

## Peter R. Baye, Ph.D. Botanist, Coastal Plant Ecologist P.O. Box 65, 33660 Annapolis Road Annapolis, California 95412



(415) 310-5109

baye@earthlink.net

Teresa Beddoe, Project Coordinator County of Mendocino Department of Planning and Building 790 South Franklin Street Fort Bragg, CA 95437

Tiffany Tauber California Coastal Commission 710 E Street, Suite 200 Eureka, CA 95501 January 8, 2007

SUBJECT: CDP #55-2006, Gualala, Mendocino County: Bower Ltd. Trust, Bower Ltd. Partnership (agent: Rau and Associates); proposed Gualala Bluff concrete block retaining wall multiple CEQA and Coastal Commission policy issues.

Dear Ms. Beddoe and Ms. Tauber:

Please consider the following comments regarding permitting and CEQA issues related to the proposed concrete block retaining wall above the Gualala River mouth lagoon (seasonal/intermittent estuary), Mendocino County.

1. Project Purpose and Need. The project purpose confuses maintenance/repair of a localized slope failure in artificially placed fill with "stabilization" of an extensive segment of vegetated, stable marine cliff and bluff along the north shore of the Gualala River lagoon, an intermittent stream-mouth estuary. There is no apparent shore protection purpose or need for a 285 foot long concrete block retaining wall at this currently undeveloped location. There are no existing structures behind the majority of the proposed 285 ft segment of bluff to protect from slope failure. The project does not include other development that may justify construction of a retaining wall. The site is currently a bluff-top public coastal trail (dedicated public access easement) at the edge of a private dirt parking lot at the top of the bluff. The parking lot is mostly unoccupied with recent (2006) signs posting "no trespassing". None of these existing features appear to justify the scope of the project.

In contrast, there may be some justification for stabilization (or other appropriate remedy) for two localized, shallow slope failures at the top of the bluff. The larger one occurs behind the Surf Supermarket next to a concrete sewer box (Figure 1), and a smaller one occurs at the west end of the bluff, near the small overlook park. Both shallow slope failures appear to have originated as saturated earthflows; no slump-block structure was evident in the larger slide in the winter of 2006 when it formed. The composition and texture of the sediments, and the remnants of a decayed wooden retaining wall, indicate that the ultimate cause of the larger slide was unstable, unengineered placement of past artificial fill.

For the remaining length of the project area, there is <u>no evidence of deep or shallow slope instability</u> in the bedrock base of the cliff, or the mature coastal scrub vegetation of the bluff above it.). The lower slope of the cliff along the banks of the lagoon/estuary is composed of bedrock, relatively erosion-resistant Cretaceous sedimentary rocks (Figure 2). Wave-polished old slabs of bedrock form a boulder armor beach at the base of the cliff, with pockets of old fresh-brackish marsh among them. If the cliff were actively eroding and unstable, boulder fragments would be angular, unpolished, and only young patches of marsh plants (no peat formation) would occur. This is not the case.

The coastal bluff vegetation also indicates stability and maturity of the cliff and bluff. The majority of the bluff supports dense, continuous cover of mature coastal scrub vegetation, dominated by coyote-brush (*Baccharis pilularis*), California-lilac (*Ceanothus thyrsiflorus*), silk-tassel (*Garrya elliptica*), and California blackberry (*Rubus ursinus*), with locally abundant *Toxicondendron quercifolium*, *Scrophularia californica*, and many forb species (Figure 3). The shrubs are large and old, including multiple excellent specimens of large, mature wind-sheared coast silk-tassel (*Garrya elliptica*), an infrequent native species (Figure 4). The non-native invasive vegetation (Himalayan blackberry, *Rubus discolor*, = *R. armeniacus*), poison-hemlock (*Conium maculatum*), nasturtium (*Tropaeoleum majus*) is concentrated mostly in the artificial fill edge at the top of the bluff/parking lot edge, but jubata grass (*Cortaderia jubata* is widespread on the cliff and bluff. Even the exposed bedrock within the wave splash zone supports large specimens of long-lived, stress-tolerant coastal cliff forbs (liveforever, *Dudleya farinosa*; sea-daisy, *Erigeron glaucus*; paintbrush, *Castilleja wightii*).

The existing coastal vegetation structure and patterns on the bluff do not indicate modern history of slope failure. They do not reflect the heterogeneous age-structure and complex patterns associated with uneven-aged slope failures that exist elsewhere on the Sea Ranch-Gualala area coast, particularly on weakly consolidated sediments of raised marine terraces. This apparent stability is very likely related to the erosion-resistant bedrock cliff base, which protects the softer sediment above from wave action and undermining. In addition, the toe of the slope (lagoon shoreline below high tide line) is boulder-armored. The only indication of significant instability on the

bluff within or near the project area is associated with past unengineered fill placed with an excessively steep slope.

