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# California State Assembly

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## NATURAL RESOURCES

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CHAIR

### AGENDA

Monday, March 13, 2023  
2:30 p.m. -- State Capitol, Room 447

## ADOPTION OF COMMITTEE RULES

### BILLS HEARD IN SIGN-IN ORDER

- |               |                   |  |   |
|---------------|-------------------|--|---|
| 1.            | AB 45             | Boerner Horvath                              | Coastal resources: coastal development permits: blue carbon demonstration projects: new development: greenhouse gas emissions.  |
| 2.            | AB 57             | Kalra  | California Pocket Forest Initiative.  |
| 3.            | AB 72             | Boerner Horvath                              | Coastal resources: research: landslides and erosion: early warning system: County of San Diego.                                 |
| 4.            | AB 287            | Garcia                                       | California Global Warming Solutions Act of 2006: Greenhouse Gas Reduction Fund: competitive grant programs: funding objectives. |
| <del>5.</del> | <del>AB 356</del> | <del>Mathis</del><br><b>Pulled by Author</b> | <del>California Environmental Quality Act: aesthetic impacts.</del>   |
| 6.            | AB 397            | Essayli                                      | California Global Warming Solutions Act of 2006: scoping plan.  |
| 7.            | AB 527            | Calderon                                     | Urban forestry: school greening projects: grants.   |
| 8.            | AB 536            | Wilson                                       | Bay Area Air Quality Management Advisory Council: compensation.   |
| 9.            | AB 584            | Hart   | California Coastal Act of 1976: coastal development: emergency waiver.  |

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### COVID FOOTER

**SUBJECT:** All witness testimony will be in person; there will be no phone testimony option for this hearing. You can find more information at [www.assembly.ca.gov/committees](http://www.assembly.ca.gov/committees).

Date of Hearing: March 13, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES  
Luz Rivas, Chair  
AB 45 (Boerner Horvath) – As Introduced December 5, 2022

**SUBJECT:** Coastal resources: coastal development permits: blue carbon demonstration projects: new development: greenhouse gas emissions.

**SUMMARY:** Authorizes the California Coastal Commission (Commission) to authorize blue carbon demonstration projects, as defined, in order to demonstrate and quantify the carbon sequestration potential of these projects to help inform the state’s natural and working lands and climate resilience strategies.

**EXISTING LAW:**

Pursuant to the California Global Warming Solutions Act of 2006 (Health and Safety Code § 38500 et seq.):

- 1) Establishes Air Resources Board (ARB) as the state agency responsible for monitoring and regulating sources emitting GHG.
- 2) Requires ARB to approve a statewide GHG emissions limit equivalent to the statewide GHG emissions level in 1990 to be achieved by 2020 and to ensure that statewide GHG emissions are reduced to at least 40% below the 1990 level by 2030.
- 3) States that it is the policy of the state that the protection and management of natural and working lands is an important strategy in meeting the state’s GHG emissions reduction goals, and that the protection and management of those lands can result in the removal of carbon from the atmosphere and the sequestration of carbon in, above, and below the ground.

Pursuant to the California Coastal Act of 1976 (Public Resources Code § 30000, et seq)

- 1) Establishes the Commission to protect regional, state, and national interests in assuring the maintenance of the long-term productivity and economic vitality of coastal resources necessary for the well-being of the people of the state, avoid long-term costs to the public and a diminished quality of life resulting from the misuse of coastal resources, and coordinate and integrate the activities of the many agencies whose activities impact the coastal zone.
- 2) Requires anyone planning to perform or undertake any development in the coastal zone to obtain a coastal development permit from the Commission.

**THIS BILL:**

- 1) Defines “blue carbon demonstration project” as the restoration of coastal wetland, subtidal, intertidal, or marine habitats or ecosystems, including, but not limited to, wetlands and seagrasses, that can take up and sequester carbon. A blue carbon demonstration project is limited to all of the following:

- a) Ecologically appropriate locations where the habitat or ecosystem had historically occurred and subsequently become degraded or removed;
  - b) The restoration of the habitat or ecosystem to its historical state to provide ecosystem services and habitat values, to the extent feasible; and,
  - c) The use of diverse native species.
- 2) Authorizes the Commission to authorize blue carbon demonstration projects in order to demonstrate and quantify the carbon sequestration potential of these projects to help inform the state's natural and working lands and climate resilience strategies.
  - 3) Authorizes the Commission to require an applicant with a project that impacts coastal wetland, subtidal, intertidal, or marine habitats or ecosystems to build or contribute to a blue carbon demonstration project.
  - 4) Requires the Commission to consult with ARB, the Department of Fish and Wildlife, the State Coastal Conservancy, the State Lands Commission, and other public entities, and seek consultation with the United States Army Corps of Engineers and the National Oceanic and Atmospheric Administration (NOAA), in developing the blue carbon demonstration project program.
  - 5) Requires each blue carbon demonstration project to be designed, monitored, and have sufficient data collected in order to demonstrate the carbon uptake and sequestration achieved. Requires this to include an evaluation of relevant factors affecting the permanence of the sequestration. Requires the results to be presented to the Commission in a public hearing.
  - 6) Requires all new development in the Coastal Zone to among other requirements, mitigate GHG.

**FISCAL EFFECT:** Unknown.

**COMMENTS:**

- 1) **Need for the bill.** According to the author,

Several recent studies focusing on the importance of conserving coastal ecosystems have concluded coastal wetlands can store far greater amounts of carbon than they naturally release, which makes them one of the world's most important natural "carbon sinks. Unfortunately, coastal habitats around the world are being lost at a rapid rate, largely due to coastal development for housing, ports, and commercial facilities. AB 45 would require that coastal development permit applicants include in their planning and design how they plan to build or will contribute in promoting blue carbon projects where feasible. This requirement is consistent with the California Coastal Commission's task of working with local governments to protect the shoreline when approving developments in the coastal zone consistent with the California Ocean Protection Act.

- 2) **Blue carbon.** Blue carbon refers to the carbon stored by seagrass, mangroves, tidal marshes, and other plants in coastal wetlands. These coastal ecosystems are able to sequester carbon dioxide from the earth's atmosphere through photosynthesis. As these aquatic plants grow, they accumulate and bury organic matter in the soil. Water-logged sediments are very low in oxygen, allowing the carbon drawn from plants to stay trapped in the sediment for as long as it remains undisturbed.

Seagrass, tidal marshes, and mangroves are sometimes referred to as "blue forests" in contrast to land-based forests. Blue forests equal just 0.05% of the plant biomass on land, but they can efficiently store high levels of carbon. Research indicates that coastal blue carbon habitats annually sequester carbon 10 times faster than mature tropical forests, and store 3-5 times more carbon per equivalent area.

Although seagrass makes up only 0.1% of area on the ocean floor, it accounts for approximately 10-18% of the total oceanic carbon capture. Researchers have studied how large-scale seaweed cultivation in the open ocean can act as a form of carbon sequestration. They found that nearshore seaweed forests constitute a source of blue carbon, as seaweed debris is carried by wave currents into the middle and Deep Ocean thereby sequestering carbon.

Because oceans cover 70% of the planet, and because more than 80% of the global carbon cycle is circulated through the ocean, ocean ecosystem restoration has the great blue carbon development potential. Research is ongoing, but in some cases it has been found that these types of ecosystems remove far more carbon than terrestrial forests, and can store it for millennia.

Sadly, in coastal California, human activity has led to a reduction in the coastal wetlands and the distribution and amount of seagrass beds. California has lost on the order of 90% of its coastal wetlands. Despite that, recent estimates indicate that on the order of 13.4 million tons of carbon are stored in California's coastal wetlands. Restoring coastal wetlands can further harness carbon sequestration potential.

- 3) **Blue carbon in California.** In California, coastal blue carbon habitats consist of tidal salt marsh and seagrass (eelgrass). Currently, the state has about 296,500 acres of tidal salt marsh habitat and 14,800 acres of eelgrass. As habitats that sequester carbon are altered and decreased, the natural carbon stored in these environments is being released into the atmosphere, accelerating the rate of climate change. Researchers indicate that if blue carbon ecosystems continue to decline at the current rate, 30% to 40% of tidal marshes and seagrasses could be gone in the next century.

Marshes sequester carbon in underground biomass due to high rates of organic sedimentation and anaerobic-dominated decomposition, a process where microorganisms break down biodegradable material in the absence of oxygen. Marshes are susceptible to eutrophication (a nutrient-induced increase in phytoplankton productivity) and pollution from oil and industrial chemicals. Introduced invasive species, sea-level rise, river damming, and decreased sedimentation are other long-term changes that affect marsh habitat, and in turn, may affect carbon sequestration potential.

- 4) **Federal Efforts.** NOAA has supported efforts to include coastal wetlands into the U.S. inventory of GHG emissions and sinks. They work collaboratively with the National Marine Fisheries Service, National Ocean Service, and Oceanic and Atmospheric Research offices, and sponsor the National Academies of Sciences, Engineering, and Medicine’s project, “Developing a Research Agenda for Carbon Dioxide Removal and Reliable Sequestration.” NOAA is working to make wetlands conservation and restoration profitable while reducing GHG emissions through blue carbon financial markets. This approach creates a financial incentive for restoration and conservation projects by helping to alleviate federal and state carbon taxes aimed at discouraging the use of fossil fuels.

In November 2021, U.S. Senate Oceans Caucus Co-Chairs Lisa Murkowski (R-AK) and Sheldon Whitehouse (D-RI) reintroduced the Blue Carbon for Our Planet Act, focused on conserving, restoring, and understanding coastal blue carbon ecosystems. While that legislation was not enacted, it illustrates the bipartisan acknowledgement and support for blue carbon investments at a federal level.

- 5) **Natural and working lands.** Current law defines natural lands as lands consisting of forests, grasslands, deserts, freshwater and riparian systems, wetlands, coastal and estuarine areas, watersheds, wildlands, or wildlife habitat, or lands used for recreational purposes such as parks, urban and community forests, trails, greenbelts, and other similar open-space land. Natural and working lands cover approximately 90% of the state’s 105 million acres, including California Native American tribes’ ancestral and cultural lands and waters.

Healthy natural and working lands can sequester and store carbon and limit future carbon emissions into the atmosphere. International leaders recognize this timely opportunity. According to the United Nations Environment Program, “By working with nature, we have the potential to reduce emissions by more than a third of what is needed by 2030.”

In October 2020, Governor Newsom outlined a comprehensive and results-oriented nature-based solutions agenda for California in Executive Order (EO) N-82-20. The EO called on the California Natural Resources Agency (NRA) to enable enduring conservation measures on a broad range of landscapes, including natural areas and working lands, in partnership with land managers and natural resource user groups.

