**West Coast Diesel Emissions Reductions Collaborative**
**Federal Network for Sustainability**

**Federal Agency Biodiesel Collaborative Project Proposal**

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**Submitted by**:
National Park Service
Point Reyes National Seashore, California

**Problem Statement**

Point Reyes National Seashore currently uses over 12,000 gallons of petrodiesel fuel per year for off-road and heavy machinery from an onsite 1000 gallon tank. There is no biodiesel fueling facility in the area and the cost to have B20 transported to the Park to use at the onsite 1,000 gallon tank would be highly cost prohibitive. Additionally, Buildings and Utilities staff will be acquiring diesel fueled trucks, which present a perfect opportunity for additional biodiesel usage, increasing the Park's annual usage to around 15,000 gallons per year.

**Proposed Actions**

Evaluate the feasibility of designing and installing a biodiesel (B20) fueling station within Point Reyes National Seashore. The fueling complex would involve the use of the existing 1,000 gallon petrodiesel tank and an additional 1,000 gallon storage tank for B100 to be refilled on a quarterly basis. This would minimize the number of trips for the freight of B100 biodiesel. Ideally, this complex would incorporate an in-line blending system or an in-tank blending system, creating the proper mixture of B20. Additionally, the fueling station will provide the future option of choosing other percentages of biodiesel for fueling, depending on the biodiesel market and vehicle practicality. This system would minimize manual error, logistical problems, and maximize the accuracy for the appropriate mixtures. The biodiesel would be used by all diesel fueled equipment within the Park. With the addition of biodiesel at Point Reyes National Seashore, the percentage of alternative fueled vehicles will increase from 8.6% to over 30%.

**Partnering Agencies/Groups**
EPA

**Anticipated Benefits**:

1. <u>Reduced Fossil Fuel Dependency and Diesel Emissions</u>. An annual reduction in the use of over 3000 gallons of petrodiesel fuel and the reduction of harmful emissions from standard petrodiesel.
2. <u>Minimize Impact of Potential Spills</u>. Off road machinery is used on roads, trails, and other areas where a petrodiesel spill would highly impact ecosystems.
3. <u>Potential for an Increased Local Biodiesel Market</u>. Would promote the installation of similar biodiesel stations in West Marin County, where biodiesel fueling stations are not present. The West Marin community is a strong advocate of sustainable programs, potentially providing them with future biodiesel options.
4. <u>Potential for an Increase in Biodiesel Usage for the National Park Service</u>. This project would lay the groundwork for other National Parks to install similar systems. Many National Parks are located considerable distances from metropolitan areas causing high biodiesel prices and limiting users. This program would correct the economic and logistic hurdles some Parks face.
5. <u>Flexibility for Using Different Biodiesel Mixtures</u>. The ability to use different biodiesel percentages will minimize use of petrodiesel and emissions by optimizing blends depending on the biodiesel market and vehicle practicality.
6. <u>Improve Long-Term Competitive Pricing</u>.

**Estimated Costs**

- $17,000: 1,000 gallon B100 storage tank, pump, gauges, compliant with seismic codes. Shipping and installation costs included.
- $4,250: 25% sliding scale applied for design and engineering costs.
- $6,000: Cost differential for fuel costs for the first year.

- TOTAL REQUESTED FUNDING: $27,250

**Project Timeframe**

Short Term (<FY06): Design and engineer fueling system

Medium Term (FY06): Installation of facility within six months

Long Term (>FY06): Continued Park use of biodiesel, ability to change to different biodiesel mixtures as market changes.


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