

Staff Report 45

APPLICANT:

Terry and Dale Lingenfelder Family Trust

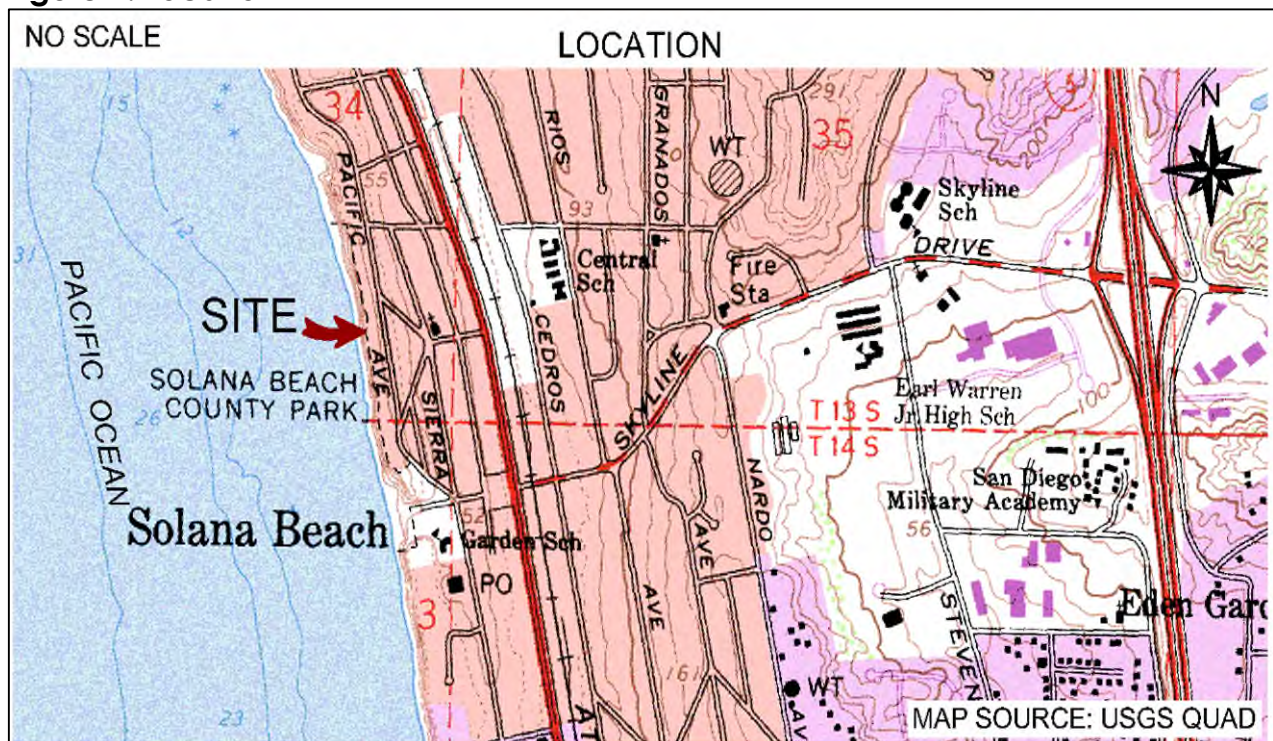
PROPOSED ACTION:

Issuance of a General Lease – Protective Structure Use.

AREA, LAND TYPE, AND LOCATION:

Sovereign land located in the Pacific Ocean, adjacent to 309 Pacific Avenue, Solana Beach, San Diego County (as shown in Figure 1).