In response to the Governor’s EO, the state released the draft *Natural and Working Lands Climate Smart Strategy* in 2021, which describes how these lands can deliver on our climate change goals and identifies options to track nature-based climate action and measure progress. The state is committed to “track nature-based climate solutions and their outcomes, as well as to improve our understanding and ability to measure outcomes of climate smart actions. To improve over time, our efforts will need to be flexible; successful climate smart land management requires adaptive approaches that are continually reassessed as ecosystems are affected by climate change and our understanding of the processes at work grows.”

Although natural and working lands can remove carbon dioxide from the atmosphere and sequester it in soil and vegetation, disturbances such as severe wildfire, land degradation, and conversion can cause these landscapes to emit more carbon dioxide than they store.

California’s natural and working lands are not healthy and the critical ecosystem services they provide, including their ability to sequester carbon from the atmosphere, are at

risk. Actions to protect, restore, and sustainably manage the health and resiliency of these lands can greatly accelerate our progress to mitigate climate change and our ability to reduce worsening climate change impacts.

To advance that goal, AB 45 would authorize blue carbon demonstration projects in order to demonstrate and quantify the carbon sequestration potential of these projects to help inform the state's natural and working lands and climate resilience strategies.

ARB's 2017 Scoping Plan set a preliminary goal to reduce GHG emissions from natural and working lands by at least 15 – 20 million metric tons of carbon dioxide equivalents (MMT CO<sub>2</sub>e) by 2030.

The 2022 Scoping Plan, released last fall, for the first time includes modeling for seven land types within the natural and working land sector, including wetlands. The Scoping Plan notes,

“Wetlands cover 2 percent of the state (roughly 1.7 million acres) and include inland and coastal wetlands, such as vernal pools, peatlands, mountain meadows, salt marshes, and mudflats. These lands are essential to California's communities as they serve as hotspots for biodiversity, contain considerable carbon in the soil, are critical to the state's water supply, and protect upland areas from flooding due to sea level rise and storms. Wetlands have been severely degraded through reclamation, diking, draining, and dredging practices in the past, resulting in the emissions of the carbon stored in the soils and the loss of ecosystem benefits. Climate smart strategies to restore and protect all the types of wetlands can reduce emissions while simultaneously improving the climate resilience of surrounding areas and improving the water quality and yield for the state. Restored wetlands also can reduce pressure on California's aging water infrastructure. These benefits beyond emissions reductions will help in the future, as climate change is predicted to negatively affect water supply.”

This bill's findings declare that blue carbon is not currently included in the state's natural and working lands inventory due, in part, to the limited availability of data and methodologies to inventory the stored carbon. While “blue carbon” is not explicitly referenced in the Scoping Plan update, the inclusion of wetlands under natural and working lands provides the opportunity to include blue carbon in the conversation as it relates to wetland restoration and meeting the state's GHG goals.

- 6) **Counting GHG benefits.** While various models exist to evaluate carbon stocks and sequestration rates for different habitats, the California Ocean Science Trust has stated that more research is needed to provide clear estimates and to better understand blue carbon opportunities in California. Information gaps include understanding the differences in carbon sequestration rates for restored wetland habits versus mature blue carbon ecosystems; determining how macro-algae and kelp forests contribute to carbon export and burial; and, better mapping of existing California blue carbon habitats and field measurements of their GHG emissions.

AB 45 would allow the Coastal Commission to authorize blue carbon demonstration projects in order to demonstrate and quantify the carbon sequestration potential of these projects to help inform the state's natural and working lands and climate resilience strategies.

7) **Committee amendments.** To ensure expectations are appropriately managed as it relates to the quality and quantity of data that the projects resulting from this bill could generate, the Committee may wish to amend (e) - (f) of Section 1 as follows:

(e) ~~However, according to the~~ The State Air Resources Board's draft 2022 scoping plan update, blue carbon is not currently included does not specifically include blue carbon in the state's natural and working lands inventory due, in part, to the limited availability of data and methodologies to inventory the stored carbon.

(f) Given the potential of blue carbon sequestration, ~~it is critically important to conduct~~ blue carbon demonstration projects in California ~~to help generate the data and knowledge to understand~~ may help the state better understand how blue carbon ~~may~~ could potentially contribute to the state achieving its carbon neutrality and climate resilience goals.

8) **Related legislation.**

AB 2593 (Boerner Horvath, 2022) would have authorized the Commission to approve blue carbon projects, as defined, in order to demonstrate and quantify the carbon sequestration potential of these projects to help inform the state's natural and working lands and climate resilience strategies. This bill was held in the Senate Appropriations Committee.

AB 2649 (C. Garcia, 2022) would set annual targets for natural carbon sequestration starting in 2030 by requiring the removal of 60 million metric tons (MMT) of carbon dioxide equivalent per year, increasing to 75 MMT annually in 2035. Defines "natural carbon sequestration" as "the removal and storage of atmospheric carbon dioxide equivalents by vegetation and soils on natural, working, and urban lands." Much of the policy language from this bill was codified in the Budget Act to require ARB to establish goals for carbon sequestration in natural and working lands. The bill was subsequently held in the Senate.

AB 1298 (Mullin, 2020) would have appropriated an unspecified amount to the Ocean Protection Council for blue carbon projects that increase the ability of the ocean and coastal ecosystems to capture, sequester, and store carbon dioxide. This bill was held due to the COVID-19 pandemic and limits on how many bills policy committee could hear.

**REGISTERED SUPPORT / OPPOSITION:**

**Support**

350 Bay Area Action  
Buena Vista Audubon Society  
San Diego Audubon Society  
San Diego Unified Port District  
Surfrider Foundation

**Opposition**

None on file

**Analysis Prepared by:** Paige Brokaw / NAT. RES. /

Date of Hearing: March 13, 2023

**ASSEMBLY COMMITTEE ON NATURAL RESOURCES**

Luz Rivas, Chair

AB 57 (Kalra) – As Introduced December 6, 2022

**SUBJECT:** California Pocket Forest Initiative.

**SUMMARY:** Establishes the California Pocket Forest Initiative (Initiative) at the Department of Forestry and Fire Protection (CAL FIRE).

**EXISTING LAW:**

Pursuant California Global Warming Solutions Act of 2006 (Health and Safety Code § 38500 et seq.):

- 1) Establishes the Air Resources Board (ARB) as the state agency responsible for monitoring and regulating sources emitting greenhouse gases (GHG).
- 2) Requires ARB to approve a statewide GHG emissions limit equivalent to the statewide GHG emissions level in 1990 to be achieved by 2020 (AB 32, Nuñez, Chapter 488, Statutes of 2006) and to ensure that statewide GHG emissions are reduced to at least 40% below the 1990 level by 2030. (SB 32, Pavley, Chapter 249, Statutes of 2015)
- 3) States that it is the policy of the state that the protection and management of natural and working lands is an important strategy in meeting the state’s GHG emissions reduction goals, and that the protection and management of those lands can result in the removal of carbon from the atmosphere and the sequestration of carbon in, above, and below the ground.

Pursuant to the California Urban Forestry Act of 1978 (Public Resources Code (PRC) § 4799.06-4799.12)

- 1) Finds and declares that trees are a vital resource in the urban environment and as an important psychological link with nature for the urban dweller; trees are a valuable economic asset in our cities; trees provide shade and humidity; trees help reduce noise, provide habitat for songbirds and other wildlife; and, trees planted in urban settings play a significant role in meeting the state’s GHG emission reduction targets by sequestering carbon as well as reducing energy consumption.
- 2) Requires CAL FIRE to implement a program in urban forestry to encourage better tree management and planting in urban areas to increase integrated, multiple benefit projects by assisting urban areas.
- 3) Requires CAL FIRE to encourage demonstration projects that maximize the benefits of urban forests in conjunction with state and local agency programs to improve carbon sequestration, water conservation, energy conservation, stormwater capture and reuse, urban forest maintenance, urban parks and river parkways, school construction and improvements, school greening or sun-safe schoolyards, air quality, water quality, flood management, urban revitalization, solid waste prevention, and other projects.



- 4) Requires CAL FIRE to establish local or regional targets for urban tree canopy, with emphasis on disadvantaged communities that tend to be most vulnerable to the urban heat island effect. Requires those targets to include urban forest diversity, tree species' adaptability to anticipated climate change impacts, and other relevant factors.
- 5) Authorizes the director of CAL FIRE to enter into agreements and contracts with a public or private organization including a local agency that has urban forestry-related jurisdictional responsibilities and an established and operating urban forestry program.
- 6) Authorizes the director of CAL FIRE to make grants to provide assistance of 25 to 90% of costs for projects meeting guidelines upon recommendation by the director.

**THIS BILL:**

- 1) Define the following terms for purposes of this bill:
  - a) "Initiative" means the California Pocket Forest Initiative.
  - b) "Miyawaki method" means a method of planting that first analyzes and improves a plot's soil conditions, then densely plants the plot with native main tree species, subspecies, shrubs, and ground-covering herbs. The trees planted through this method should, if possible, be grown from seeds, not grafts or clones.
  - c) "Pocket forest" means a small plot of urban land that has been planted according to the Miyawaki method.
- 2) Establishes the Initiative at CAL FIRE to coordinate implementation of the Initiative in conjunction with the California Urban Forestry Act of 1978.
- 3) Requires CAL FIRE to partner with one or more academic institutions to test the applicability and effectiveness of the Miyawaki method to restore degraded lands and reforest urban areas in multiple regions throughout California.
- 4) Authorizes, upon appropriation of funds by the Legislature for the purposes of this bill, CAL FIRE to offer grants to cities, counties, districts, nonprofit organizations, and public schools to establish pocket forests on public lands in order to test and demonstrate the applicability and effectiveness of the Miyawaki method in California.
- 5) Requires CAL FIRE to prioritize disadvantaged communities and communities that lack publicly accessible green space for these demonstration grants.
- 6) Authorizes, for public school grantees, the grant to include funding to develop and offer grade-appropriate urban forestry and ecology curriculum.
- 7) Requires CAL FIRE, on or before January 1, 2030, to submit a report to the Legislature that evaluates the applicability and effectiveness of the Miyawaki method to restore degraded lands and reforest urban areas in multiple regions throughout California. Requires the report to include an assessment of the costs and benefits of the Miyawaki method, a discussion of

appropriate species for different regions of the state, and recommendations for any modifications to the method that may be appropriate for its use in California. Authorizes CAL FIRE to contract with academic institutions to prepare the report, which shall be subject to the peer review process.

8) Sunsets this bill on January 1, 2031.

**FISCAL EFFECT:** Unknown.

**COMMENTS:**

1) **Need for the bill.** According to the author:

The environmental, societal, and health benefits of natural green spaces are numerous and well-documented. Unfortunately, urban communities often lose out on these benefits. While many install street trees and low-biodiversity parks, they often struggle to facilitate larger, more biodiverse forestry projects. This is especially true for low-income and otherwise disadvantaged communities.

