SENATE COMMITTEE ON ENVIRONMENTAL QUALITY
Senator Allen, Chair
2023 - 2024 Regular

Bill No:	AB 1159		
Author:	Aguiar-Curry		
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Urgency:	No	**Fiscal:**	Yes
Consultant:	Eric Walters		

SUBJECT: California Global Warming Solutions Act of 2006: natural and working lands: market-based compliance mechanisms

DIGEST: This bill amends a provision of AB 1757 (C. Garcia, Chapter 341, Statutes of 2022) to (rather than prohibit any project receiving any and all state funds from generating credits for a market-based compliance mechanism) only prohibit the specific greenhouse gas emissions reduced or removed as a result of state funding from generating credits for a market-based compliance mechanism.

ANALYSIS:

Existing law:

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

    a) Establishes the California Air Resources Board (CARB) as the state agency responsible for monitoring and regulating sources emitting greenhouse gases (GHGs).

    b) Requires CARB to approve a statewide GHG emissions limit equivalent to the statewide GHG emissions level in 1990 to be achieved by 2020 (AB 32, 2006) and to ensure that statewide GHG emissions are reduced to at least 40% below the 1990 level by 2030 (SB 32, 2016).

2) States that it is the policy of the state that the protection and management of natural and working lands (NWL) 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. (Public Resources Code (PRC) §9001 et seq.)

3) Under the California Climate Crisis Act (AB 1279, Muratsuchi, Chapter 337, Statutes of 2022), states that it is the policy of the state to achieve net zero

GHG emissions no later than 2045 and maintain net negative GHG emissions thereafter, and to ensure that by 2045 statewide anthropogenic GHG emissions are reduced to at least 85% below the 1990 level.

4) Under AB 1757 (C. Garcia, Chapter 341, Statutes of 2022) (HSC §38561.5):

   a) Directs California Natural Resources Agency (CNRA) to, in collaboration with CARB, California Environmental Protection Agency (CalEPA), the California Department of Food and Agriculture (CDFA), the expert advisory committee, and other relevant state agencies, to determine an ambitious range of targets for natural carbon sequestration and for nature-based climate solutions that reduce GHG emissions for 2030, 2038, and 2045 ("Targets"), which will be integrated into the AB/SB 32 Scoping Plan Updates.

   b) Directs CARB to, no later than January 1, 2025, develop standard methods for state agencies to consistently track GHG emissions and reductions, carbon sequestration, and, where feasible and in consultation with CNRA and CDFA, additional benefits from NWLs over time.

   c) Directs CARB to ensure that all emissions reductions from projects and actions developed to achieve the Targets shall be accounted for in a manner that does not result in double counting of emissions reductions. ("(b)(3)(A)")

   d) States that notwithstanding any other law, emissions reduction projects and actions that receive state funding are not eligible to generate credits under any market-based compliance mechanism. ("(b)(3)(B)")

This bill revises (b)(3)(B) to prohibit NWL projects and actions that receive state funding from generating credits under any market-based compliance mechanism only for any GHG emissions reduced or removed as a result of the state funding.

Background

1) *Natural and Working Lands (NWLs).* California's NWLs include rangelands, forests, woodlands, wetlands, grasslands, shrubland, farmland, riparian areas, and urban green space. They cover more than 90 percent of the State and supply life-sustaining resources including clean water, air, food, and fiber. With their potential to sequester carbon, reduce GHG emissions, and increase the capacity for California to withstand inevitable climate impacts, these lands are a critical component of California's integrated climate change strategy.

However, some sources show that California's NWLs are a net GHG source, losing more carbon than they are sequestering, with wildfire being the largest cause of carbon loss. A number of entities in California's executive branch are developing policy and implementing programs to mitigate disturbances on natural and working lands and protect these lands from conversion to more intensive land uses.

2) *NWLs and carbon neutrality*. Under last year's AB 1279, it is now California's statutorily enshrined policy to achieve carbon neutrality as soon as possible, but no later than 2045, and to do so by way of reducing GHG emissions to at least 85% below their 1990 level.

   If emissions are reduced by 85% in 2045, the 15% that remains are termed "residual emissions" and in order to achieve carbon neutrality they must be offset by an equivalent amount of carbon dioxide removal (CDR). To put more concrete numbers to it, achieving an 85% reduction from the 1990 level (as AB 1279 requires) would mean there are still 65 million metric tons of CO2-equivalent emissions in 2045. To be carbon neutral then, California would need to demonstrate 65 MMTCO2e worth of CDR, which could be provided by a mix of nature-based carbon sequestration on NWLs and engineered carbon removal.

   Nature-based carbon sequestration has received considerable attention because it is, to many, the most attractive solution to achieving carbon neutrality. There is no plausible plan for California to have truly zero emissions in 2045; all signs point towards at least some residual emissions from some sectors. For those who question the promise of engineered carbon removal, nature-based carbon sequestration then must play a larger role in counterbalancing any residual emissions in 2045 and beyond.