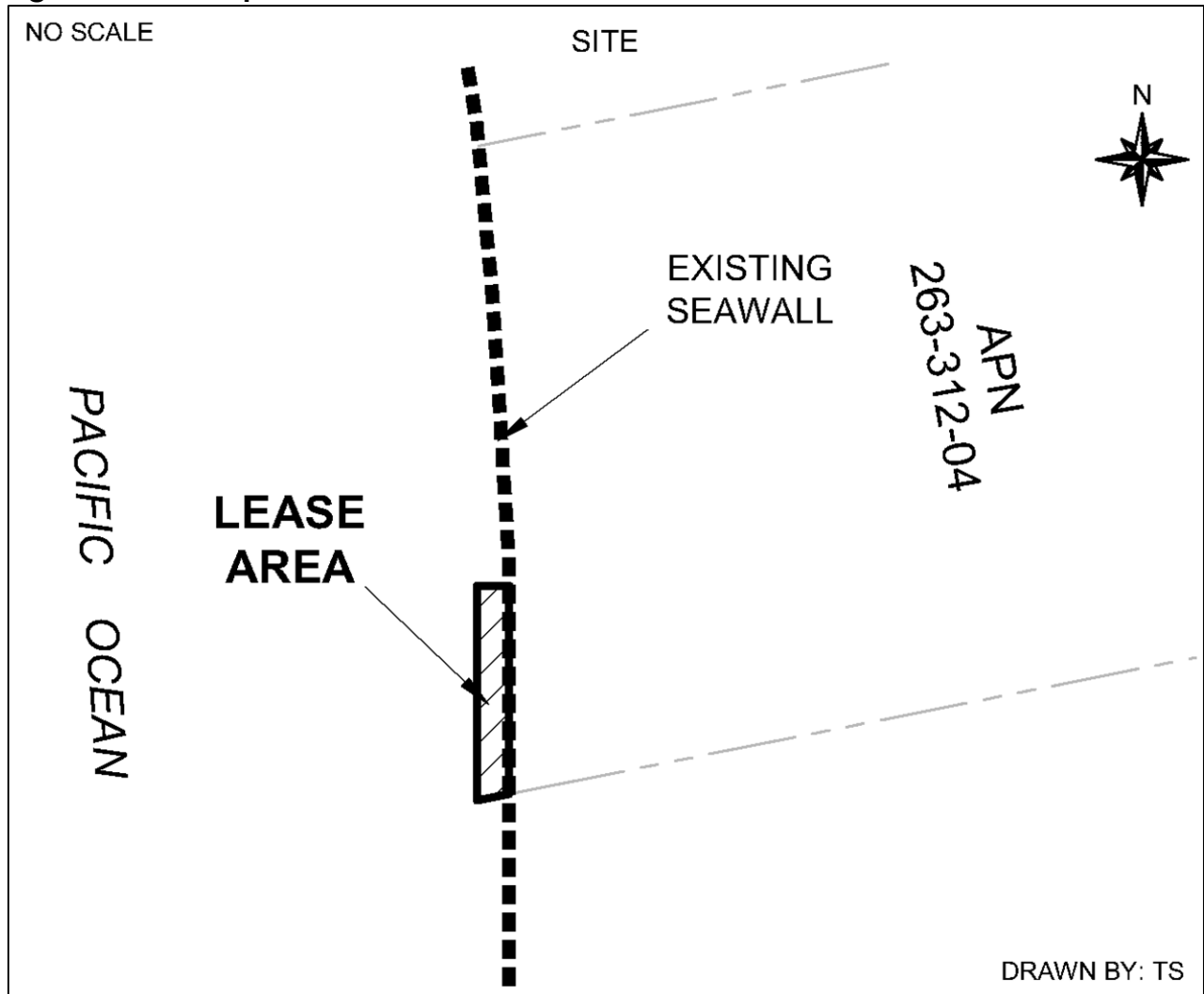
Figure 1. Location



AUTHORIZED USE:

Use of an existing 35-foot high, 2.5-foot wide concrete seawall (as shown in Figure 2).

Figure 2. Site Map



NOTE: This depiction of the lease premises is based on unverified information provided by the Applicant or other parties and is not a waiver or limitation of any State interest in the subject or any other property.

TERM:

10 years, beginning August 19, 2025.

CONSIDERATION:

\$628 per year, with an annual Consumer Price Index adjustment.

