



Submitted via email

October 19, 2020

State Controller Betty T. Yee
Chair, California State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento CA 95825
CSLC.CommissionMeetings@slc.ca.gov

RE: 2021-2025 California State Lands Commission Strategic Plan (Agenda Item 44)

Dear Chair Yee,

We respectfully request that the California State Lands Commission (“Commission”) include provisions in its draft 2021-2025 Strategic Plan to address potential seabed mining for hard minerals in state waters. Specifically, we recommend that the Commission examine ways to revise its existing policies and regulations to prohibit seabed mining for hard minerals, including phosphorus, metals, and metal-enriched sands. Seabed mining is an incipient threat to California’s submerged lands and the extraordinary public resources those lands support. We urge the Commission to take this opportunity to proactively protect the State’s critical coastal and marine resources.

The submerged lands underlying California’s coastal waters provide an astonishing array of values to the public. These areas are home to productive habitats that support economically important fisheries, wildlife-watching, marine research, recreation, navigation, aesthetic and spiritual values, and much more. Seabed mining would threaten these values. In addition to directly disturbing or destroying seafloor habitats, seabed mining fills the water column with large sediment plumes that can smother and/or poison plants and animals in the vicinity. Noise and light pollution from mining activities can also disrupt feeding, migration, and other essential fish and wildlife behaviors. These adverse effects would be added to threats our coastal resources already face from climate change, ocean acidification, and ocean noise. In order to ensure that these crucial coastal resources remain resilient and continue to provide essential benefits to the public, we must first ensure that we do not more stressors to the system.

Fortunately, the Commission has the ability to prevent seabed mining from harming California’s coastal resources. Governing law gives the Commission broad authority to regulate the State’s submerged lands and directs that in doing so, the Commission must ensure it serves the public interest and protects public trust values.¹ California courts have affirmed that the public trust values the Commission must protect encompass not only the traditional uses of fishing and navigation, but also recreation and conservation. As recognized in a recent decision concerning mineral leasing

¹ See, e.g., Public Resources Code sections 6301 (giving Commission exclusive authority and jurisdiction over ungranted tidelands and submerged lands owned by the State), 6890-6900 (giving Commission authority to issue leases or permits for mineral extraction if it is consistent with the public interest and trust responsibilities).

provisions, “an increasingly important public use is the preservation of trust lands ‘in their natural state, so that they may serve as ecological units for scientific study, as open space, and as environments which provide food and habitat for birds and marine wildlife.’”² Enacting regulations to prohibit seabed mining for hard minerals on or under California submerged lands would be an appropriate exercise of the Commission’s authority to protect the public trust.

We urge the Commission to include the objective of prohibiting seabed mining for hard minerals in its 2021-2025 Strategic Plan. Doing so will allow the Commission to carefully consider the issue and craft regulations to protect key public resources. We are eager to assist in that effort. Please do not hesitate to contact me if you would like to discuss these issues further.

Sincerely,

A handwritten signature in black ink, appearing to read 'Andrea A. Treece', with a long horizontal flourish extending to the right.

Andrea A. Treece
Staff Attorney, Oceans Program

² *San Francisco Baykeeper, Inc. v. State Lands Com.*, 242 Cal. App. 4th 202, 233–34, 194 Cal. Rptr. 3d 880, 904–05 (2015), quoting *National Audubon v. Superior Court* (1983), 33 Cal.3d 419, 434–35, 189 Cal.Rptr. 346, 658 P.2d 709.

October 20, 2020

State Controller Betty T. Yee
Chair, California State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento CA 95825

RE: 2021-2025 California State Lands Commission Strategic Plan (Agenda Item 44)

Dear Chair Yee,

I am writing today on behalf of The Pew Charitable Trusts to again request that the California State Lands Commission (Commission) address the potential development of seabed mining for hard minerals¹ on California's marine submerged lands in the Commission's 2021-2025 Strategic Plan. Ultimately, Pew recommends that the Commission consider revising its policies and regulations to prohibit the approval of hard mineral leases on state submerged lands in California's nearshore ocean. Factoring this potentially emergent issue into the Commission's long-term planning through inclusion in the new strategic plan would be a proactive and sensible first step.

