



August 22, 2019

Hon. Xavier Becerra
Attorney General
1300 I Street, 17th Floor
Sacramento, California 95814

Attention: Ms. Anabel Renteria
Initiative Coordinator

Dear Attorney General Becerra:

Pursuant to Elections Code Section 9005, we have reviewed the proposed statutory initiative (A.G. File No. 19-0005) that would authorize \$7.9 billion in general obligation bonds for various natural resources-related programs and projects intended to respond to the potential effects of climate change.

BACKGROUND

Climate Change Projected to Have Significant Effects in California. Scientific research predicts that climate change could have several consequential effects in California, including:

- **Sea-Level Rise.** Recent estimates project that compared to 2000, sea levels along the California coast south of Mendocino will rise between 1.5 inches and 1 foot by 2030 and between 5 inches and 2 feet by 2050. These changes would impact both human and natural resources along the coast, increasing the risk of flooding of buildings and infrastructure, salt water contaminating groundwater basins, and beaches eroding.
- **Flooding.** Climate models predict more intense storm patterns, which would increase the risk of inland flooding. Floods cause significant risk to human life, as well as damage to roads, buildings, and other infrastructure.
- **Temperature Increases.** Extreme heat events are projected to worsen throughout the state. By midcentury, for example, the Central Valley is projected to experience high heat events that are two weeks longer than current patterns. Changing temperatures could affect human health, agricultural production, and natural habitats.
- **Drought.** Warmer temperatures would contribute to more frequent and intense droughts by leading to more precipitation falling as rain rather than snow, faster melting of winter snowpack, greater rates of evaporation, and drier soils. These conditions would decrease the amount of spring snowmelt runoff upon which the state historically has depended for its annual water supply, as well as increase the demand for irrigation water in both agricultural and urban settings.

- **Wildfires.** Climate change is expected to make forests more susceptible to extreme wildfires. One study, for example, predicts that by 2100 the frequency of extreme wildfires burning over approximately 25,000 acres will increase by nearly 50 percent, and that the average area burned statewide will increase by 77 percent.
- **Warming Oceans.** Evidence indicates that climate change is degrading the state’s marine environment. In recent years, California’s coastal environment has experienced a historic marine heat wave, record harmful algal bloom, fishery closures, and a significant loss of northern kelp forests.

Climate Effects Would Impact Communities Throughout the State. The anticipated effects of climate change would vary by region and could affect communities and sectors differently. Some potential impacts include: (1) reduced public health from high heat events; (2) reduced water supply, water quality, and agricultural production from droughts; (3) increased energy costs from increased average temperatures; (4) increased risks to public safety and infrastructure from flooding and wildfires; and (5) degraded fish and wildlife habitats from higher temperatures, droughts, and changed ocean conditions.

Climate Change Likely to Increase Disaster-Related Costs for State and Local Governments. State and local governments incur costs to respond to and recover from major disasters such as wildfires and floods. To the extent that climate change increases the risk of such events, large one-time costs could result. For example, current estimates suggest the state will pay more than \$2.5 billion to respond to and recover from the Camp Fire that occurred in Paradise in November 2018 (although the federal government is expected to reimburse the state for a large share of these costs).

Disaster-Related Costs Could Be Minimized Through Mitigation Activities. Recent research from the National Institute of Building Sciences found that undertaking certain prevention activities ahead of time can reduce the impacts from and costs associated with natural disasters. Such activities—commonly known as mitigation—can result in significant public and private savings by protecting health and safety, preventing damage to or loss of property and infrastructure, and reducing business disruptions. For example, the study found that within the “wildland-urban interface” where wildfires have more potential to cause costly property damage, federal grants for fire mitigation provide \$3 of benefit for every \$1 invested.

PROPOSAL

This measure provides \$7.9 billion in general obligation bonds for various natural resources-related programs and projects intended to respond to the potential effects of climate change.

Uses of Funds

As shown in Figure 1 (next page), the measure provides bond funding for various uses that fall into seven broad categories, which are described in more detail on the next page.

Figure 1

Uses of Proposed Bond Funds
(In Millions)

Categories of Activities	Amount
Protect and enhance water supply and quality	\$2,200
Prevent and protect from wildfires	2,000
Protect parks, urban communities, and natural resources	1,508
Protect and enhance fish and wildlife habitats	975
Protect and restore coastal and ocean resources	770
Workforce development and education	230
Protect and enhance agricultural lands	200
Total	\$7,883

Funds Must Be Spent on Specific Purposes. Within the broad categories shown in Figure 1, the measure includes around 60 subcategories for how the bond funds must be spent. In some cases, the initiative requires that certain subcategories be spent in particular regions of the state or on specific types of projects. The measure’s broad spending categories include:

- **Water Supply and Quality (\$2.2 Billion).** The measure provides funding for activities to protect California’s water supply and water quality. These include projects that improve supplies of safe drinking water; improve groundwater supply; protect and restore rivers, lakes, and streams; and manage rivers in ways that reduce flood damage while also reducing risks to public safety and improving wildlife habitats.
- **Wildfires (\$2 Billion).** The measure provides funding for a variety of activities to protect communities from wildfires, reduce the risk of severe fires occurring, and recover from the impacts of fires. These include funding grants for local agencies to undertake projects such as improving emergency notification systems, hardening structures, thinning trees in strategic locations, and cleaning up sites damaged by fires.
- **Parks, Urban Communities, and Natural Resources (\$1.5 Billion).** The measure provides funding for activities that increase resilience to the effects of climate change in urban areas, such as developing green infrastructure, capturing stormwater to increase water supplies, and establishing shelters for use during extreme heat events. Additionally, the measure provides funding for state conservancies to implement projects that protect and conserve natural resources within their specific jurisdictions, for the state Department of Parks and Recreation to undertake activities that increase resilience to climate change across state parks, and for collaborative groups to develop and implement climate adaptation strategies on a regional scale.
- **Fish and Wildlife Habitats (\$975 Million).** The measure provides funding for projects to protect the state’s fish and wildlife habitats in response to changing climate conditions and natural disasters. These include restoring wetlands and acquiring water to benefit fish. Other activities might include acquiring land or conservation easements to protect land from development.

- ***Coastal and Ocean Resources (\$770 Million)***. The measure provides funding for various activities to protect coastal and ocean resources from the impacts of climate change. This includes specific funding allocations for certain areas of the state—the San Francisco Bay and San Diego region—as well as funding that would be available for coastal and ocean restoration projects around the state.
- ***Workforce Development and Education (\$230 Million)***. The measure provides funding for projects and programs that promote workforce development and career pathways in natural resources-related fields, including fire prevention and management, watershed and forestry restoration, parks or fisheries management, and sustainable agriculture. The measure also provides funding for various education and outreach efforts, including climate risk and resilience and outdoor environmental education programs.
- ***Agricultural Lands (\$200 Million)***. The measure provides funding for protecting farmland and rangelands from the effects of climate change and for improving agricultural practices that also benefit the environment. Examples of such practices include improving on-farm water use efficiency, soil health, and replenishment of groundwater.

Funding Allocations and Administrative Costs

The bond would be administered by more than a dozen different state departments, agencies, boards, and conservancies. These administering entities, in turn, would pass through much of the funds to local government agencies, Indian tribes, and non-profit agencies in the form of grants. In addition to making grants, the measure would allow state government entities to spend some of the funds on projects and programs implemented at the state level. Administering entities could use up to 5 percent of the bond funds to pay for administrative costs, along with an additional 10 percent for planning and monitoring activities. The measure requires that funding for certain activities—such as for safe drinking water projects—be prioritized for economically disadvantaged communities. Moreover, the measure allows for up to 10 percent of funding for each of the categories displayed in Figure 1 to be used for technical assistance and capacity building for disadvantaged communities and vulnerable populations.

FISCAL EFFECTS

Fiscal Effects on State Government. This measure would allow the state to borrow up to \$7.9 billion by selling general obligation bonds to investors, who would be repaid with interest using the state's general tax revenues. The cost to the state of repaying these bonds would depend on various factors such as the interest rates in effect at the time they are sold, the timing of bond sales, and the time period over which they are repaid. We assume that (1) the interest rate for bonds would average 5 percent, (2) they would be sold over the next 10 years, and (3) all bonds would be issued for a 30-year term. Based on these assumptions, the cost to taxpayers to repay the bonds would average about \$385 million annually over the next 40 years—totaling \$15.4 billion to pay off both principal (\$7.9 billion) and interest (\$7.5 billion).

Additionally, some of the funding provided by this initiative could help reduce future state costs to respond to climate-related disasters. As noted earlier, studies have found that certain pre-disaster mitigation activities can ultimately result in post-disaster savings through lessening the severity and/or impact of the event. Of the total amount provided by this measure, roughly one-

quarter would be dedicated for activities that could help mitigate the severity of future fires and floods that can result in state costs for disaster response and recovery. To the degree that undertaking such activities ends up reducing future fire or flood damages (and associated state costs) that would otherwise have occurred, this would result in savings for the state. The magnitude of these savings would depend upon the specific activities undertaken with the funding, the degree to which potential disaster recovery costs would have been covered by the state—rather than the federal—government, as well as the fire and flood events that ultimately occur.

Fiscal Effects on Local Governments. A portion of the bond funding would be used for local government projects, in particular for fire protection and drinking water supply. Providing state funds for local projects would affect how much of their own funds these local governments spend on these projects. In cases where the state bond funds replace monies that local governments would have spent on projects anyway, this could reduce local spending and result in savings. The exact amount would depend on which specific projects local governments choose and their share of the total project costs. These savings could average in the low tens of millions of dollars annually over the next few decades.

Similar to the state, local governments could also experience some savings from avoided disaster-related costs to the degree that undertaking certain bond-funded activities reduce damages from future fires or floods.

Summary of Fiscal Effects. This measure would have the following major fiscal effects:

- State costs of \$15.4 billion to pay off principal (\$7.9 billion) and interest (\$7.5 billion) on bonds over a 40-year period. Annual payments would average \$385 million.
- Some amount of state and local government savings possible based on to the degree to which bond-funded activities reduce future fire or flood damages (and associated state and local costs) that would otherwise have occurred.
- Potential savings to local governments, primarily for fire protection and water supply projects, averaging in the low tens of millions of dollars annually over the next few decades.

Sincerely,

Gabriel Petek
Legislative Analyst

Keely Martin Bosler
Director of Finance