Small, high biodiversity pocket forests overcome these challenges by providing an impactful forestry solution designed specifically for the urban landscape. By establishing the California Pocket Forest Initiative, AB 57 will make grants for pocket forest creation readily available to urban Californians. In turn, it will also serve as a much-needed beacon for the equitable, community-orientated environmentalist movement.

2) **Urban Forestry.** An urban forest is comprised of trees and other vegetation in and around our communities, including the trees in our yards and along residential streets, in parking lots and along commercial thoroughfares, on school grounds and in parks and open spaces.

Climate change, pollution, drought, arboreal disease, and other factors strain our urban forests. Investments in maintaining and protecting our current urban forests and developing new urban forests can help combat those threats and further the state's goals for urban forestry.

Trees conserve energy, reduce urban heat island effects, reduce storm-water runoff, improve local air quality, support public and mental health benefits, provide wildlife habitat, and increase property values. Trees not only improve, but are imperative to the quality of life in our urban environments.

According to a 2017 study, *The structure, function and value of urban forests in California communities*, reduced energy use from canopy shading and cooling saves an estimated \$568 million annually.

Last September, in response to a heatwave and overheated kids, Reclaim Our Schools LA — an association of parents, educators, students and community members — demanded more green space and shade on playgrounds in the Los Angeles Unified School District. Schoolyards are often the hottest locations in communities due to the large swaths of asphalt. Research has shown that heat and lack of green space can affect

children's attendance and educational performance. The coalition called for, among other things, making all schools 50% green space.

- 3) **The California Urban Forestry Act of 1978.** The CAL FIRE Urban & Community Forestry Program (Program), pursuant to the California Urban Forestry Act, works to optimize the benefits of trees and related vegetation through multiple objective projects. CAL FIRE has seven Regional Urban Foresters throughout the state to provide expert urban forestry support to communities, non-profit groups, and other municipal governments to create and maintain sustainable urban forests. These specialists also administer and provide technical support for grants that are offered for activities such as tree planting, municipal tree inventories and management plans, urban forest educational efforts, and innovative urban forestry projects. California currently has 1,256 square miles of urban forest canopy.

Under the Program, CAL FIRE also provides urban forestry grants to help communities to advance their urban forestry efforts. Eligible applicants for the urban forestry grants include cities, counties, and qualifying districts, which include, but are not limited to school, park, recreation, water, and local taxing districts. Non-profit organizations are not eligible for this grant, but may be partners in the projects.

Projects are prioritized if they meet the ARB criteria for being located within disadvantaged communities identified pursuant to AB 1550 (Gomez, Chapter 369, Statutes of 2016). AB 1550 requires that at least 25% of Greenhouse Gas Reduction Fund investments that go to projects within and for the benefit of disadvantaged communities and at least an additional 10% for low-income households or communities.

- 4) **Miyawaki method.** Dr. Akira Miyawaki, botanist and professor, invented the method in 1980. Miyawaki observed the trees which traditionally grew around temples, shrines, and cemeteries in Japan were native species, relics of the primary forest, and at the same time he calculated that only 0.06% of contemporary Japanese forests were indigenous forests. Contemporary forests, created according to forestry principles, are not, in his view, the most resilient nor the best suited vegetation for the geobioclimatic conditions in Japan, neither are they the most suited to address climate change. Leaning on potential natural vegetation, he developed, tested, and refined a method of ecological engineering today known as the "Miyawaki method" to restore native forests from seeds of native trees on very degraded soils, which were deforested and without humus. Using ecological theories and the results of his experiments, he was able to restore, sometimes over large areas, protective forests.

The essential principle of the Miyawaki method is using species of trees that would occur naturally in that area and that work together to create a diverse, multi-layered forest community. This creates a resilient and thriving forest ecosystem with species that complement each other, restoring "native forests by native trees." The selection of species to plant in a given area was originally linked to the theory of potential natural vegetation, in other words the vegetation that would occur in a specific area without further human interference.

It works like this: the soil of a future forest site is analyzed and then improved, using locally available sustainable amendments—for example, rice husks from a nearby mill. About 50 to 100 local plant species are selected and planted as seedlings in a random mix like you would find growing naturally in the wild. The seedlings are planted very densely—20,000 to 30,000 per hectares as opposed to 1,000 per hectare in commercial forestry. For a period of two to

three years, the site is monitored, watered, and weeded, to give the nascent forest every chance to establish itself.

During this early period, the plantings compete with each other for space and access to light and water—a battle that encourages much faster growth. Once stabilized, the forest is left to flourish on its own without further interference.

There has been particular focus on planting Miyawaki forests in urban environments as there are significant benefits to tree planting in towns and cities, and this method maximizes the space available. Urban forests reduce local temperatures (-1.3°C in one study), improve air quality by reducing pollutants, sequester carbon, and improve the wellbeing of residents, as well as creating a natural oasis for invertebrates and birds.

- 5) **Grant program.** This bill would require CAL FIRE to create guidelines for planting pocket forests and provide grants to cities, counties, districts, nonprofit organizations, and public schools to create pocket forests on public land. To enable equitable distribution of grants, the bill would require CAL FIRE to prioritize disadvantaged communities and communities that lack publicly accessible green space for these demonstration grants.

Because the bill requires CAL FIRE to coordinate implementation of the Initiative in conjunction with the California Urban Forest Act of 1978, the grants under this bill would be provided under the current Urban Forestry Grant program for pocket forests.

Last year, the Legislature considered AB 2114, which was held on the Senate Suspense File. The Senate Appropriations Committee analysis noted that the anticipated fiscal for that bill was unknown, but potentially significant one-time costs (General Fund) for CAL FIRE to partner with one or more academic institutions to test the applicability and effectiveness of the Miyawaki method, plus additional costs associated with the reporting requirement. The analysis also noted the cost pressure the bill would have created to provide future grant funding should CAL FIRE determine that the Miyawaki method would be applicable and effective in California.

- 6) **State fiscal crisis.** The Governor’s January 10 proposed budget reflects a \$22.5 billion deficit and proposes a 40% reduction (\$100 million) in urban greening funds and a 27% reduction (\$30 million) from urban forestry.

The Legislative Analyst’s Office’s February 22, 2023, report, *Crafting Climate, Resources, and Environmental Budget Solutions*, found a compelling rationale for the Governor’s proposal to reduce funding for Urban Greening and Urban Forestry. While funding would decline substantially, there would still be a significant amount—\$180 million—available for these programs. Additionally, the LAO opined, these two programs are similar to the Green Schoolyards program, which the Governor proposes to fully maintain at \$150 million. Accordingly, under the Governor’s proposed approach, the state still would maintain \$330 million for greening-related programs.

7) **Related legislation.**

AB 527 (Calderon) would require CAL FIRE to provide grants to qualified entities to support school greening. This bill is scheduled to be heard in the Assembly Natural Resources Committee on March 13.

AB 2114 (Kalra, 2022) would have established the California Pocket Forest Initiative at CAL FIRE to test the applicability and effectiveness of the Miyawaki method to restore degraded lands and reforest urban areas in multiple regions throughout California. This bill was held in the Senate Appropriations Committee.

AB 2251 (Calderon, Chapter 186, Statutes of 2022) requires CAL FIRE to develop a statewide strategic plan to achieve a 10-percent increase of tree canopy cover in urban areas by 2035.

AB 347 (Caballero, Chapter 104, Statutes of 2021) requires moneys transferred to the California Community and Neighborhood Tree Voluntary Tax Contribution Fund to be continuously appropriated and allocated to CAL FIRE to the grant program for urban forest management activities under the California Urban Forestry Act of 1978.

AB 1530 (Gonzalez Fletcher, Chapter 720, Statutes of 2017) requires CAL FIRE to update the California Urban Forestry Act to reflect its current funding mix, establish local or regional targets for urban tree canopy, and provide more focus on the maintenance of urban forests.

**REGISTERED SUPPORT / OPPOSITION:**

**Support**

Acterra: Action for A Healthy Planet  
Active San Gabriel Valley  
Breathe California of The Bay Area, Golden Gate, and Central Coast  
California Environmental Voters  
California Institute for Biodiversity  
California Native Plant Society Yerba Buena Chapter  
Californians for Western Wilderness  
Elders Climate Action Norcal Chapter  
Elders Climate Action Social Chapter  
Forests Forever  
Golden Gate Audubon Society  
Green Pocket Forests  
Resource Renewal Institute  
Roseville Urban Forest Foundation  
Sierra Club California  
Sunrise Silicon Valley  
Sustainable Claremont  
Sustainable Mill Valley  
Tuolumne River Trust  
YMCA of San Francisco

**Opposition**

None on file

**Analysis Prepared by:** Paige Brokaw / NAT. RES. /



Date of Hearing: March 13, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES  
Luz Rivas, Chair  
AB 72 (Boerner Horvath) – As Introduced December 13, 2022

**SUBJECT:** Coastal resources: research: landslides and erosion: early warning system: County of San Diego.

**SUMMARY:** Extends the sunset dates for the Scripps Institution of Oceanography (Scripps Institute) to conduct research on coastal cliff landslides and erosion in the County of San Diego and report its recommendations to the Legislature.

**EXISTING LAW:**

- 1) Establishes the Climate Ready Program in the State Coastal Conservancy (Conservancy) to address the impacts and potential impacts of climate change on resources within the Conservancy's jurisdiction. (Public Resources Code (PRC) § 31113)
- 2) Authorizes the Conservancy to undertake projects within its jurisdiction, including projects related to beach and bluff erosion and other coastal hazards that threaten coastal communities, infrastructure, and natural resources. (PRC § 31200)
- 3) Requires, upon appropriation by the Legislature, the Scripps Institute to conduct research on coastal cliff landslides and erosion in the County of San Diego and to report to the Legislature recommendations for developing a coastal cliff landslide and erosion early warning system based on available research. (Education Code § 92685)

**THIS BILL:**

- 1) Extends the sunset date from January 1, 2025, to January 1, 2026, for the Scripps Institute to conduct research on coastal cliff landslides and erosion in the County of San Diego.
- 2) Extends the sunset date from March 15, 2025, to March 30, 2026, for the Scripps Institute to provide a report to the Legislature with recommendations for developing a coastal cliff landslide and erosion early warning system based on available research. Extends the date for which this reporting requirement is repealed to March 15, 2029, to March 30, 2030.

**FISCAL EFFECT:** Unknown.

**COMMENTS:**

- 1) **Need for the bill.** According to the author,

In 2021, AB 66 directed the Scripps Institution of Oceanography to conduct research on coastal cliff landslides and erosion at Beacons Beach in the City of Encinitas and the City of Del Mar both in San Diego County. Due to delays in the local permitting process, Scripps researchers were not able to monitor or install the sensors needed for data collection at Beacons Beach for one year. Scripps is requesting a one-year extension to complete the full data collection and provide



recommendations for the state to develop an early warning system for bluff collapse to keep our beaches and beach-goers safe.

