality Management District;
  - » Pacific Gas & Electric Co; and
  - » Advanced Energy
- » The school district became one of only seven school districts in the country – and the first in California– to operate a plug-in hybrid school bus
- » Project is expected to improve fuel economy by 70-100% and reduce emissions by up to 90 percent.



California's first **plug-in** hybrid school bus – funded in part by EPA's Clean School Bus program and the West Coast Collaborative – was dedicated in Napa, CA, on August 10, 2007.

# Thank You Wayne!

**For your visionary  
leadership  
in establishing the  
West Coast Collaborative  
to reduce diesel emissions &  
improve human health  
in the West**