3) *Cap-and-trade compliance.* The original cap-and-trade program was recommended by CARB as a central approach to flexibly and iteratively reduce emissions over time. Beginning on January 1, 2013, the cap-and-trade regulation set a firm, declining cap on total GHG emissions from sources that make up approximately 80% of all statewide GHG emissions. Sources included under the cap are termed "covered entities." The cap is enforced by requiring each covered entity to surrender one "compliance instrument" for every emissions unit (i.e., metric ton of carbon dioxide equivalent or $MTCO_2e$) that it emits at the end of a compliance period.

   Two main forms of compliance instruments are used: allowances and offsets. Allowances are generated by the state in an amount equal to the cap and may

be "banked" (i.e., allowing current allowances to be used for future compliance). An offset is a credit intended to represent a real, verified, permanent, and enforceable emission reduction project from a source outside a capped sector (e.g., a certified carbon-storing forestry project). Under AB 398 (E. Garcia, Chapter 135, Statutes of 2017), the amount of offsets a covered entity may use to comply with cap-and-trade was reduced from 8% of its total emissions to 4% of its total emissions, though this number will rise to 6% in 2026 onward. Allowances and offsets both have some controversy surrounding their design and implementation in California's cap-and-trade program.

4) *Concerns around offsets.* Carbon offsets are widely used by individuals, corporations, and governments to mitigate their GHG emissions on the assumption that offsets reflect equivalent climate benefits achieved elsewhere. These climate-equivalence claims depend on offsets providing real and additional climate benefits beyond what would have happened, counterfactually, without the offsets project. In California, according to the latest Independent Emissions Market Advisory Committee (IEMAC) report, offsets constitute a significant source (6.3%) of the supply of compliance instruments in the market, with forest offsets producing about 80% of offset supply to date.

   The central idea behind a carbon offset is that it can substitute for GHG emission reductions that an organization would have made on its own. Given the inherent difficulty of proving an impact as compared to something that did not happen, the financial incentives for expert practitioners to advocate for more lenient policies, and the huge diversity of offset-generating projects, it is no wonder the discussions of carbon offsets have been complex and fraught. The stakes are incredibly high as well; if emitting one ton of GHGs is justified because of an offset, and that offset turns out to not be real, then emissions will continue to rise unabated regardless of the accounting performed.

5) *CARB's AB 1757 guidance.* In December of 2022, CARB issued a guidance document for AB 1757 implementation, which addressed some of the very same issues AB 1159 does, but it did so through interpreting the intentions underlying AB 1757.

   In the document, CARB stated that the intention of HSC §38561.5(b)(3)(B) was to avoid offsets being generated alongside state funding with the *primary purpose* being to help the state achieve the AB 1757 targets, despite no allusion to the "primary purpose" of the funds in the statute. The guidance document went on to state that "A project receiving compliance offset credits in the Cap-and-Trade Program can still receive State funding for actions that do not have

as their primary purpose climate mitigation and increases in quantified stored carbon or avoided GHG emissions." This is a notable contrast to the text of AB 1757, which reads "emissions reduction projects and actions that receive state funding are not eligible to generate credits under any market-based compliance mechanism."

As initially introduced, AB 1159 reflected CARB's guidance by stating that "projects and actions that receive state funding for the primary purpose of reducing greenhouse gas emissions are not eligible to generate credits under any market-based compliance mechanism." However, subsequent amendments to the bill taken in the Assembly Natural Resources Committee further refine the language, and as such deviate considerably from CARB's December 2022 guidance.

Comments

1) *Purpose of Bill.* According to the author, "Last year, the Legislature passed AB 1757 (C. Garcia and R. Rivas), which required the Natural Resources Agency to determine a range of targets for natural carbon sequestration and for nature-based carbon solutions for GHG reductions. AB 1757 also includes well-intended provisions to ensure any emission reductions work used toward achieving targets is not double-counted and that projects or actions that receive state funding are not eligible to generate credits under any market-based mechanisms. However, the existing law under AB 1757, is overly broad, and could be interpreted to apply to all state funds, not just funds intended for carbon sequestration or GHG emissions reduction. This interpretation has the potential to halt projects that return ancestral lands to tribes because these projects rely on state funds for the acquisition and restoration grants, but also generate carbon sequestration projects.

   "This bill clarifies that the prohibition established in AB 1757 against generating credits under a market-based compliance mechanism - if a project or activity receives state funds - only applies to actions and projects that receive state funding for the primary purpose of reducing GHG emissions.

   "This clarification will allow land managers to seek and receive state acquisition and restoration grants for projects on properties that generate carbon sequestration credits (without the use of state funds) to move forward with legal certainty."