- 2) **Cliff erosion.** In January 2002, the Department of Boating and Waterways submitted to the Legislature the report, *California Beach Restoration Study*, which acknowledged that the great majority of the coast of California consists of actively eroding sea cliffs. Results from this study showed that the great majority -- 72% -- of the coast of California consists of actively eroding sea cliffs. Earlier studies (US Army Corps of Engineers, 1971) indicated that about 950 miles, or 86%, of California's coast are eroding based on a large-scale regional analysis, which goes to show how long there has been concern around coastal erosion.

Since then, more recent science has kept pace with the impacts of climate change, and we know sea level rise, higher storm surges, and other impacts of climate change are exacerbating coastal erosion. A 2017 study from the US Geological Survey published in the *Journal of Geophysical Research–Earth Surface* predicts that with limited human intervention, 31% to 67% of Southern California erosion caused by sea-level rise will shrink nearly all the beaches, which are a crucial feature of the economy and the first line of defense against coastal-storm impacts for coastal residents and businesses. Further projections suggest that up to two-thirds of Southern California beaches may become completely eroded by 2100.

Eroding cliffs threaten extensive cliff top development throughout the state, including homes, businesses, highways, railways, wastewater, oil, natural gas, and nuclear facilities, universities, several critical military bases, and numerous state beaches and parks.

A 2018 report by the Scripps Institute identified locations in California at highest risk of cliff failure by 2050. The highest risk sites were spread across the state, but included several Southern California locations: San Onofre State Beach, Daly City, Point Reyes National Seashore, and Palos Verdes. In these areas, ocean waves, rainstorms and other factors eroded coastal bluffs by up to 12 feet per year during the study period. Coastal erosion and bluff collapse have resulted in multiple fatalities and injuries in San Diego County. In August 2019, three people were fatally crushed when a bluff collapsed at an Encinitas beach. Bluff collapses in 1995 and 2008 resulted in three deaths and one injury.

While research suggests that coastal erosion rates will increase as the sea level rises, variation in cliff geology, beach protection, exposure to weather, and other factors complicate the prediction of future erosion rates. The 2018 Scripps Institute study also determined that historical cliff erosion rates do not always provide a good prediction of future rates, and cliffs with high erosion rates in recent times were often preceded by time periods with very erosion. These are key findings because models predicting future cliff retreat are often based on projecting the historical rates. Existing cliff erosion studies are often small scale, use a variety of techniques, and often rely on lower quality data sources, providing a patchwork across the state. According to Scripps Institute researcher Dr. Adam Young, understanding the processes that drive cliff failures, triggering mechanisms, magnitude of erosion, and timing of collapse is essential for coastal management and building resilient and safe communities.

- 3) **Current coastal erosion research requirements.** Last session, the Legislature enacted AB 66 (Boerner Horvath, Chapter 456, Statutes of 2021) to outline enhanced coastal monitoring

to better understand the timing of bluff failures and help inform recommendations towards the development of a potential early landslide warning system.

The research required pursuant to AB 66 was delayed for a year due to the permitting process, preventing timely installation of some key sensors. Delays were caused because the research project was initially combined with a City of Encinitas parking lot realignment project to streamline permitting. While the combined approach was initially mutually beneficial for both projects, the parking lot realignment project stalled and required the AB 66 research project to be separated in order move forward more rapidly. This delayed the permitting process by several months.

In addition, the project was appealed twice by a resident living adjacent to the project site. The project was initially reviewed during the City of Encinitas Planning Commission permit hearing on June 29, 2022, and received unanimous approval. The Planning Commission approval was appealed and then presented to the City of Encinitas City Council at an appeal hearing in August. The City Council denied the appeal and voted unanimously to approve the permit to conduct the AB 66 research and coastal monitoring. However, the City Council decision was appealed to the Coastal Commission and then presented at the November meeting. The Coastal Commission unanimously voted to deny the appeal and approve the project. In total, the permit process delays have set the project timeline back about one year.

Despite delays in the permit process, some significant progress has been made, including routine monitoring and the installation of some sensors. Routine monitoring includes GPS and total station surveys, LiDAR surveys (light detection and ranging), and aerial photo surveys. Sensor installation includes shallow surficial ground tilt sensors, a seismometer, cliff base wave sensors, and nearshore buoys. In addition, a dedicated website to the project is currently being developed to display sensor data in real time.

However, installation of several key sensors including a subsurface high sensitivity strain meter have been delayed by the permitting process, therefore requiring the project extension. Without a project extension, full data collection would only cover one full winter (when coastal erosion and landslides occur more frequently) and limit the overall project outcomes and recommendations.

- 4) **This bill.** AB 72 extends the statutory deadlines by one year from January 1, 2025, to January 1, 2026, to allow the Scripps Institute the time it needs to conduct and complete its research and the meet the requirements of AB 66.
- 5) **Related legislation:**

AB 2734 (Petrie-Norris, 2022) would require the Scripps Institute, upon appropriation by the Legislature, to conduct research on coastal cliff landslides and erosion in Orange County. This bill was held in the Senate Appropriations Committee.

AB 66 (Boerner Horvath, Chapter 456, Statutes of 2021) requires the Scripps Institute to conduct research on coastal erosion in San Diego County and report back to the Legislature on the feasibility of a bluff collapse early warning system, among other things.

SB 1 (Atkins, Chapter 236, Statutes of 2021) establishes the California Sea Level Rise State and Regional Support Collaborative at the Ocean Protection Council to help coordinate and fund state efforts to prepare for sea level rise associated with climate change, and provides up to \$100 million in state funding annually to address sea level rise, among other things.

SB 627 (Bates, 2021) would have authorized by-right construction of sea walls and other hard shorelines structures statewide. This bill was held in the Senate Natural Resources Committee.

**REGISTERED SUPPORT / OPPOSITION:**

**Support**

None on file

**Opposition**

None on file

**Analysis Prepared by:** Paige Brokaw / NAT. RES. /

Date of Hearing: March 13, 2023

**ASSEMBLY COMMITTEE ON NATURAL RESOURCES**

Luz Rivas, Chair

AB 287 (Garcia) – As Introduced January 24, 2023

**SUBJECT:** California Global Warming Solutions Act of 2006: Greenhouse Gas Reduction Fund: competitive grant programs: funding objectives

**SUMMARY:** Adds specified co-benefits to be included in Greenhouse Gas Reduction Fund (GGRF) project quantification and revises the criteria for various GGRF grant programs.

**EXISTING LAW:**

- 1) Requires the Air Resources Board (ARB), pursuant to California Global Warming Solutions Act of 2006 [AB 32 (Núñez), Chapter 488, Statutes of 2006], to adopt a statewide greenhouse gas (GHG) emissions limit equivalent to 1990 levels by 2020 and adopt regulations to achieve maximum technologically feasible and cost-effective GHG emission reductions. AB 32 authorizes ARB to permit the use of market-based compliance mechanisms to comply with GHG reduction regulations once specified conditions are met. Requires ARB to approve a statewide GHG emissions limit equivalent to 85% below the 1990 level by 2045. (Health and Safety Code § 38500-38599.11)
- 2) Establishes the GGRF and requires all moneys, except for fines and penalties, collected by ARB from the auction or sale of allowances pursuant to a market-based compliance mechanism (i.e., the cap-and-trade program adopted by ARB under AB 32) to be deposited in the GGRF and available for appropriation by the Legislature. (Health and Safety Code § 39710 et seq.)
- 3) Establishes the GGRF Investment Plan and Communities Revitalization Act (Act) to set procedures for the investment of GHG allowance auction revenues. Authorizes a range of GHG reduction investments and establishes several policy objectives:
  - a) Maximize economic, environmental, and public health benefits;
  - b) Foster job creation;
  - c) Complement efforts to improve air quality;
  - d) Direct investment toward the most disadvantaged communities and households in the state;
  - e) Provide opportunities for businesses, public agencies, nonprofits, and other community institutions to participate in and benefit from statewide efforts to reduce GHG emissions; and,
  - f) Lessen the impacts and effects of climate change on the state's communities, economy, and environment. (Health and Safety Code § 38500-38599.11)
- 4) Specifies that moneys appropriated from the GGRF for investments may include funding to reduce GHG emissions through:

- a) Energy efficiency, clean and renewable energy generation, distributed renewable energy generation, transmission and storage, and other related actions;
  - b) The development of state-of-the-art systems to move goods and freight, advanced technology vehicles and vehicle infrastructure, advanced biofuels, and low-carbon and efficient public transportation;
  - c) Strategic planning and development of sustainable infrastructure projects;
  - d) Investments in programs implemented by local and regional agencies, local and regional collaboratives, and nonprofit organizations coordinating with local governments; and,
  - e) Funding research, development, and deployment of innovative technologies, measures, and practices related to programs and projects funded pursuant to the Act.
- 5) Directs ARB and agencies administering GGRF funding to maximize the co-benefits associated with funded projects, including: (Health and Safety Code § 38500-38599.11)
- a) Maximizing economic, environmental, and public health benefits to the state;
  - b) Fostering job creation by promoting in-state GHG emissions reduction projects carried out by California workers and businesses;
  - c) Complementing efforts to improve air quality;
  - d) Directing investment toward the most disadvantaged communities and households in the state;
  - e) Providing opportunities for businesses, public agencies, Native American tribes in the state, nonprofits, and other community institutions to participate in and benefit from statewide efforts to reduce GHG emissions; and,
  - f) Lessening the impacts and effects of climate change on the state's communities, economy, and environment. (Health and Safety Code § 38500-38599.11)
- 6) Requires the Department of Finance (DOF) to submit an annual report and a triennial investment plan to the Legislature on the status of projects funded by GGRF moneys. (Health and Safety Code § 39716)
- 7) Requires ARB to prepare, in consultation with specified entities, a statewide strategy to reduce emissions of toxic air contaminants and criteria air pollutants in communities affected by a high cumulative exposure burden. Requires the strategy to include criteria for the development of community emission reduction programs. (Health and Safety Code § 44391.2)

**THIS BILL:**

- 1) Beginning July 1, 2025, requires state agencies administering competitive grant programs that allocate moneys from the GGRF to ensure that:

- a) Communities identified for community emissions reduction programs are given preferential points during grant application scoring for grant programs intended to improve air quality;
  - b) There are at least three months between the first call for applications or proposals and the due date of the proposal; and,
  - c) Applicants from the Counties of Imperial and San Diego are allowed to include daytime population numbers in grant applications, as specified.
- 2) Beginning July 1, 2025, requires state agencies that administer competitive grant programs using GGRF for projects that involve housing, urban forestry, urban greening, or planning to develop at least three categories for applications based on the population and density of the communities.
- a) Requires administering state agencies to develop scoring criteria for each category that takes into account the possible impacts a project will have on the population and density of the communities in which the project is located.
  - b) Specifies that nothing in this provision should be interpreted to require an administering state agency to fund grant applications from all of the categories.
  - c) States legislative intent that an administering state agency take into account the differences that exist between urban, suburban, and rural communities when reviewing applications for projects in order to ensure that all communities of the state have a reasonable chance of being awarded a grant.
- 3) Adds the following benefits to the list of co-benefits to be priorities in GGRF expenditures:
- a) Increase water supply resilience.
  - b) Reduce or prevent increases in transportation, energy, or fuel costs, particularly in disadvantaged communities.
  - c) Accelerate the development and implementation of low-carbon technology.
  - d) Reduce vehicle miles traveled.
  - e) Promote zoning and development activities that increase public access to essential services or amenities.
  - f) Promote partnerships between multiple jurisdictions.
  - g) Promote climate change adaptation capacity, including, but not limited to:
    - i) Higher average temperatures;
    - ii) Decreased air and water quality;
    - iii) The spread of infection and vector-borne illnesses or other public health impacts;

- iv) Extreme weather events;
  - v) Sea level rise;
  - vi) Flooding;
  - vii) Heat waves;
  - viii) Wildfires; and,
  - ix) Drought.
- h) Improve community access to green space.
- 4) Requires the annual report by DOF on the status of projects funded by the GGRF to also include the applications received for each grant program, including:
- a) Locations of projects proposed;
  - b) Amount of moneys requested for each project;
  - c) Names of lead applicants;
  - d) Whether the projects were funded in whole or in part by the GGRF.
- 5) Makes related technical and clarifying changes.

