

NicklingEnvironmentalLtd

Airqualityandwinderosionspecialists

March 12, 2021

Mr. Jack Ainsworth, Executive Director, California Coastal Commission
Mr. Steve Padilla, Chair of the California Coastal Commission
455 Market Street, Suite 300
San Francisco, CA. 94105

Re: Oceano Dunes State Vehicular Recreation Area

Dear Mr. Ainsworth and Mr. Steve Padilla,

The Scientific Advisory Group (SAG) was established in April 30, 2018 through a Stipulated Order of Abatement (SOA) to advise California State Parks on potential methodologies to reduce dust emissions at Oceano Dunes State Vehicular Recreation Area (ODSVRA), California, to comply with State and Federal Air Quality PM₁₀ Standards. SAG is comprised of 7 well published research scientists (geomorphologists, air quality engineers and biologists) whose primary expertise is directly related to sediment transport by wind, wind erosion control methodologies and air quality issues.

Since its inception it has been SAG's goal to reduce dust emissions at ODSVRA using environmentally sustainable techniques that attempt to mimic or enhance natural dune processes and landforms that tend to slow down near surface wind speeds and trap sediment (e.g., planting of natural vegetation, promoting the development of dune forms near the coast where sediment is deposited by wave action). Importantly the SAG has always been focused on finding the most effective ways to improve air quality with the least possible disruption to existing uses.

Over the past 3-5 years the control strategies and field trials that have been implemented at ODSVRA have been very promising with significant sand deposition behind sand fences and within planted vegetation. Of particular importance is the development of the 48 acre (0.19 km²) "proto" foredune that was established using different forms of roughness (tillage, addition of straw mulch and planting of different varieties and densities of vegetation). In the past 2 years small dunes (nebhkas) have now begun to form, providing evidence that they will continue to grow, trapping sand moving down wind, thereby reducing dust emissions and PM10 concentrations.

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Although we understand that the Coastal Commission and Parks must weigh a variety of factors in their decisions, from an air quality perspective the work of the SAG thus far indicates that there is a workable approach to achieving the targets set by the SOA while retaining some level of off-highway vehicular activity at the ODSVRA. We would like to make sure that these scientifically informed findings, which are reflected in multiple Parks reports in response to the SOA, are appropriately considered within broader debates about management of the ODSVRA.

Yours Sincerely,

W.G. Nickling PhD
Special Master
Chair, Science Advisory Group

Science Advisory Group

W.G. Nickling PhD, Chair
M. Bush MS
J.A. Gillies PhD
R. Martin PhD
C. Scheidlinger MS
I.J. Walker PhD
Earl Withycombe MEng

cc: Gavin Newsom, Governor
Wade Crowfoot, Secretary for Natural Resources Agency
Armando Quintero, Director DPR
Sarah Miggins, Deputy Director OHMVR Division
OHMVR Commissioners
Coastal Commissioners