We look forward to reviewing the first draft of the new strategic plan and hope that this draft will include content responsive to our request. However, we also understand that the emerging nature of this issue, its relatively recent introduction to the Commission as an issue relevant to California submerged lands, and the specificity of our request may be continuing to challenge the Commission in development of this content. Therefore, we would like to reiterate our request to work with the Commission to collaboratively identify an effective, appropriate way to ensure this important issue is explicitly and adequately included in the new plan. In August 2020, we proposed an exploration of emerging issues as one potential way to frame the inclusion of marine hard mineral mining, and regulatory reform thereof, in the new strategic plan.² In previous correspondence we had described the converging factors that make it probable that interest in seabed mining in California state waters will emerge, including increased global activity in marine mining, declining terrestrial mineral sources, advances in technology, and the presence of valuable minerals on, in, and under California's submerged lands (e.g. phosphorite, precious metals, and semi-precious metals).³

¹ For the purposes of these recommendations, "hard minerals" are seabed mineral resources other than sand, gravel and shell historically extracted for existing uses such as beach re-nourishment, aggregate etc., including but not limited to phosphorite, metals, and metal-enriched sands

² See California State Lands Commission, Archived August 2020 Commission meeting public comment letters, [Agenda Item 59](#), letter from The Pew Charitable Trusts to California State Lands Commission dated August 17, 2020, at pp. 9-10

³ See California State Lands Commission, Archived April 2020 ([Agenda Item 73, pp. 1-3](#)) and June 2020 ([Agenda Item 63, pp. 3-5](#)) Commission meeting public comment letters, letters from The Pew Charitable Trusts to California State Lands Commission dated April 23, 2020 and June 18, 2020

We would like to offer another potential lens through which the seabed mining issue might be focused for inclusion in the plan. We suggest considering a strategic plan commitment (goal) focused on the value of the ecosystem services provided by the submerged lands stewarded by the Commission, and the threat that emerging issues like seabed mining pose to maintaining the intact ecosystems and the associated benefits they provide. This approach would be another proactive and science-based way for the Commission to address calls by Pew and other stakeholders to reform its seabed mining regulations yet also cast a wider net for management strategies that build coastal resilience.

Ecosystem Services and Emerging Issues like Seabed Mining:

A concise, compelling, and functional definition of ecosystem services comes from a recent paper specific to seabed mining: “[*Ecosystem Services*] are the contributions to human well-being from ecosystems.”⁴ The authors go on to elaborate on that definition and the important scientific, economic, and policy implications it raises, stating that ecosystem services “try to associate values with environmental benefits that are linked to human well-being, whether a market exists for the benefit or not. Sustainable management of resources requires that these values are incorporated into environmental regulation.”⁵ Some key examples of ecosystem services provided by shallow and deep-sea (> 200 meters depth) marine ecosystems include commercial and recreational fishery yield, carbon sequestration/climate regulation, and nutrient cycling.⁶ Because ecosystem structure and function must be maintained to ensure continued provision of valuable services, an effort to inventory and describe the specific ecosystem services provided by California’s submerged lands and to assess the risks to those services of emerging activities like seabed mining would be a prudent exercise and potentially another viable way to address marine mining in the plan.

Ecosystem Services as a Consideration in Evaluating Impacts to Public Trust Resources:

Notably for the Commission, which applies a “*continuously evolving*” public trust doctrine (PTD) to its stewardship of California’s submerged lands,⁷ ecosystem services can also serve as an instructional and compelling framework for “*reshaping the way ecological goals are framed to fit the [PTD]*.”⁸

In an article entitled “*Ecosystem Services and the Public Trust Doctrine: Working Change from Within*” J.B Ruhl and James Salzman effectively construct a case that resource managers do not need to expand the PTD to achieve ecological protection and can instead “*approach the goals [of ecological protection] by reframing the ways in which ecological resources are computed in the*

⁴ Le, Jennifer T., Lisa A. Levin, and Richard T. Carson “[Incorporating ecosystem services into environmental management of deep-seabed mining](#)”, Deep-Sea Research II 137 (2017) 486-503, 2017, at p. 487

⁵ Ibid, at p. 487

⁶ Ibid, at p. 487

⁷ See California State Lands Commission website, webpage entitled “Public Trust Doctrine” at <https://www.slc.ca.gov/public-engagement/#pubtrust>

⁸ Ruhl, J. B. and Salzman, James E., “*Ecosystem Services and the Public Trust Doctrine: Working Change from Within*”, Southeastern Environmental Law Journal, Forthcoming, FSU College of Law, Public Law Research Paper No. 217, 2006, Available at SSRN: <https://ssrn.com/abstract=934393>, at p. 224

*doctrines utilitarian calculus. Protecting ecosystems, in other words, is compatible with the doctrine in its sharpest utilitarian projection.”*⁹

Careful consideration of new science on the ecosystem services provided by nearshore shallow and deep-sea marine ecosystems could better inform the Commission regarding PTD implications of activities that would disrupt or reduce those services, including, but not limited to, seabed mining for hard minerals. A healthy, intact seafloor should be safeguarded from invasive new industries like marine mining and the repercussive effects mining would have on the broader marine ecosystem in order to ensure continued provision of the critical ecosystem services held in trust by the Commission. For this reason, prioritizing an effort to review emerging issues through the lens of ecosystem services will help the Commission prepare for an uncertain environmental future by protecting natural capital so it can continue to generate benefits in the form of ecosystem services. In short, “ecosystem services *link the environment and human well-being, and can help improve sustainability and stewardship of the deep sea.*”¹⁰

In conclusion, we again ask for Commission consideration of seabed mineral management reforms that will better protect California’s submerged lands and the sustainable ocean activities and coastal economies those submerged lands support. We hope that the Commission will take the key first step toward shielding California’s marine resources and dependent communities from potential adverse or even irreversible impacts of seabed mining by addressing the issue in the 2021-2025 Strategic Plan. Thank you again for your continued commitment to conservation and sustainable use of California’s marine resources in the face of the unprecedented challenges 2020 has presented.