**FISCAL EFFECT:** Unknown

**COMMENTS:**

1) **Author's statement:**

Several years into the administration of the Greenhouse Gas Reduction Fund we are hearing of barriers that make it hard for applicants to access these important resources. AB 287 will direct administering agencies to refine their application processes to ensure communities can compete for resources and other important state priorities are met.

- 2) **AB 32.** The Global Warming Solutions Act (AB 32) requires ARB to adopt a statewide GHG emissions limit equivalent to 1990 levels by 2020 and adopt regulations, including market-based compliance mechanisms, to achieve maximum technologically feasible and cost-effective GHG emission reductions.

As part of the implementation of AB 32 market-based compliance measures, ARB adopted a cap-and-trade program that caps the allowable statewide emissions and provides for the auctioning of emission credits, the proceeds of which are deposited into the GGRF to be available for appropriation by the Legislature.

The Budget continuously appropriates 35% of cap-and-trade funds for investments in transit, affordable housing, and sustainable communities. Twenty-five percent of the revenues are

continuously appropriated to continue the construction of high-speed rail. The remaining 40% is to be appropriated annually by the Legislature for investments in programs that include low-carbon transportation, energy efficiency and renewable energy, and natural resources and waste diversion.

- 3) **Environmental justice.** According to the Office of Environmental Health Hazard Assessment (OEHHA), more than 20% of Californians live in zip codes that are considered "highly impacted" by environmental, public health, and socioeconomic stressors. Nearly half of all Californians live within six miles of a facility that is a significant GHG emitter, and they are disproportionately people of color. Throughout California, people of color face a 50% higher risk of cancer from ambient concentrations of air pollutants listed under the Clean Air Act. These impacts are felt by all Californians. ARB estimates that air pollution exposure accounts for 19,000 premature deaths, 280,000 cases of asthma, and 1.9 million lost work days every year.

SB 535 (de León), Chapter 850, Statutes of 2012, requires the Cap and Trade Proceeds Investment Plan to direct a minimum of 25% of the available moneys in the fund to projects that provide benefits to identified disadvantaged communities; and, a minimum of 10% of the available moneys in the fund to projects located within identified disadvantaged communities. SB 535 also required the California Environmental Protection Agency (CalEPA) to identify disadvantaged communities (i.e., environmental justice communities). In order to accurately identify environmental justice communities, OEHHA, on behalf of CalEPA, created the California Communities Environmental Health Screening Tool (CalEnviroScreen). CalEnviroScreen is a screening methodology that can be used to help identify California communities that are disproportionately burdened by multiple sources of pollution.

In February of 2014, CalEPA issued an Environmental Justice Program Update, which included four main areas for future actions: 1) increase efforts to eliminate discrimination on the basis of race, national origin, ethnic group identification, religion, age, sex, sexual orientation, color, genetic information, or disability in any program or activity conducted or funded by the state; 2) develop guidance to promote a sound legal framework for CalEPA to advance environmental justice goals and objectives; 3) lead an agency-wide working group dedicated to increase compliance with environmental laws in communities with relatively higher environmental burdens; and, 4) add additional indicators to CalEnviroScreen.

- 4) **Co-benefits in GGRF projects.** Proceeds from the state's cap-and-trade program are used to fund a variety of projects across state agencies that reduce GHGs through California Climate Investments (CCIs). As the oversight agency for distribution of GGRF funds, ARB is directed by statute to provide guidance to administering agencies on quantifying co-benefits associated with CCI investments. For example, efforts to control diesel emissions simultaneously reduce carbon dioxide and particulate matter, which can reduce rates of asthma and respiratory disease. These positive public health outcomes are co-benefits associated with this GHG intervention, and are slated to be tracked as part of the CCI reporting process.

California Climate Investments support the state's climate change goals and provide many additional benefits to individuals, households, businesses, and communities. These "co-benefits" include social, economic, and environmental benefits. ARB provides guidance on



quantification methods and reporting to administering agencies. ARB contracted with the University of California, Berkeley (UC Berkeley) to help research and develop methods for evaluating project co-benefits. Guidance on using the co-benefit assessment methodologies is contained in ARB's Funding Guidelines.

The co-benefits listed below were prioritized based on administering agency input and broad applicability to CCI programs. UC Berkeley first reviewed the scientific data to determine if methods could be developed and summarized the findings in literature reviews. Next, UC Berkeley and ARB developed co-benefit assessment methodologies where feasible. ARB solicited public comment on draft versions in Spring 2018 prior to posting final Co-benefit Assessment Methodologies. ARB may review and update assessment methodologies periodically based on: new or evolving project types; new legislation; available resources; new scientific developments or tools, or modifications in the analytical tools or approaches upon which the methodologies were based; or input from administering agencies or the public. ARB has established quantification methodologies and a calculator tool to assist administering agencies with estimating GHG emissions reductions and co-benefits for GGRF projects and benefit criteria tables for determining benefits for priority populations.

- 5) **California-Mexico Border.** Air pollution along the California-Mexico border poses significant threats to adjacent communities in California. OEHHA is participating in pilot projects with community groups to monitor air quality in the border region, and has found that pollution levels in border adjacent cities are substantially higher than in cities farther from the border. ARB estimates that Imperial County would be able to meet the national standard for 2.5 micrometer particulate matter if pollution from Mexico was not crossing the border. An estimated 196,120 people commute daily from Mexico to San Diego and Imperial Counties and back again, and in July of 2015, an estimated 1.1 million passenger cars, 29,000 trucks, and 230 buses crossed through the two ports of entry in Calexico. Border crossings often involve considerable time, sometimes hours, waiting to pass through customs, which leads to idling vehicles that exacerbate pollution. Communities in these areas are not authorized to account for daytime population in applications for CCI programs, so exposure to pollutants is likely higher in these areas than current estimates account for.
- 6) **Application lead time.** To apply for GGRF funding, the administering state agency issues a request for proposals with a specified due date, and the time between announcement and due date varies between programs. For example, the Natural Resources Agency Urban Greening program has solicited applications in January with a due date of April 16, the Department of Food and Agriculture Healthy Soils Program has solicited applications on March 6 with a due date of April 16, and the Department of Community Service and Development Low-Income Weatherization Program has solicited applications on March 27 with a due date of April 27. Short turn-around times for grant applications have the potential to limit the applicant pool and favor groups that have existing capacity to apply for grants. The three-month minimum time between the initial grant solicitation and due date for competitive GGRF programs across agencies could help less sophisticated applicants engage in the process.
- 7) **Previous legislation.**
  - a) AB 943 (E. Garcia) of 2022 was substantially similar to this bill. This bill was held in the Assembly Appropriations Committee.

- b) AB 2812 (E. Garcia) of 2020 was substantially similar to this bill; it was not heard in the Assembly Natural Resources Committee.
- c) AB 352 (E. Garcia) of 2019 was substantially similar to this bill, but was subsequently amended to establish the Wildfire Prevention, Safe Drinking Water, Drought Preparation, and Flood Protection Bond Act of 2020. This bill was held in the Senate Environmental Quality Committee.
- d) AB 1945 (E. Garcia) of 2018 was substantially similar to this bill; it was vetoed by Governor Brown.

**REGISTERED SUPPORT / OPPOSITION:**

**Support**

None on file

**Opposition**

None on file

**Analysis Prepared by:** Elizabeth MacMillan / NAT. RES. /



Date of Hearing: March 13, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES  
Luz Rivas, Chair  
AB 397 (Essayli) – As Introduced February 2, 2023

**SUBJECT:** California Global Warming Solutions Act of 2006: scoping plan.

**SUMMARY:** Requires the California Air Resources Board (ARB) to include greenhouse gas (GHG) emissions from wildlands and forest fires in the Scoping Plan

**EXISTING LAW:**

Pursuant to the California Global Warming Solutions Act of 2006 (Health and Safety Code (HSC) § 38500 et seq.):

- 1) Establishes ARB as the state agency responsible for monitoring and regulating sources emitting GHG.
- 2) Requires the GHG emissions reduction limit, pursuant to AB 1279 (Muratsuchi, Chapter 337, Statutes of 2022) to be at least 85% below the 1990 level by 2045, and establishes a goal of zero net carbon emissions by 2045, commonly known as carbon neutrality.
- 3) Requires ARB to prepare and approve a scoping plan for achieving the maximum technologically feasible and cost-effective reductions in GHG emissions from sources or categories of sources of GHGs. Requires ARB to consult with all state agencies with jurisdiction over sources of GHGs. Requires the Scoping Plan to identify and make recommendations on direct GHG emissions reduction measures, among other things. Requires ARB to update Scoping Plan for at least once every five years.
- 4) States that it is the policy of the state that the protection and management of natural and working lands is an important strategy in meeting the state’s GHG emissions reduction goals, and that the protection and management of those lands can result in the removal of carbon from the atmosphere and the sequestration of carbon in, above, and below the ground.

