



## WEST COAST COLLABORATIVE

A public-private partnership to reduce diesel emissions

The West Coast Collaborative's goal is to leverage federal funds and reduce emissions from the most polluting diesel sources in heavily impacted communities. The Collaborative seeks to significantly improve air quality and public health by targeting the highest polluting diesel engines and equipment with the most cost-effective control strategies.

# DERA 2019: Replacing Diesel Locomotive Switchers in the San Joaquin Valley, CA

The West Coast Collaborative (WCC) is pleased to announce the San Joaquin Valley Unified Air Pollution Control District's (SJVUAPCD) receipt of a United States Environmental Protection Agency (US EPA) Diesel Emissions Reduction Act (DERA) grant to replace three diesel locomotives operating in the San Joaquin Valley. This project will be implemented using \$2,246,080 in DERA grant funding combined with \$6,317,103 in matching funds from the SJVUAPCD and participating railroads.

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### What is the Project?

This project will replace 3 diesel locomotives operating in the San Joaquin Valley with new diesel locomotive switchers having Tier 4 engines, greatly reducing the amount of pollution that is emitted by those rail yard switcher operations. These locomotive switchers are used throughout the Valley at various rail yards.

### Why is this project important?

Exposure to diesel exhaust is associated with decreased lung function and can also exacerbate the symptoms of asthma, bronchitis and pneumonia. By replacing older, higher-emitting locomotive switchers, this project reduces human exposure to diesel emissions and those negative health effects associated with exposure. The San Joaquin Valley is one of the most agriculturally diverse and productive regions in the world. Due to the area's unique topographical and meteorological conditions, it also has some of the poorest air quality areas in the nation.

### What are the Environmental Benefits?

Over the remaining lifetime of the 3 affected engines, these replacements are estimated to reduce emissions of oxides of nitrogen (NOx) by 745 short tons, fine particulate matter (PM2.5) by 27 short tons, hydrocarbons (HC) by 60 short tons, and carbon dioxide (CO<sub>2</sub>) by 4,207 short tons. Additionally, the reduction of PM2.5 emissions will also reduce black carbon (BC), which has been shown to affect climate by directly absorbing light, reducing the reflectivity ("albedo") of snow and ice through deposition, and interacting with clouds.

### Who are the Partners on this project?

The project will be administered by the SJVUAPCD, a regional agency with jurisdiction over air quality in the San Joaquin Valley Air Basin. SJVUAPCD received the DERA grant award through the WCC, and will distribute the grant funds to project partners San Joaquin Valley Railroad and California Northern Railroad Company. SJVUAPCD will be responsible for data monitoring and reporting for the project.

### What is the Collaborative?

The WCC is an ambitious partnership between leaders from federal, state, local, and tribal government, the private sector, and environmental groups committed to reducing diesel emissions along the West Coast. Partners come from all over Western North America, including: Alaska, Arizona, California, Hawaii, Idaho, Nevada, Oregon, Washington, the Pacific Islands, Canada and Mexico. The WCC is part of the US EPA National Clean Diesel Campaign ([www.epa.gov/cleandiesel](http://www.epa.gov/cleandiesel)).

### How can I find out more information?

For more information on this project, please contact Francisco Dóñez at US EPA ([donez.francisco@epa.gov](mailto:donez.francisco@epa.gov) or 213-244-1834). For more information on the WCC, please visit our website. [www.westcoastcollaborative.org](http://www.westcoastcollaborative.org)