Sincerely,

A handwritten signature in dark ink, appearing to read "Tom Rudolph", written in a cursive style.

Tom Rudolph
Officer, Conserving Marine Life in the U.S. and Northern Oceans Conservation
The Pew Charitable Trusts

⁹ Ibid, at p. 230

¹⁰ Le, Jennifer T., Lisa A. Levin, and Richard T. Carson “[Incorporating ecosystem services into environmental management of deep-seabed mining](#)”, Deep-Sea Research II 137 (2017) 486-503, 2017, at p. 486



October 22, 2020

Betty Yee, Chair
Eleni Kounalakis, Member
Keely Bosler, Member
California State Lands Commission
100 Howe Ave., Suite 100S
Sacramento, CA 95825

RE: 2021-2025 Commission Strategic Plan – Seabed mining

Dear Chair Yee and Members Kounalakis and Bosler,

On behalf of the undersigned environmental protection and conservation organizations, we are writing to request that the California State Lands Commission (Commission) prioritize a proactive revision of Commission policies, regulations, and leasing programs to prevent the development of seabed mining for hard minerals on or under California submerged lands. We request that this priority be included in the Commission's 2021-2025 Strategic Plan, currently under development.

Natural resource managers in California are already struggling to balance a wide and growing array of competing demands on the nearshore ocean, ranging from traditional industries like fisheries and tourism to newer uses such as renewable energy and aquaculture. At the same time, the marine ecosystem is increasingly stressed by anthropogenic changes, especially those tied to a warming climate. In this context, it is critical to protect and preserve as much intact seafloor habitat and biodiversity as possible. Maintaining these foundational components of the ecosystem will increase ocean resilience in the face of these unprecedented pressures and changes. "Do no more harm" is one of the most important strategies we can implement to steward our ocean resources and protect our coastal communities.

And the ecological harm caused by seabed mining would be severe. From a global perspective, increasing demand, decreasing terrestrial availability, technological advances, and proposals for prospecting or extraction all are all pointing to the emergence of a marine mining industry in coming years and have spurred a burst of scientific inquiry into the environmental impacts of this new activity. This growing body of evidence is clear that seabed mining would be an extremely risky proposition, with profound and in many cases irreversible effects including physical disturbance of the seabed, removal of biota, and loss of biodiversity. New research even highlights the fact that mining impacts like sediment plumes and noise will be felt far above the

seafloor in the midwater ecosystem, and that current scientific knowledge is insufficient to understand and manage those impacts.

These ecological impacts will reverberate in California's coastal communities and economies as negative social and economic impacts to stakeholders that depend on existing ocean uses like fishing and tourism. To protect these industries and ocean economies, as well as other water-dependent societal uses, government agencies with jurisdiction over marine resources should aggressively identify and address emerging and future threats, including activities that might harm sensitive seafloor and midwater habitats that provide critical ecosystem functions and services.

Given its importance to California's existing ocean economies and stakeholders, the three-mile wide nearshore area regulated by the state is a highly sensitive area that is incompatible with a high impact activity like seafloor mining. For this reason, the current regulatory regime of lease applications on a case-by-case basis merits reconsideration and the preclusion of hard mineral mining on submerged lands would be a more proactive and durable solution to this emerging threat. Therefore, we again urge you to consider a prohibition on seabed mining for hard minerals, including but not limited to phosphorite, metals, and metal-enriched sands, on or under California Submerged Lands, and request that the Strategic Plan update prioritize this proactive reform. We appreciate the opportunity to engage with the Commission and look forward to continued collaboration as you develop the new Strategic Plan.

Sincerely,

Susan Jordan
Executive Director
California Coastal Protection Network

Andria Ventura
Legislative and Policy Director
Clean Water Action

Pamela Flick
California Program Director
Defenders of Wildlife

Bill Allayaud
California Director of Government Affairs
Environmental Working Group

Irene Gutierrez
Senior Attorney
Natural Resources Defense Council

Robert Gould, MD
President
San Francisco Bay Physicians for Social
Responsibility

Jennifer Savage
California Policy Manager
Surfrider Foundation

Dr. Elizabeth Dougherty
Executive Director
Wholly H2O