Pursuant to AB SB 901 (Dodd, Chapter 626, Statutes of 2018):

- 5) Requires ARB, in consultation with the California Department of Forestry and Fire Protection (CAL FIRE), to issue a report every five years that assesses GHG associated with wildfire and forest management activities. (HSC § 38535)

**FISCAL EFFECT:** Unknown.

**COMMENTS:**

- 1) **Need for the bill.** According to the author,

“According to Michael Jerrett, a [University of California, Los Angeles] Public Health professor on environmental health sciences and a lead author of a study on Wildfire Emissions, “Wildfire emissions in 2020 essentially negated 18 years of

reduction in greenhouse gas emissions.” Therefore, to better account and plan for future wildfires, AB 397 calls for the California Air Resource Board to include GHG emissions from wildlands and forest fires in its scoping plan.”

- 2) **Wildfires.** Wildfires have always been part of California’s natural ecology and will continue to be, but climate change has been exacerbating California’s wildfire season over the last decade. Of the twenty largest wildfires ever recorded in California, nine occurred in 2020 and 2021.

The 2020 wildfires resulted in the largest wildfire season recorded in California’s modern history that was characterized by nearly 10,000 fires that burned more than 4.2 million acres. The associated carbon losses (GHGs released into the atmosphere) of these wildfires contribute to the very problem healthy forests naturally help solve.

Over the long term, healthy and diverse forests are able to sequester carbon at a higher rate than overly dense forests under a broader range of stressful conditions. But, our forests need a lot of work before they can be considered “healthy.” Forest thinning, which can be achieved by prescribed fire, mechanical, or manual thinning, helps to prevent fire. Thinning may result in an initial loss of carbon; however, within a decade or two of treatment, the larger and more resilient trees will recover the carbon and will sequester it at a faster rate than an untreated stand.

- 3) **Natural and working lands.** Current law defines natural lands as lands consisting of forests, grasslands, deserts, freshwater and riparian systems, wetlands, coastal and estuarine areas, watersheds, wildlands, or wildlife habitat, or lands used for recreational purposes such as parks, urban and community forests, trails, greenbelts, and other similar open-space land. Working lands include lands used for farming, grazing, or the production of forest products. Natural and working lands cover approximately 90% of the state’s 105 million acres, including California Native American tribes’ ancestral and cultural lands and waters.

Healthy natural and working lands can sequester and store carbon, limit future carbon emissions into the atmosphere, protect people and nature from the impacts of climate change, and build resilience to future climate risks.

In October 2020, Governor Newsom outlined a comprehensive and results-oriented nature-based solutions agenda for California in Executive Order (EO) N-82-20. The EO called on the Natural Resources Agency to enable enduring conservation measures on a broad range of landscapes, including natural areas and working lands, in partnership with land managers and natural resource user groups.

Although natural and working lands can remove carbon dioxide from the atmosphere and sequester it in soil and vegetation, disturbances such as severe wildfire, land degradation, and conversion can cause these landscapes to emit more carbon dioxide than they store.

The Natural Resources Agency has a draft *Natural and Working Lands Climate Smart Strategy* to guide and accelerate near- and long-term climate action across key California landscapes. This strategy will specifically identify how these lands can deliver on our climate change goals and identify priority nature-based climate solutions to address the climate crisis.

- 4) **Calculating wildfire GHG.** Quantifying emissions from fires and forest management is an evolving area of science. The 2020 ARB report, *Greenhouse Gas Emissions of Contemporary Wildfire, Prescribed Fire, and Forest Management Activities*, pursuant to SB 901, directed ARB to prepare “a report that assesses [GHGs] associated with wildfire and forest management activities.”

Wildfire activity varies as landscapes cycle through periods of vegetation fuel abundance and scarcity in response to climate, management, and ignitions. The frequency and area extent of wildfire is the product of multiple factors, such as fuel abundance and availability, climate episodes such as drought, the strength of seasonal events such as Diablo and Santa Ana winds, topography, ignition sources, and fire behavior.

Using a vegetation combustion model and geospatial fire perimeters, annual wildfire GHG emissions in California were calculated for the years 2000–2019. ARB predicted the 2020 wildfire GHG emissions would be 112 million metric tons of CO<sub>2</sub> (MMTCO<sub>2</sub>), the equivalent to the amount of carbon contained in the structural lumber of 6.3 million average California homes, or more than 75% of all homes in California.

The ARB notes on its website that it is challenging to determine how much wildfire emissions alter the GHG concentrations in the atmosphere and contribute to anthropogenic climate change because wildfire emissions are part of the terrestrial carbon cycle.

Since the passage of AB 32 (Nuñez, Chapter 488, Statutes of 2006), ARB has focused on reducing fossil fuel combustion emissions and other anthropogenic emissions because they are accumulating in the atmosphere at an unprecedented pace. Fossil-fuel combustion releases ancient carbon stored underground for millions of years that the atmosphere has not seen in any recent carbon cycle.

Earth’s terrestrial carbon cycle transfers carbon between the land, ocean, and atmosphere. As part of the terrestrial carbon cycle, fire, plant respiration and decomposition are balanced by plant growth and other processes that take place over decades or centuries. When in balance, these biogenic CO<sub>2</sub> emissions from fire and other sources are offset by biogenic CO<sub>2</sub> sequestration, resulting in relatively minimal change in the total concentration of atmospheric CO<sub>2</sub> that drives climate change. Emissions from fossil-fuel combustion are contributing to putting this cycle out of balance. They are also contributing to a negative feedback loop for California’s forests and lands: as CO<sub>2</sub> emission accumulate in the atmosphere and California experiences more warming, extreme heat events, droughts, and invasive species, the risk and intensity of fires also increases, which in turn push the terrestrial carbon cycle further out of balance. Because of this effect, ARB works to understand and track both the total GHG emissions from anthropogenic sources, like the combustion of fossil-fuels, and the total carbon flux (or *net* change in carbon on the landscape) from terrestrial carbon.

ARB does track and estimate GHG and criteria pollutant emissions from wildfires. The development of a carbon inventory for natural and working lands quantifies the carbon stored in the state’s forests, soils, and other natural lands. Looking year-over-year at the data in the inventory, ARB tracks the trends of carbon-loss in California’s natural and working lands, with most of those losses coming from wildfires.

Whether to include wildfire GHGs in the Scoping Plan is not a novel topic. When asked why ARB does not currently include wildfire emissions in the GHG accounting in the Scoping Plan, it explains:

Use of fossil fuels created the climate and air quality problems we face, so our first priority will continue to be to minimize combustion of fossil fuels and reduce emissions as much as possible. This will not just reduce future global warming, but will also provide air quality and public health improvements for Californians, particularly those living in areas of high pollution exposure near traffic or other industrial sources. We also expect that California will need to develop and utilize carbon sinks via engineered carbon removal and natural and working lands to achieve carbon neutrality.

Recent catastrophic wildfires, land conversion, and other disturbances that are largely driven by climate change and human activity, have turned our natural and working lands into a net source of emissions, which makes achieving carbon neutrality even more challenging. As part of the upcoming Scoping Plan effort, ARB will work to project the net flux (or change) of carbon on the State's natural and working lands between now and mid-century. This flux will include both changes in carbon sequestration as well as emissions from wildfires and other disturbances, consistent with recommendations from the [Intergovernmental Panel on Climate Change] on achieving carbon neutrality.

- 5) **Scoping Plan.** The climate change Scoping Plan is the state's roadmap for reducing anthropogenic GHGs by 85% below 1990 levels no later than 2045 and for ultimately achieving carbon neutrality.

ARB modeling shows that, at this time and until our forests reach a balance through appropriate treatments, California's natural and working lands will act as a net source of emissions, not a sink. As such, the Scoping Plan includes policy direction and actions intended to quickly move the sector toward being a net sink and a more natural state, where wildfires will continue to be an important part of the healthy forest cycle but not at the intensity and frequency observed in recent years.

- 6) **This bill.** According to the author, "given the risk of emission impacts from wildfires, CARB cannot afford to ignore emissions from wildfires in its scoping plan. AB 397 would require CARB to include GHG emissions from wildlands and forest fires in its scoping plan. Since forest fires are the source of an enormous amount of GHG emissions, this proposal will help us understand the impact of future wildland fires, which will hopefully lead to reduced GHGs and other toxic pollutants."

AB 397 would require the ARB to include GHGs from wildlands and forest fires in the Scoping Plan. It is important to note that the Scoping Plan was just released in November 2022. Therefore, should this bill be enacted, the inclusion of GHGs from wildfires wouldn't be realized in the Scoping Plan for another five years.

In addition, the impact of including wildfire GHGs could skew ARB's prioritization of GHG reductions, and may not be necessary given the state's efforts to reduce and sequester GHG in natural and working lands.

**REGISTERED SUPPORT / OPPOSITION:**

**Support**

California Farm Bureau Federation

**Opposition**

None on file

**Analysis Prepared by:** Paige Brokaw / NAT. RES. /





Date of Hearing: March 13, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES

Luz Rivas, Chair

AB 527 (Calderon) – As Introduced February 8, 2023

**SUBJECT:** Urban forestry: school greening projects: grants.

**SUMMARY:** Requires the Department of Forestry and Fire Protection (CAL FIRE) to provide grants to qualified entities to support school greening.

**EXISTING LAW,** pursuant to the California Urban Forestry Act of 1978 (Public Resources Code § 4799.06-4799.12):

- 1) Finds and declares that trees are a vital resource in the urban environment and as an important psychological link with nature for the urban dweller; trees are a valuable economic asset in our cities; trees provide shade and humidity; trees help reduce noise, provide habitat for songbirds and other wildlife; and, trees planted in urban settings play a significant role in meeting the state’s greenhouse gas emission reduction targets by sequestering carbon as well as reducing energy consumption.
- 2) Requires CAL FIRE to implement a program in urban forestry to encourage better tree management and planting in urban areas to increase integrated, multiple benefit projects by assisting urban areas.
- 3) Requires CAL FIRE to encourage demonstration projects that maximize the benefits of urban forests in conjunction with state and local agency programs to improve carbon sequestration, water conservation, energy conservation, stormwater capture and reuse, urban forest maintenance, urban parks and river parkways, school construction and improvements, school greening or sun-safe schoolyards, air quality, water quality, flood management, urban revitalization, solid waste prevention, and other projects.
- 4) Requires CAL FIRE to establish local or regional targets for urban tree canopy, with emphasis on disadvantaged communities that tend to be most vulnerable to the urban heat island effect. These targets shall include urban forest diversity, tree species’ adaptability to anticipated climate change impacts, and other relevant factors.
- 5) Authorizes the director of CAL FIRE to enter into agreements and contracts with a public or private organization, including a local agency that has urban forestry-related jurisdictional responsibilities and an established and operating urban forestry program.
- 6) Authorizes the director of CAL FIRE to make grants to provide assistance of 25 - 90% of costs for projects meeting guidelines upon recommendation by the director.

**THIS BILL:**

- 1) Defines the following terms for purposes of the bill:
  - a) “Eligible project” means any project that includes, but it not limited to, development of urban tree plans, provision of seedling and tree stock, tree planting projects, and training

and education on tree care that can feasibly be completed on the schoolsite of a local educational agency.