2) *Defining "double-counting" and "double-dipping".* Within the provisions of AB 1757, the two subparagraphs implicated in this bill, (b)(3)(A) and

(b)(3)(B), are colloquially referred to as the "double-counting" and "double-dipping" prohibitions, respectively.

Double-counting is an important concept that has been included in CARB's compliance offset protocol, as well as other regulations and legislation. Subparagraph (b)(3)(B) effectively restates existing law, emphasizing the importance of making sure that any action taken to reduce (or avoid) one ton of emissions is only accounted for once, in one place. If double-counting were to occur, a single ton of reductions in reality may be accounted for on two different emissions ledgers. Taken together, this would create a situation where emissions on paper are lower than emissions in reality. Needless to say, emissions in reality are what matter for mitigating climate change, and emissions on paper are only useful insofar as they reflect reality.

Double-dipping is a comparatively ill-defined concept, referring to the practice of receiving state funds on the front-end (say, through a state grant for habitat restoration), and also earning revenue on the back-end as well (say, through generating and selling forest offsets). There does not appear a clear objective standard to delineate between "stacking incentives" and "double-dipping", which complicates the issue considerably.

A project double-dipping could be undesirable because it suggests that project may have received enough funding to have occurred, and yet it may still have sought more funding and more profitability. In part, this seems to be a matter of efficiency. If $1 million in state funding could either induce two projects to remove 10,000 tons of carbon a piece and break even, or induce one project to remove 10,000 tons of carbon and make a profit, the state's GHG goals would have been better served by the former.

The more pressing aspect of protecting against double-dipping comes in its implications for additionality, which is a complicated and thorny topic.

3) *Defining "additionality".* Additionality is an essential component of carbon-offset projects. To qualify as a genuine carbon offset, the reductions achieved by a project need to be 'additional' to what would have happened if the project had not been carried out (e.g. continued as business-as-usual). For instance, if a project is viable in its own right, say through a conservation easement, or because of government funding, regulation or other policies, then it cannot be used as an offset project as it would have been undertaken regardless of investment secured through carbon markets.

The concept of additionality is important as only carbon credits from projects

that are "additional to" the business-as-usual scenario represent a net environmental benefit. Without the "additionality" requirement, there is no guarantee that the emissions reduction activities will lead to a reduction of GHGs into the atmosphere. Therefore, in simple terms, if carbon credits are awarded to activities that would have happened anyway, emissions are allowed to rise without a corresponding cut elsewhere, therefore making the process meaningless.

Unfortunately, additionality is not an objective feature of a project, but rather a determination that is made based on assumptions and claims about what would have happened without the investment. This has led to controversy embroiling numerous projects, such as where old-growth forests under no risk of being logged were misrepresented by project proponents as requiring offset funds to protect the trees.

The existing language of (b)(3)(B), created by AB 1757, is maximally protective of additionality, and it errs on the side of disqualifying some projects that may indeed provide truly additional GHG removals rather than risk providing support for any non-additional project. The current language in this bill attempts to thread the needle and allow certain projects to receive state funds and still generate offsets. The intent is for the language to allow GHG reductions and removals that are not the result of state funding to generate offsets, even if some part of a larger project does receive state funding. However, verifying that a GHG reduction or removal is "a result of" state funding is much easier said than done.

Ultimately, whether or not a project that has received other state funding should be eligible for generating offset credits does not have one objectively correct answer. It is a matter of determining an appropriate counterfactual to compare against, and carefully accounting for the carbon removed or avoided, such that it can be credibly used to justify a continuing emission elsewhere. This has proven to be an endlessly contentious and confounding task.

4) *Real world impacts of (b)(3)(B).* The sponsors of this measure, The Conservation Fund, state that in the nine months since AB 1757 was signed into law there have already been considerable negative impacts on desirable projects. The Conservation Fund has owned and managed more than 75,000 on California's North Coast since 2004. Their work has improved habitat for the endangered Northern Spotted Owl, state-threatened coho salmon, and steelhead trout. The Conservation Fund claim that the revenue generated through the sale of carbon offsets via cap-and-trade is instrumental to doing their work. In 2022, The Conservation Fund secured more than $900,000 in state grants in

partnership with Trout Unlimited and California Department of Fish and Wildlife for the improvement of salmon and trout habitat.

Due to the passage of AB 1757, The Conservation Fund has chosen to decline those grants. Notably, it would seem that if The Conservation Fund had followed the direction CARB's December 2022 guidance document, much of that work could have continued, all while continuing to generate offsets.