SPECIFIC LEASE PROVISIONS:

- Lessee must comply with all conditions of Coastal Development Permit (CDP) 6-05-095.
- When requesting approval for any necessary major repairs or alterations of the authorized improvements, Lessee must assess the feasibility of implementing alternative adaptation strategies such as nature-based solutions or hybrid protective structure designs and provide written documentation of that analysis to Lessor's staff.
- If Lessee applies for a subsequent lease, then Lessee must concurrently apply for an amendment to CDP 6-05-095 or for a new CDP to authorize the subject seawall.
- Liability insurance in an amount no less than \$1,000,000 per occurrence.

STAFF ANALYSIS AND RECOMMENDATION:

AUTHORITY:

Public Resources Code sections 6005, 6216, 6301, 6321, 6321.2, 6501.1, 6503; California Code of Regulations, title 2, sections 2000 and 2003.

PUBLIC TRUST AND STATE'S BEST INTERESTS:

On August 19, 2015, the Commission authorized a General Lease – Protective Structure Use to the Terry and Dale Lingenfelder Family Trust, for the use of an existing 35-foot high, 2.5-foot wide protective seawall, adjacent to 309 Pacific Avenue, Solana Beach, San Diego County ([Item 56, August 19, 2015](#)). The lease expired on August 18, 2025.

The Applicant is now applying for a General Lease – Protective Structure Use for the use of the existing 35-foot high, 2.5-foot wide protective seawall in the Pacific Ocean, adjacent to 309 Pacific Avenue, Solana Beach, San Diego County, effective August 19, 2025.

The Applicant owns the uplands adjoining the lease premises, and the upland facilities are located atop the bluff protected by the subject seawall. The seawall extends across the Applicant's entire property and continues along many adjacent properties. However, only a small part of the seawall in front of this property extends beyond the last natural mean high tide line. The seawall is connected to and

directly stabilizes the lower section of the bluff. The upper section of the bluff is indirectly stabilized by the seawall, as it creates a more stable base through stabilization of the lower section. Loss or degradation of the seawall could result in failure of the bluffs, which could in turn lead to significant property damage and increased rockfall danger to beachgoers. Therefore, the presence of the seawall provides a benefit to both the upland owner and the public.

Although the existing seawall provides benefits to both the upland owner and the public, this benefit is not attained without some compromise. As with other hard armoring structures that provide a solid barrier between the land and sea to block or minimize energy from tides and waves, seawalls often lead to increased erosion along adjacent beaches due to wave reflection and refraction. Therefore, though the seawall authorized by the proposed lease protects the upland property and provides some safety benefits for public use of the beach, it also accelerates erosion to the adjacent coastline. Additional adverse impacts related to the subject seawall include interference with natural coastal processes that influence the supply of sand in the region and potential impacts on flora and fauna due to habitat loss. To help address these impacts, various beach nourishment programs have been implemented by local governing bodies and sand-loss mitigation fees have been a requirement of new Coastal Development Permits for projects in the area. These efforts help maintain Public Trust resources in the region and help ensure that a wide sandy beach remains available for public use. Nevertheless, as detailed in the Commission's recently adopted report, [Shoreline Adaptation and The Public Trust](#), the benefits and detriments to Public Trust resources resulting from the subject seawall should be considered by the Applicant in future design and adaptation plans, particularly as climate impacts increase over time.

The Coastal Commission approved the subject seawall through Coastal Development Permit (CDP) 6-05-095. This CDP did not require the Applicant to pay an in-lieu fee to the Coastal Commission to compensate for the seawall's adverse impacts to the sand supply because the applicant previously contributed to the San Diego Association of Governments (SANDAG) Sand Mitigation Fee program to account for impacts to the adjacent beach over a 30-year period (1999 to 2029). The payments collected via this fee are used to help fund sand-replenishment projects. The CDP requires the Applicant to submit an annual monitoring report prepared by a licensed civil or geotechnical engineer in order to monitor the condition of the seawall and beach. Likewise, per the CDP, the Applicant must submit a report prepared by a licensed civil or geotechnical engineer to assess the feasibility of alternative protection methods if they apply to expand the seawall.