- b) “In-need education facility” means a schoolsite of a local educational agency (LEA) in which either of the following apply:
    - i) A schoolsite located in a disadvantaged community or a low-income community.
    - ii) A schoolsite in which 70% or more of the pupils are eligible for free or reduced-price meals.
  - c) “LEA” means a school district, county office of education, or charter school that maintains a kindergarten or any of the grades 1 to 12, inclusive.
  - d) “School greening” means any eligible project located within the property boundaries of a schoolsite of an LEA that reduces the ambient temperature, including by supporting the urban forest.
- 2) Requires funds appropriated or allocated for purposes of this bill to be administered to support school greening by providing grants to eligible LEAs, nonprofit organizations, cities, counties, and districts, including special districts, through a competitive grant process.
  - 3) Requires not less than 60% of the school greening features supported by a grant received under this section to occur within areas on a schoolsite of an LEA used by pupils, including, but not limited to, for recreation, recess, lunch, or instruction outdoors.
  - 4) Requires, on or before July 1, 2024, CAL FIRE to develop the competitive grant process, which shall include guidelines that include all of the following:
    - a) Application requirements that specify the exact project to be completed.
    - b) Applicants to obtain a memorandum of understanding, resolution, or certified letter from the respective LEA supporting the project before being awarded a grant for work to be completed on that LEA’s property.
    - c) Awarded grants to be subject to state auditing and reporting requirements.
    - d) Grantee requirements to maintain and operate the project developed pursuant to the grant for a period of no less than five years.
    - e) Grant funds to be used to support costs related to the project that include, but are not limited to, planning, permitting, design, and soil testing.
    - f) Grant funds to be available to support indirect costs up to 20% of the total grant awarded by CAL FIRE.
    - g) Awarded projects to comply with the most recent state guidance from CAL FIRE on water-efficient irrigation or the local agency landscape water ordinance and shall use drought- and storm-tolerant plantings, as appropriate.
    - h) Priority for grant funds to be given to projects that convert paved areas to green spaces.
    - i) A charter school that has received a grant from the Charter Schools Facilities Program can be eligible for a grant pursuant to this section.
  - 5) Requires not less than 80% of funds made available for grants to be designated for in-need education facilities if sufficient applications for in-need education facilities are received and qualify for the grants.

- 6) Require, before developing the grant process, CAL FIRE to hold at least two public hearings to gather public input on the grant process development.
- 7) Establishes the School Greening and Resiliency Fund in the State Treasury and requires, upon appropriation in the annual Budget Act, funding for these purposes to be transferred to that fund.

**FISCAL EFFECT:** Unknown.

**COMMENTS:**

- 1) **Need for the bill.** According to the author,

“Last year, I was proud to secure \$150 million over two years for K-12 school greening grants. This funding prioritized providing grants to public school and childcare facilities located in low-income and disadvantaged communities. Due to increasing extreme heat events, Assembly Bill 527 seeks to codify the school greening grant program within CAL FIRE to ensure there is ongoing support in place for future school greening grants beyond the currently allocated state funding. AB 527 will continue to prioritize schools within low-income and disadvantaged communities, and require CAL FIRE to host public hearings to receive public input as they develop the competitive grant process.”

- 2) **The California Urban Forestry Act of 1978.** The CAL FIRE Urban & Community Forestry Program (Program), pursuant to the California Urban Forestry Act, works to optimize the benefits of trees and related vegetation through multiple objective projects. CAL FIRE has seven Regional Urban Foresters throughout the state to provide expert urban forestry support to communities, non-profit groups, and other municipal governments to create and maintain sustainable urban forests. These specialists also administer and provide technical support for grants that are offered for activities such as tree planting, municipal tree inventories and management plans, urban forest educational efforts, and innovative urban forestry projects. California currently has 1,256 square miles of urban forest canopy.

Under the Program, CAL FIRE also provides urban forestry grants to help communities to advance their urban forestry efforts. Eligible applicants for the urban forestry grants include cities, counties and qualifying districts, which includes, but is not limited to school, park, recreation, water, and local taxing districts.

- 3) **School greening.** California has about 10,000 public schools of which the majority have less than 5% canopy cover and a high degree of impervious surfaces. This leaves children, who are already disproportionately impacted by extreme urban heat, in even unhealthier environments than the surrounding urban areas. The lack of nature, exposure to extreme heat, and associated number of indoor-only days to avoid the heat don't just affect children's physical activity and health, but their mental health and wellbeing as well.

Last September, in response to a heatwave and overheated kids, Reclaim Our Schools LA — an association of parents, educators, students and community members — demanded more green space and shade on playgrounds in the Los Angeles Unified School District. Schoolyards are often the hottest locations in communities due to the

large swaths of asphalt. Research has shown that heat and lack of green space can affect children's attendance and educational performance. The coalition called for, among other things, making all schools 50% green space.

The Climate Ready Schools Coalition, a coordinated effort between doctors, medical and environmental health researchers, educators, youth and community groups, released the report, *Climate-Resilient California Schools: A Call to Action* on March 3 that looks at the impact of climate change on California's children and makes 14 evidence-based recommendations to center climate resilience in California's schools. The report explains that two out of five public school buildings in California are at least 50 years old — built long before the impacts of climate change began to affect school kids. The recommendations, to protect students and teachers from climate-related harms and to move schools closer to our carbon neutral goals, recommends, among other things:

- Creating green schoolyards that increase shade and reducing the presence of asphalt and other impervious surfaces.
- Growing food in regenerative schoolyard gardens.

While CAL FIRE has not excluded schools and school districts from applying for grant funding, the complex and time-consuming grant application process is one of the reasons why California public schools, which are historically understaffed and underfunded, have not invested resources in a grant application with uncertain outcome to improve their campus.

CAL FIRE is receiving funding for Green Schoolyards Grants, provided under the Program, which will include planting of trees and other vegetation on California public school campuses to help alleviate extreme heat, improve the immediate environment for students as well as improve accessibility to nature and nature-based learning, while also reducing greenhouse gas emissions, improving functionality of urban forests, arresting the decline of urban forest resources, addressing climate change resilience, improving the quality of the environment in urban areas, and optimizing co-benefits to school children and surrounding urban residents.

The CAL FIRE school greening grants will be included in the 2022/2023 grant cycle; however, the complex and time-consuming process of grant writing and application submission remains an obstacle for schools in disadvantaged communities or serving disadvantaged populations. To address that, CAL FIRE is providing grant writing assistance, stakeholder engagement, cost estimation, benefits estimation, and proposal/application submission assistance to school greening applicants with the greatest need to ensure that high quality yet feasible school greening projects are implemented.

- 4) **This bill.** AB 527 would require CAL FIRE to administer a competitive grant process to support school greening by providing grants to eligible LEAs, nonprofit organizations, cities, counties, and districts, including special districts, through a competitive grant process. It would require no less than 60% of the school greening features supported by a grant to occur within areas on a schoolsite of an LEA used by students. Furthermore, the bill would require no less than 80% of funds made available for grants to be designated for in-need education facilities if sufficient applications for in-need education facilities are received and qualify for the grants.

Last year, the Legislature approved AB 2566 (Calderon), which was virtually identical to this bill, but it was vetoed by the Governor. The goal of AB 527 is to create a program for school greening that is distinct from the existing urban greening and urban forestry programs, and the context of the state budget last year versus this year is what TreePeople, the sponsor of this bill, argues also makes a significant difference.

- 5) **State fiscal crisis.** The Governor's January 10 proposed budget reflects a \$22.5 billion deficit and proposes a 40% reduction (\$100 million) in urban greening funds and a 27% reduction (\$30 million) from urban forestry.

The Legislative Analyst's Office's (LAO) February 22, 2023, report, *Crafting Climate, Resources, and Environmental Budget Solutions*, found a compelling rationale for the Governor's proposal to reduce funding for Urban Greening and Urban Forestry. While funding would decline substantially, there would still be a significant amount—\$180 million—available for these programs. Additionally, the LAO opined these two programs are similar to the Green Schoolyards program, which the Governor proposes to fully maintain at \$150 million. Accordingly, under the Governor's proposed approach, the state still would maintain \$330 million for greening-related programs.

Given that, there is stakeholder concern that the Green Schoolyards funding will be used to supplant the urban greening and forestry programs, potentially diluting investments specifically in school greening projects.

AB 1567 (E. Garcia) is proposing a \$15.1 billion bond, the Safe Drinking Water, Wildfire Prevention, Drought Preparation, Flood Protection, Extreme Heat Mitigation, and Workforce Development Bond Act of 2023, for the next ballot. That bill currently proposes \$100 million to the Natural Resources Agency for urban greening projects that benefit vulnerable populations, among other potential investments in both urban greening and urban forestry.

6) **Related legislation.**

- a) AB 57 (Kalra) proposes to establish the California Pocket Forest Initiative at CAL FIRE. This bill has been referred to the Assembly Natural Resources Committee.
- b) AB 2256 (Calderon, 2022) was identical to AB 527. It was vetoed by Governor Newsom.
- c) AB 2251 (Calderon, Chapter 186, Statutes of 2022) requires CAL FIRE to complete a statewide strategic plan to achieve a 10% increase of tree canopy cover in urban areas by 2035.
- d) AB 2114 (Kalra, 2022) proposes to establish the California Pocket Forest Initiative at CAL FIRE. This bill is was held in the Senate Appropriations Committee.
- e) AB 347 (Caballero, Chapter 104, Statutes of 2021) requires moneys transferred to the California Community and Neighborhood Tree Voluntary Tax Contribution Fund to be continuously appropriated and allocated to CAL FIRE to the grant program for urban forest management activities under the California Urban Forestry Act of 1978.
- f) AB 1530 (Gonzalez Fletcher, Chapter 720, Statutes of 2017) requires CAL FIRE to update the California Urban Forestry Act to reflect its current funding mix, establish local

or regional targets for urban tree canopy, and provide more focus on the maintenance of urban forests.

**REGISTERED SUPPORT / OPPOSITION:**

**Support**

Treepeople

**Opposition**

None on file

**Analysis Prepared by:** Paige Brokaw / NAT. RES. /

Date of Hearing: March 13, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES  
Luz Rivas, Chair  
AB 536 (Wilson) – As Introduced February 8, 2023

**SUBJECT:** Bay Area Air Quality Management Advisory Council: compensation

**SUMMARY:** Authorizes members of the Bay Area Air Quality Management District (BAAQMD) Advisory Council to receive compensation for attending specified meetings.