The proposal should identify sufficient justification in terms of (a) a reasonable purpose commensurate with the scope and scale of the project, and (b) sufficient nexus to objective private and public need. Rigorous justification of public and private need for a 285-foot retaining wall in existing mature coastal bluff vegetation is indicated because of the environmentally sensitive location. The location is a sensitive coastal setting, with a high potential for significant impacts due to construction or major new artificial structures, because:

- (a) it occurs above the lagoon/estuary of the Gualala River mouth, in the vicinity of a harbor seal haul-out site, brown pelican roosts, steelhead smolt habitat;
- (b) wetlands occur at the toe of the cliff;
- (c) the bluff supports mature coastal bluff vegetation;
- (d) the coastal bluff vegetation appears to include seeps that support slope wetland patches (see 4 below);
- (e) the bluff tope is a dedicated public trail (easement) with unique views of Gualala Point Park, the sand spit, and the lagoon/estuary; and
- (f) the bluff itself has important scenic, esthetic values (and potential esthetic impacts) for visitors of the Gualala Point Regional Park.

The project as proposed is not fully justified by existing conditions; only the existing localized slope failures justify correction, and it is not at all clear that a retaining wall is the most environmentally appropriate or feasible stabilization approach.

Furthermore, in the absence of evidence for history of natural modern slope failure (i.e., other than slumps caused by artificially or potentially unauthorized past deposition of fill), no permit should be issued to "stabilize" a bluff that is manifestly stable.

2. Impermissible project segmentation ("piecemealing"). It appears that the proposed retaining wall is only one component of a larger development project on the parcel that has not been disclosed as essentially related or interdependent. This omission may explain why a retaining wall has been anomalously proposed for an unimproved parking lot above a stable bluff.

A purely speculative purpose (slope stabilization for a potential <u>future</u> development that has not been authorized) is not acceptable for a coastal development permit, and it is not

permissible under CEQA. Under CEQA, project descriptions and impact assessments must account for "reasonably foreseeable" future phases or interrelated and interdependent projects. *Laurel Heights Improvement Association of San Francisco, Inc. v. Regents of the University of California* (1988) 47 Cal.3d 376, 393-399 (253 Cal. Rptr. 426]. See discussion of segmentation and piecemealing at 2 below.

Public discussion in the local newspaper (Independent Coast Observer, Gualala) and local residents who have attended local planning meetings (GMAC, Gualala Municipal Advisory Council) suggests that the project applicant has additional plans for redevelopment of the commercial properties and undeveloped lands of the parcel. The County and Coastal Commission should exercise due diligence in determining whether the proposed retaining wall is reasonably related to or interdependent with a larger development plan for its basic purpose. If this is indeed the case, preparation of separate environmental assessment of the retaining wall and development/redevelopment for nominally separate projects would constitute impermissible project segmentation ("piecemealing") under CEQA. The larger, comprehensive development plan including the significant expansion of a retaining wall, must be interpreted as a single project (CEQA Guidelines Section 15063 (a)(1). A CEQA agency cannot treat one project with potential significant impacts as a succession of smaller projects with less-than-significant impacts.

- 3. The existing bluff within the project area has pipes or culverts (Figure 5) that discharge into the Gualala River lagoon. These pipes appear to be a potential point-source of pollution, and they appear to run under the project parcel. The nature of the effluents they discharge, and the drainage plan of the parcel protected by the proposed retaining wall, should be disclosed and analyzed as a cumulative ongoing impact to water quality of the lagoon (particularly when the tidal inlet is closed), as well as part of the environmental baseline. Of particular concern is the potential for discharges to contain cleaning solvents such as commercial detergents. The presence of even low levels of detergents (surfactants) within the lagoon during periods of inlet closure could result in toxic, sublethal or lethal effects on federally listed steelhead smolts. Depending on the nature of contaminants in surface runoff, channelized or culverted drainage water, the drainage design of any project at this location should incorporate mitigation measures such as detention basins or bioswales (grass/rush/sedge-lined surface drainage swales with microbially active soils to trap sediment and reduce toxicity of runoff)
- 4. <u>Potential significant impacts of constructing a 285 ft retaining wall at the proposed location</u>.