Additionally, the Hoopa Valley Tribe has raised substantial concerns about the impacts of AB 1757 as well. They state, "Our Tribe has developed significant partnerships with California public agencies, including CalFire and the State Coastal Conservancy, to carry out habitat restoration projects, water quality improvements, and fuel reduction work that protects critical infrastructure and public safety. None of these activities implicate double-counting of emissions reductions in the state's accounting. Yet AB 1757's overly broad language suggests that if we receive state grants for such activities, we might be unable to generate carbon offset revenue that would support ongoing land management and the wellbeing of Tribal members." If AB 1757 is preventing important work the Legislature wishes to see be done, then it is important to remedy the situation.

5) *AB 1757 is downstream of CARB's Compliance Offset Protocol*. Double-counting and additionality are separate but closely-interlinked concepts; if done incorrectly, either component can lead to carbon reductions or removals being accounted for on paper that do not represent a true ton of carbon in the real world. They are so important, in fact, that both of these protections (and more) are ostensibly included in CARB's Compliance Offset Protocol for U.S. Forest Projects. Regardless of the language included or omitted from this code section, that Offset Protocol remains and the implicated projects are subject to both.

   It is worth considering what the fundamental purpose of the original (b)(3)(A) and (B) was, and what this legislation seeks to achieve. Subparagraph (b)(3)(A) simply stated that offsets were not to be double-counted. This was already existing law under the Compliance Offset Protocol. Subparagraph (b)(3)(B) seems most importantly to be assuring the additionality of offsets. Additionality, too, is a requirement of the Compliance Offset Protocol. This legislation attempts to revise the double-dipping provision in a way that upholds additionality, but even without this language, projects would need to demonstrate their additionality under the Offset Protocol.

   That being said, the recurring conflicts about additionality, double-counting,

permanence, and other elements of the Compliance Offset Protocol have unfolded despite the Protocol's existence. Getting at the root of those problems is likely more a matter of engaging the Offset Protocol itself, and less a matter of piggybacking off of those concepts in subsequent legislation, be it AB 1757 or AB 1159. If concerned stakeholders believe that CARB has a faulty conception of additionality in the Offset Protocol, there is no way to rewrite (b)(3)(B) so well that it overcomes that. Conversely, if the Offset Protocol were "fixed" so to speak, there would be no need for (b)(3) in its entirety.

Given the continued existence of additionality provisions in the Compliance Offset Protocol, and the significant issues the bill's supporters raise of unintended consequences, a question arises as to the necessity of (b)(3)(B) at all. ***The committee may wish to consider striking (b)(3)(B) altogether, and including the phrase "To ensure that all greenhouse gas emissions reductions and removals are in addition to any reductions and removals that would otherwise occur" in (b)(3)(A).***

6) *You only get one second chance*. This is clearly a complicated issue. The motivation behind introducing clean-up legislation five months after the passage of AB 1757 was to assuage project operators' and investors' concerns about an uncertain—or even prohibitory—regulatory environment around California's NWLs. Given that, then it is of the utmost importance that the Legislature get it right this time and not continue to amend and re-amend this code section, creating market uncertainty.

   If ensuring additionality of offsets to the extent desired does indeed require more than simply amending this code section, doing so would be a significant undertaking that would require more time and stakeholder participation than would be feasible this year. The author, committee, and subsequent committees may wish to consider holding this measure over until next year and committing to working with the affected and engaged parties to address the root causes of concerns around double-counting, double-dipping, and offsets without creating unintended consequences.

7) *Committee amendments*. ***Staff recommends the committee adopt the bolded amendments contained in comment 5 above.***

DOUBLE REFERRAL:

If this measure is approved by the Senate Environmental Quality Committee, the do pass motion must include the action to re-refer the bill to the Senate Natural Resources and Water Committee.

Related/Prior Legislation

AB 1757 (C. Garcia, Chapter 341, Statutes of 2022) directs the CNRA to determine an ambitious range of targets for natural carbon sequestration, and for nature-based climate solutions, that reduce GHG emissions for 2030, 2038, and 2045 to support state goals to achieve carbon neutrality and foster climate adaptation and resilience. It also includes provisions to avoid double counting emission reductions, updates the Natural and Working Lands Climate Smart Strategy, develops GHG tracking protocols, and biennially post progress made in achieving the targets on CNRA's internet website.

AB 2649 (C. Garcia, 2022) would have set goals for natural carbon sequestration, as defined, for California of at least 60 million metric tons of carbon dioxide equivalent by December 31, 2030 and 75 million metric tons by December 31, 2035. It also would have provided direction on integrating these goals into specified state plans, as well as reporting requirements to the Legislature. AB 2649 died in the Senate Appropriations Committee.

AB 284 (R. Rivas, 2021) would have required CARB to identify a 2045 climate goal, with interim milestones, for the state's NWLs to sequester carbon and reduce atmospheric GHG emissions. AB 284 died on the Senate floor.

SOURCE: The Conservation Fund

SUPPORT:
None received

OPPOSITION:
None received

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