

Additional GPU

Attn: Supervisor Ryan Sundberg, 5th District

July 12, 2014

Greetings Supervisor Sundberg,

I'm writing in advance of the upcoming BOS meeting on Monday, wherein you are bound to encounter an extremely vocal minority over the issue of invasive beach grass eradication on the dunes. Let me just say, the scientific and professional majority has responded to this/these individuals MANY times over the years without success. The supportive public attempt to respond publically in blogs and such, getting pummeled by attacks and name calling. Agencies, leading world scientists in the field of coastal dune geomorphology, engineering and geological consultants, water districts, and more, have tried to satisfy these interests. Alas, they seem to have a personal agenda, and thus, the information falls on deaf ears.

Does one or a few comprise real controversy? Case in point: Support for ecological restoration and conservation of coastal dune ecosystems: Literally ten to twenty thousand volunteers over the past two decades, state support (California Coastal Conservancy, California Coastal Commission, California Conservation Corps), years of youth employment and mentoring, non-profit education and youth efforts such as Ocean Day, Bay to Dunes, monthly weekend restoration events, federal investment in threatened and endangered species recovery and success; including a current recommendation to down list endangered beach layia given the continued restoration maintenance and progress.

Versus:

One or two equestrian riding interests; specifically, a horse farrier...is chronically working to discredit all career resource professionals and science. It is analogous to those 97% that know climate change is happening, versus the 3% that don't 'believe' in it. Why do the media perpetuate misinformation and fear mongering without basis? Because it sells papers and creates controversy. Unneeded, and utterly a waste of public taxpayer dollars, another point the so-called wetland and dune defenders are so concerned over. The newspapers are not a place to play out this discussion.

A couple other notes: The pipeline section that has been reburied once or twice in the past 20 years on BLM Ma-le'l property has and will again become unburied regardless of the species of grass on the foredunes. This section runs along a 'wetland' swale (dry except for during the wettest of storms), a low point in the dunes, and must be artificially buried by borrowing sand from surround dunes vegetated with native plants to cover it. Over time, it becomes unburied. GHD and associates have analyzed this area at the request of the water district and provided a report to the Humboldt Bay Water District just this year. I myself have seen this section unburied twice at the beginning of my career in 1993, and a couple of years ago...it has nothing to do with the minimal weeding that was done to the west of it. The claims are hogwash.

Further, the leading world coastal dune geomorphologist Dr. Patrick Hesp believes that no type of foredune vegetation would prevent ultimate inundation as a result of sea level rise. However, native dunes, typically of lower grade, but wider, and with more translocation of sand landward increasing its volume and breadth, is likely to offer greater friction and resistance to counter a swell of incoming water associated with higher tides and wave events. Abrupt, taller foredunes, vegetated with European beachgrass; still breach under the forces of the ocean, and the inundation would pick up speed behind the initial foredune as it is often scoured lower than it would be otherwise if sand were functionally translocating and accreting inland in a normal manner. Multi-year, local topographical monitoring is

underway with current efforts to expand the study south to the South Spit from the Lanphere Dunes Unit of the Humboldt Bay Wildlife Refuge. Results of this study could be combined with wave inundation models to one day soon prove this expert hypothesis. Preliminary topographical monitoring results will be available in the future, as well as a topographical LiDAR study in the near future. Look to the U.S. Fish and Wildlife Service, Humboldt Bay Refuge for updates on progress of these efforts.

Wetlands on the north spit have been examined. There is a greater footprint of hydrophilic vegetation (aka ephemeral "wetlands" associated with winter precipitation and wind scour meeting the level of the water table) than prior to restoration. The ridiculous claims regarding landscape loss of wetlands have no merit. Sure, there may be a specific site(s) with a smaller footprint, but dunes move, that's the natural process; but overall, there are more wetland acres than 20 years ago. Of course, without rain, there will not be much in the way of wetlands anywhere.

Many in the professional natural resources community, if not all, are exasperated with the ridiculous onslaught of public media attacks. Invasive weeds are categorized as such because they do not belong in native systems. European beachgrass was NEVER planted in the foredunes and there is only a limited historical record of intentional plantings, primarily on the bay side of the spit. However, given some large storms in the 1960's, one of those intentional plantings got into the Mad River and flushed out into the littoral cell of the Pacific Coast...beginning its spread into its favored coastal habitat by early 1971. Around 1972, it begins to make an appearance on the South Spit, as well. By the early 1990's; two foredune species had been listed endangered with European beachgrass invasion and native habitat displacement a principal cause and imminent threat. Restoration began around the same time and has been very successful.

In my professional capacity, I have prepared a presentation on the history of introduction and spread of European beachgrass and yellow bush lupine, and would be happy to show you, or any other supervisor, any time if you wish. There is also a brief, more entertaining synopsis of it that was published this summer in the Dunesberry (Summer 2014, Volume 33, Issue 2, begins page 8), a Friends of the Dunes newsletter available on their website.

The public enjoys access to the unique, biodiverse beaches and dunes of the north coast. Botanically, our dunes are unlike most anywhere else along the entire Pacific Coast. Recreational modes of access are varied and provided for.

Please, stick up for the good work the restoration community has done and help lay this non-issue to rest. Please ensure that the County maintains the general plan as written and that invasive weed eradication remain a principally permitted activity everywhere in our County.

Thank you,



Jennifer Wheeler
McKinleyville, CA
wheelerj@suddenlink.net
(707)498-4581