The proposed project <u>may cause significant individual, indirect, and cumulative impacts</u>, and <u>should require the preparation of an Environmental Impact Report</u>, because:

4.1. The project would destroy a significant portion of the total coastal bluff vegetation along the lagoon shoreline within the salt spray zone. Construction

would also disturb existing vegetation and soil, making it vulnerable to increased invasion and dominance by non-native plants, reducing native biological diversity. This vegetation contains mature, large old woody wind-sheared shrubs and forbs, as well as non-native invasive vegetation. This impact is not mitigable because non-native invasive species are most likely to dominate disturbed bluff soils and substrates, and weed control is extremely difficult on near-vertical slopes. No retaining wall design could support the complete cover of native vegetation that currently exists.

- 4.2. The bluffs appear to include numerous seeps and seep wetlands, indicated by the presence of hydrophytes (wetland indicator plants) and wet soil not readily detected in the dry season). These are particularly visible from the lagoon shore. Patches of sword fern and horsetail (*Polystichum munitum*, *Equisetum telmateia*) occur in the otherwise arid, windswept coastal bluff. Their presence suggests that wetland seeps are at least intermittently present, because these species depend on free water for parts of their life-cycle, and the horsetail species is narrowly associated with moist to wet soils year-round. My understanding is that the Coastal Commission policies effectively prohibit destruction of coastal zone wetlands (within Commission policy definition of "wetlands").
- 4.3. The shear stress of a concrete retaining wall, particularly during construction, could itself result in partial slope failure. The impermeable retaining wall could also impede groundwater discharge and cause increased saturation, lubrication of substrate behind it, inducing a higher risk of slope failure.
- 4.4. Runoff or dust from wall construction would be likely to transport contaminants into the Gualala lagoon, causing significant impacts to water quality (sensitive salmonid receptors). Construction noise and light would cause significant disturbance to federally protected marine mammals (harbor seal pups at traditional haul-out site), brown pelicans, river otters, diving ducks, cormorants, and recreational users of the Gualala Bluff trail and Gualala Point Regional Park. Accidental spills of solvents, concrete, or hazardous materials on the cliff during construction could cause significant impacts to the seasonally closed lagoon's water quality, steelhead, diving birds, and marine or aquatic mammals.
- 4.5. A concrete retaining wall would have significant adverse esthetic impacts to the scenic views of the lagoon/estuary from Gualala Point Regional Park. The concrete wall would amplify the artificial, stark appearance of the existing building backs that lack a vegetative buffer or screen. The wall would replace textured, mature, heterogeneous bluff vegetation.
- 4.6. The project would either be cumulative to a larger (undisclosed, impermissibly segmented) project with potential significant impacts, or it would have significant growth-facilitating or growth-inducing impacts.

- 4.7. A retaining wall may be incompatible with a safe, accessible alignment of the Gualala Bluff Trail with bluff-top views of the lagoon and beach. The retaining wall would cause significant degradation of recreational and scenic values of the public Gualala Bluff Trail which extends along the entire length of the proposed project. I understand that his public trail easement was required mitigation for previous Coastal Commission authorization of the existing development at the project parcel. Thus, the impacts would have unacceptable significant cumulative (or compounded) impacts on required mitigation for a previous development project at this location.
- 5. Recommendations and conclusions. The application should be rejected as incomplete because of impermissible project segmentation. A full and complete application should include all interdependent or reasonably related parts of the same project, including development plans or later phases of development related to the retaining wall. The geotechnical justification for the project should be independently reviewed by a qualified expert, and its assumptions should be confirmed by a site inspection or additional data and analysis. An EIR should be prepared to analyze numerous potential significant impacts of the project (including its construction). Vegetation, seeps, and wetlands along the bluff should be surveyed (with complete biological inventory) to assess impacts. Managers and biologists of Sonoma County Regional Parks should be consulted.

Respectfully submitted,

Poter & Baye

Peter R. Baye, Ph.D.



Figure 1. Slope failure (debris flow) behind Surf Supermarket, exposing artificial fill. Note boulder armor beach with marsh pockets at toe of slope. March 17, 2006.



Figure 2. Cretaceous sedimentary bedrock forms a stable boulder armor beach at toe of cliff, and an erosion-resistant, near-vertical cliff below the bluff. The bluff above bedrock is composed of Pliocene marine sediment and surficial artificial fill. December 2006-January 2007.



Figure 3. Dense, closed, mature coastal scrub on the bluff within the project area. In view: coyote-brush, California blackberry, silk-tassel, sword fern. January 2007.



Figure 4. silk-tassel (Garrya elliptica).



Figure 5. Culvert embedded in artificial fill of project area, under non-native vegetation, discharging above Gualala River lagoon. December 22, 2006.