The proposed lease does not alienate the State's fee simple interest or permanently impair public rights. The lease is limited to a 10-year term, does not grant the lessee exclusive rights to the lease premises, and reserves an easement to the public for Public Trust-consistent uses. Upon termination of the lease, the lessee may be required to remove all improvements from State land and restore the lease premises to their original condition.

The proposed lease requires the lessee to insure the lease premises and indemnify the State for any liability incurred as a result of the lessee's activities thereon. The lease also requires the payment of annual rent to compensate the people of the State for the occupation of the public land involved.

CLIMATE CHANGE:

INTRODUCTION:

The climate crisis and rising sea levels are impacting coastal California now. As underscored in the [State of California Sea Level Rise Guidance](#) (Ocean Protection Council, 2024), the combination of extreme weather events and the persistent and accelerating rise in sea levels will lead to increased coastal hazards, such as wave runup, storm surges, flooding, and erosion. Shorelines will move inland due to rising seas, exposing more of the natural and human-built environment to coastal hazards. The resulting damage will occur repeatedly and incrementally over years and, in extreme cases, over the span of a few large winter storms. These impacts may affect the existing seawall subject to the proposed lease, located on the coastline of the Pacific Ocean, near Solana Beach, San Diego County.

DATA & PROJECTIONS:

Sea levels along most of the California coast rose four to eight inches during the last century, and this trend will accelerate throughout this century. The current rate of sea level rise is triple the rate during the last century. There is growing confidence that by 2050 sea levels will be approximately ten inches higher than they were in 2000. The severity of sea level rise beyond 2050 is contingent on future levels of greenhouse gas emissions. The California Ocean Protection Council updated the State of California Sea Level Rise Guidance in 2024 to provide a synthesis of the best available science on sea level rise projections and rates for multiple emissions scenarios. To apply a precautionary approach, Commission staff evaluated the "intermediate-high" and "high" scenarios due to the vulnerability and exposure of the lease location and the continued global reliance on fossil fuels. The La Jolla tide

gauge was used for the projected sea level rise scenario for the lease area, as listed in Table 1, below.

Table 1. Projected Sea Level Rise for La Jolla

| Year | Intermediate-High (feet) | High (feet) |
|-------------|-------------------------------------|--------------------|
| 2040 | 0.7 | 0.8 |
| 2060 | 1.6 | 2.0 |
| 2080 | 3.1 | 4.1 |
| 2100 | 4.8 | 6.6 |

Source: Table 13, State of California Sea-Level Rise Guidance: 2024 Update

Note: Projections are with respect to a 2000 baseline.

ANALYSIS:

Commission staff used the online sea level rise mapping tool, [Our Coast Our Future](#), to evaluate risks to the lease premises and structures from sea level rise. At approximately 1 foot of sea level rise, the lease premises will become regularly flooded and subjected to stronger and more frequent wave impacts and erosion, potentially damaging any structures or improvements on the lease premises. Based on sea level rise projections in Table 1, this could occur between 2040 and 2060. However, episodic or short-term events, such as extreme storms, very high or King tides, and El Niño events, alone or in combination, increase the vulnerability of the lease premises and could expose it to flooding, wave runup and overtopping, and erosion much sooner.

As a result, the seawall may sustain substantial damage and degradation over the lease term, requiring more frequent repairs and maintenance to retain its function. As waves continue to collide with the seawall/revetment, the reflected wave energy will erode the sediment below and surrounding the seawall, leading to structural instabilities. Reliance on seawalls is typically not a long-term or sustainable protection strategy because the seawall will provide diminishing protection as it becomes destabilized and rising sea levels exceed the conditions for which the seawall was originally designed. In recent decades, the beach in front of the seawall has been nourished with replacement sand. Beach nourishment projects can temporarily protect beachfront development from coastal hazards by widening beaches and providing a larger buffer between the upland development and the effects of erosion and storm damage. By making beaches wider and gradually sloped, beach nourishment reduces wave run-up and potential flooding and erosion of upland areas. Beach nourishment addresses

sediment deficits, which can be an underlying cause of erosion, by increasing the quantity of beach sediment in the coastal region.