**EXISTING LAW:**

- 1) Provides the Air Resources Board (ARB) with primary responsibility for control of mobile source air pollution and provides that local air districts have primary responsibility for controlling air pollution from all sources, other than emissions from mobile sources, and establishes certain powers, duties, and requirements for those districts. (*Health and Safety Code Section 39000, et seq.*)
- 2) Establishes the BAAQMD to regulate air emissions in the Counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara and portions of the Counties of Solano and Sonoma. (*Health and Safety Code Section 40200-40276.*)
- 3) Establishes the Advisory Council, consisting of seven members appointed by the BAAQMD board, to advise and consult with the board and the air pollution control officer in effectuating their duties. Requires each member to be skilled and experienced in air pollution, climate change, or health impacts of air pollution. Requires the members to be selected to include a diversity of perspectives, experience, and backgrounds. Provides that members serve without compensation but allows them to be reimbursed for actual expenses incurred in the discharge of their duties. (*Health and Safety Code Section 40260-40268.*)

**THIS BILL** repeals the prohibition on Advisory Council member compensation and instead authorizes each member to receive compensation, to be determined by the BAAQMD board for either of the following:

- 1) Attending a meeting of the council.
- 2) Attending a meeting, upon authorization of the BAAQMD board, as a representative of the council.

**FISCAL EFFECT:** Unknown

**COMMENTS:**

- 1) **Background.** In 1975, AB 1758 (Lewis) authorized the appointment of advisory councils for all air districts and established general standards for the councils, including that “members shall serve without compensation, but may be allowed actual expenses incurred in the discharge of their duties.” In separate provisions, AB 1758 also continued the BAAQMD Advisory Council, which predated the 1975 law. The BAAQMD provisions included the



same language prohibiting compensation, but allowing expenses, set the number of members at 20, and prescribed certain qualifications. In 2014, SB 1415 (Hill) reduced the number of members of the BAAQMD Advisory Council from 20 to seven and revised qualifications to focus on air pollution, climate change, and health impacts.

In 1980, SB 1661 (Presley) amended the act creating the South Coast Air Quality Management District (SCAQMD) to, among other things, specifically provide for an advisory council. SB 1661 did not include the same standards as AB 1758, including regarding compensation and expenses. Instead, SB 1661 provided that the “membership and rules of the advisory council shall be as established by resolution of the south coast district board.” Under this authority, the SCAQMD board has established a per diem rate of \$100 for advisory council members for attendance at advisory council meetings.

According to the author and sponsor (BAAQMD), “removing (the compensation) prohibition would align the BAAQMD’s policy with that of the SCAQMD. Since the BAAQMD has its own section within the Health and Safety Code, this bill would amend Health and Safety Code § 40266 and add language to allow for Advisory Council members to receive compensation, to be determined by the Board, either for attending a meeting of the Advisory Council or attending a meeting, upon authorization of the Board, as a representative of the Advisory Council.”

It should be noted that this bill appears to differ from the rules adopted by SCAQMD in that the bill authorizes Advisory Council members to be compensated for attending meetings other than meetings of the Advisory Council itself.

The other 33 air districts would remain subject to the general provision prohibiting compensation.

## 2) **Author’s statement:**

The BAAQMD Advisory Council is made up of health and science professionals, including medical professionals, climate economists, and nonprofit leaders that are skilled and highly respected in their fields regarding air pollution, climate change, or the health impacts of air pollution. The Advisory Council has been very involved in the subject of particulate matter (PM) and recommendations for changes to BAAQMD rules and policies around it. The work is highly complex and requires a significant time commitment to be acquainted with the latest science and policy recommendations. Allowing the Advisory Council to receive compensation would align it with other Air Quality Management Districts and ensure councilmembers are compensated for their diligent work and technical expertise.

## **REGISTERED SUPPORT / OPPOSITION:**

### **Support**

BAAQMD (sponsor)

### **Opposition**

None on file

**Analysis Prepared by:** Lawrence Lingbloom / NAT. RES. /



Date of Hearing: March 13, 2023

ASSEMBLY COMMITTEE ON NATURAL RESOURCES

Luz Rivas, Chair

AB 584 (Hart) – As Amended March 6, 2023

**SUBJECT:** California Coastal Act of 1976: coastal development: emergency waiver.

**SUMMARY:** Increases the value of a structure from \$25,000 to \$125,000 to be eligible for an exemption from the permit requirements under the California Coastal Act under specified conditions, and adjusts the value of the cap to be adjusted annually based on the Consumer Price Index.

**EXISTING LAW,** pursuant to the Coastal Act of 1976 (Public Resources Code § 30000, et seq.):

- 1) Establishes the California Coastal Commission to protect regional, state, and national interests in assuring the maintenance of the long-term productivity and economic vitality of coastal resources necessary for the well-being of the people of the state, and to avoid long-term costs to the public and a diminished quality of life resulting from the misuse of coastal resources, to coordinate and integrate the activities of the many agencies whose activities impact the coastal zone, and to supplement their activities in matters not properly within the jurisdiction of any existing agency. (PRC § 30004)
- 2) Requires any person wishing to perform or undertake any development in the coastal zone, in addition to obtaining any other permit required by law from any local government or from any state, regional, or local agency, to obtain a coastal development permit. (PRC § 30600)
- 3) Defines “structure,” for purposes of development, as any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line. (PRC § 30106)
- 4) Requires issuance of a coastal development permit if the proposed development is in conformity with the certified local coastal program.
- 5) Authorizes the requirement of having to obtain a permit to be waived when immediate action by a person or public agency performing a public service is required to protect life and public property from imminent danger, or to restore, repair, or maintain public works, utilities, or services destroyed, damaged, or interrupted by natural disaster, serious accident, or in other cases of emergency, as specified. Provides that the waiver provision does not authorize the permanent erection of structures valued at more than \$25,000. (PRC § 30611)

**FISCAL EFFECT:** Unknown.

**COMMENTS:**

- 1) **Need for the bill.** According to the author,

At a time when climate change and natural disasters are affecting California’s infrastructure and shores, emergency permits and waivers are a critical resource to

public agencies and regulatory bodies. AB 584 is a simple but essential legislation to give the Coastal Commission more flexibility in issuing emergency waivers to restore fallen structures after natural disasters. The measure would allow California's departments and agencies to clean-up our roads, trails, and oceans swiftly and ensure the safety of Californians.

- 2) **Coastal Act.** When the Coastal Act was enacted in 1976, the Legislature declared that some of the basic goals for the coastal zone, among others, included ensuring orderly, balanced utilization and conservation of coastal zone resources taking into account the social and economic needs of the people of the state.

The California Coastal Commission administers the Coastal Act and works in partnership with local governments to protect shoreline public access and recreation, terrestrial and marine habitats, views of the coast and scenic coastal areas, agricultural lands, and more, by regulating proposed development along the coast and in nearby areas. As such, the Coastal Commission develops criteria for coastal development permits to ensure that development along the coast occurs in a way that conserves, sustains, and makes prudent use of California's natural and recreational coastal resources.

- 3) **Coastal development.** Generally, any "development" activity in the coastal zone requires a coastal development permit from the Coastal Commission or local government with a certified Local Coastal Program. The width of the coastal zone varies, but it can extend up to five miles inland from the shore, including private and public property, and three miles out to sea.

"Development" is broadly defined by the Coastal Act, but includes demolition, construction, replacement, or changes to the size of a structure; grading, removal of, or placement of rock, soil, or other materials; clearing of vegetation in, or that provides, sensitive habitat; impeding access to the beach or public recreational trails; changing the intensity of use of land, such as using a single family home as a commercial wedding venue; and, repair or maintenance activities that could result in environmental impacts.

- 4) **Emergency waivers.** Under emergency situations, a permit waiver may be granted. When immediate action by a person or public agency performing a public service is required to protect life and public property from imminent danger, or to restore, repair, or maintain public works, utilities, or services destroyed, damaged, or interrupted by natural disaster, serious accident, or in other cases of emergency, permit requirements can be waived by the Coastal Commission within three days before/after the disaster.

Those permit waivers are limited to structures valued at \$25,000 or less. While having a monetary cap on the emergency waiver is important because it ensures that the Coastal Commission isn't waiving major projects that truly should be processed through an emergency permit, the low dollar amount in statute effectively limits the Coastal Commission's ability to provide emergency permit waivers.

Emergency waivers are rare during "normal" times because the Coastal Commission processes most emergency projects through emergency *permits*. One reason is that the \$25,000 limit on permanent structures has become prohibitively low over the years due to inflation.

As an example, the California Department of Transportation (CalTrans) needed to replace some rockfall netting along Highway 1 in Big Sur that had been damaged. This type of work would be an ideal example for an emergency waiver because CalTrans was just replacing something that was already there. However, though the project was relatively small, the Coastal Commission was informed by CalTrans staff that neither the rockfall netting nor basically anything else CalTrans constructs is worth less than \$25,000, so emergency waiver was generally unavailable to them. The affected 44.6-mile stretch of Highway 1 was closed until CalTrans could clear the debris, which ended up costing the department a \$1.3 million emergency contract.

While the need for emergency permit waivers is not frequent, at times there can be a deluge of emergency projects along the coast when use of the emergency waivers would be really beneficial, such as the recent series of atmospheric rivers. In those moments, it's helpful for Coastal Commission to be able to quickly waive the emergency projects that deserve waivers so that they can focus on all the other emergency projects that need emergency permits.

Last month, the Executive Director of the Coastal Commission reported that, during the atmospheric rivers and collateral storm damage, there were 10 emergency permits given to public agencies and one emergency waiver. These storms brought record-breaking rainfall, winds, storm surge and snowfall to many regions of the state, resulting in devastating flooding, mudslides and storm damage.

Emergency Permits require a follow up coastal development permit for the work to ensure that any work done under emergency conditions will be either removed or modified to be consistent with the Coastal Act in the long-term. Waivers are just that—they are issued for work that is development under the Coastal Act, but does not raise any Coastal Act issues.

- 5) **Is \$125k an appropriate threshold?** During the COVID-19 pandemic, the world felt the impacts of the supply chain backup and resultant cost increases on the prices of key commodities and increasing the cost of construction. The White House's *Housing and Inflation* report in 2021 noted the pandemic-related market disruptions, like increased demand and rising building costs as well as other long-term supply constraints in the market contributed to record increases in prices.

More simply put – and setting aside today's cost of building – when \$25,000 limit was set in 1976, property values were significantly lower. If using basic inflation calculator to measure the buying power of the dollar over time, \$25,000 in 1976 is comparable to \$128,000 in today's market.

Increasing the cap to what it would be today with inflation will allow Coastal Commission staff to re-capture the value of the emergency waiver as a regulatory tool, and in turn will allow staff to serve public agency partners even more nimbly during times of widespread crisis. Additionally adjusting the cap annually for inflation pursuant to the Consumer Price Index will prevent future statutory walls like the current one presents to obtaining emergency permit waivers.

**REGISTERED SUPPORT / OPPOSITION:**

**Support**

California Association of Realtors

**Opposition**

None on file

**Analysis Prepared by:** Paige Brokaw / NAT. RES. /