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April 19, 2022

Assemblymember Luz Rivas  
Chair, Assembly Natural Resources Committee  
1020 O St., Ste. 6140  
Sacramento, CA 95814

**Re: AB 2649 (C. Garcia) – SUPPORT**

Dear Chair Rivas:

We, the undersigned sponsors, write today to urge your support for **AB 2649, the Natural Carbon Sequestration and Resilience Act of 2022**, authored by Assemblymember Cristina Garcia with co-authors Assemblymember Mark Stone and Senator Josh Becker. AB 2649 would be the first bill of its kind in the state to codify specific targets for the removal of past carbon dioxide equivalent emissions in the atmosphere through natural carbon sequestration (NCS). NCS is proven, scalable, cost-effective, environmentally sound and just, and leverages practices informed by traditional ecological knowledge—attributes which are critical to addressing the climate crisis on the necessary scale.

The climate crisis threatens increasingly deleterious effects on California's people, land, and economy. Heat extremes and poor air quality have enormous health impacts, especially to frontline communities. Stoked to ever-greater intensities by the climate crisis, wildfires and smoke storms have cost too many lives and billions of dollars in losses. The record breaking multidecadal [megadrought](#) now gripping the American West is likely to continue until at least 2030. In 2015 alone, the drought cost the state [\\$2.7 billion and 21,000 jobs](#) in just the agricultural sector. According to one leading [climate scientist](#), many of the crops grown in California today may not be viable by 2027.

As affirmed by the [latest report](#) from the IPCC, limiting global warming to the 1.5 degrees Celsius dangerous threshold will require both dramatically cutting emissions *and* removing up to a trillion tons of past climate pollution from the atmosphere. NCS is not a replacement for direct source emission reductions. Recent [climate science](#) indicates that California could pass the dangerous 1.5C warming threshold as soon as 2027. Confronting the climate crisis at the speed and scale demanded by the science will require bold action from California and the removal of carbon from the atmosphere will be a pivotal strategy in this effort.

AB 2649 aims to set this strategy in motion by setting into statute specific sequestration targets utilizing natural carbon sequestration, which the bill defines as "the removal and storage of atmospheric carbon dioxide equivalents by vegetation and soils on natural, working, and urban lands." The heart of the bill is the codification of a target for sequestering from the atmosphere by natural, non-technological means, an additional 60 million metric tons (MMT) of carbon dioxide equivalent (CO<sub>2</sub>e) annually on California's natural, working and urban lands (NWL) by 2030, which increases to 75 MMT CO<sub>2</sub>e annually by 2035. To support the achievement of these targets, AB 2649 calls for technical assistance and additional forms of support to farmers, ranchers and other land managers such as workforce and infrastructure development to implement natural carbon sequestration (NCS) at scale. Finally, the bill allocates 50 percent of state expenditures in support of NCS for low-income and disadvantaged communities including historically underserved farmers.

These goals are very achievable. [Recent research](#) found that NCS on California's working lands could absorb up to 103 MMT CO2e additional per year. Adding sequestration on natural lands and waters further increases what is possible annually with already proven, scalable, cost-effective, environmentally sound, and just methodologies, including practices informed by traditional ecological knowledge.

Practices that enable greater sequestration on NWL help restore the health of soils, vegetation and ecosystems. In doing so, they enhance water and food security, increase resilience to increasing extremes such as drought, heat, wildfires and flooding, and stabilize and improve crop yields. These practices can displace the use of synthetic nitrogen fertilizer, which, when overapplied, pollutes air and water in frontline agricultural communities and is a significant source of the potent greenhouse gas, nitrous oxide. Application at scale of compost on agricultural lands can also divert food and other organic waste from landfills, reducing emissions of the short lived climate pollutant methane while providing benefits to soil health.

Additionally, it is important to note that technological removal of past climate pollution from the atmosphere, Direct Air Capture, is in its infancy, expensive and energy intensive. The other technology that is often raised in these discussions, [carbon capture and storage](#) (CCS), attempts to capture new emissions of fossil fuel pollution at the point source, such as a smokestack, rather than removing existing carbon pollution from the atmosphere. CCS has a long record of underwhelming results that come at great expense. Neither of these technologies provides the significant co-benefits offered by NCS. On top of that, NCS can begin to be implemented immediately with multiple co-benefits for community health, our economy and our environment.

As we saw with other landmark policies like the Renewable Portfolio Standard and the climate targets set by AB and SB 32, the adoption of the targets set forth in AB 2649 will spur the wider adoption of natural carbon sequestration practices across California, create significant workforce development opportunities, and will allow the state to reap the myriad co-benefits associated with more resilient natural and working lands. By enacting the Natural Carbon Sequestration and Resilience Act of 2022, California will scale up natural carbon sequestration from the atmosphere while enhancing water and food security, public health outcomes, environmental justice, climate resilience, biodiversity, and also providing a template that can be replicated across the nation and the world. For these reasons, we urge you to vote "aye" on AB 2649.

Thank you for your consideration.

Sincerely,

Ellie Cohen  
The Climate Center

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Carbon Cycle Institute

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CC: Assemblymember Cristina Garcia  
Members, Assembly Natural Resources Committee