While the seawall may protect the upland property, that protection comes at the expense of the beach in front of the seawall and alters the natural coastal processes. As sea levels rise, the seawall will further accelerate the erosion and narrowing of the beach by preventing it from migrating inland. The loss of intertidal areas harms critical habitats and ecosystem services, degrades the scenic quality of California's iconic coast, and impairs public coastal access and recreational uses. The seawall can block public access to the shoreline in front of and adjacent to the seawall, exacerbating the existing inequities in coastal access that affect many disadvantaged and tribal communities ([Reineman et al., 2017](#)). Continued beach nourishment is likely needed to offset these impacts.

RECOMMENDATIONS:

Alternative strategies should be explored to protect the upland property and preserve the beach, including nature-based strategies (also referred to as 'natural shoreline infrastructure') like continued beach nourishment, accommodation strategies, and relocating vulnerable structures further inland. These approaches can be more effective long-term because they interfere less with dynamic coastal processes, which will help to maintain the width of the beach, preserve public access and natural resources, and protect the upland property by buffering coastal hazards. Coordinating with adjacent properties and local governments to develop a regional approach could further enhance the effectiveness of these strategies.

Please refer to Section Four of the Commission's report [Shoreline Adaptation and the Public Trust: Protecting California's Public Trust Resources from Sea Level Rise](#) for more information about various shoreline adaptation strategies and their advantages and disadvantages for mitigating coastal hazards and protecting Public Trust resources. Any future construction or activities on State land would require a separate authorization from the Commission.

Regular maintenance, as referenced in the terms of the lease, may reduce the likelihood of severe structural degradation or dislodgement. Pursuant to the proposed lease, the Lessee acknowledges that the lease premises and adjacent upland (not within the lease area) are located in an area that may be subject to the effects of climate change, including sea level rise and rising groundwater levels.

CONCLUSION:

For all the reasons above, staff believes approval of this lease will not substantially interfere with Public Trust needs at this location, at this time, nor for the term of the lease; and is in the best interests of the State.

OTHER PERTINENT INFORMATION:

1. Approval or denial of the application is a discretionary action by the Commission. Each time the Commission approves or rejects a use of sovereign land, it exercises legislatively delegated authority and responsibility as trustee of the State's Public Trust lands as authorized by law. If the Commission denies the application, the Applicant, as prior lessee, may be required to remove the improvements and restore the lease premises to their original condition. The lessee has no right to a new lease or to renewal of any previous lease.
2. This action is consistent with the "Leading Climate Activism" and "Meeting Evolving Public Trust Needs" Strategic Focus Areas of the Commission's 2021-2025 Strategic Plan.
3. Staff recommends that the Commission find that this activity is exempt from the requirements of the California Environmental Quality Act (CEQA) as a categorically exempt project. The project is exempt under Class 1, Existing Facilities; California Code of Regulations, title 2, section 2905, subdivision (a)(2).

Authority: Public Resources Code section 21084 and California Code of Regulations, title 14, section 15061 and California Code of Regulations, title 2, section 2905.

RECOMMENDED ACTION:

It is recommended that the Commission:

CEQA FINDING:

Find that the activity is exempt from the requirements of CEQA pursuant to California Code of Regulations, title 14, section 15061 as a categorically exempt project, Class 1, Existing Facilities; California Code of Regulations, title 2, section 2905, subdivision (a)(2).

PUBLIC TRUST AND STATE'S BEST INTERESTS:

Find that the proposed lease will not substantially interfere with Public Trust needs and values at this location, at this time, and for the term of the lease; and is in the best interests of the State.

AUTHORIZATION:

Authorize issuance of a General Lease – Protective Structure Use to the Applicant beginning August 19, 2025, for a term of 10 years, for the use of an existing 35-foot high, 2.5-foot-wide concrete seawall; annual rent in the amount of \$628, with an annual Consumer Price Index adjustment; and liability insurance in an amount no less than \$1,000,000 per occurrence.