Nature Based Climate Credits
Alternative Mechanisms for California's Cap and Invest

Nature Based Climate Credits (NBCCs) are designed to achieve broader climate mitigation and adaptation benefits through Conservation Easements that drive permanent changes in land management at a lower cost and more durably than carbon offsets alone can do. Conservation Easements address natural systems overall, protecting watershed, biodiversity and sustainability benefits including, but not limited to, carbon. These easements ensure California's lands store more carbon, more resiliently, with multiple benefits to the state, at a price of $10-15/ton, complementing offsets while lowering implementation costs for the Cap and Invest program.

The Tool: Conservation Easement
Conservation easements are a permanent legal tool that create NBCCs by driving changes that prevent emissions and increase carbon sequestration in more resilient, adaptive landscapes.

Examples: Working Forest Conservation Easements (WFCEs)
A WFCE restoring mature forests on 2,200 acres of redwood forests provides almost 250,000 tons of near-term stocks and over 500,000 tons in 100-years. This forest is in timber production; its easement drives the restoration of older age forests, more natural structure and habitat, and is home to Spotted Owls and salmon, amongst other species.

A WFCE restoring older forests with large, fire-resistant trees on 12,800 acres of ponderosa pine forest not only provides carbon stocks in over one hundred thousand tons in the first 5 years, it will almost double carbon stores from 2 M tons to 3.8 M tons of CO2 in 50 years. This forest supports over 127 species including 10 special status species and is a notable source for the McCloud River, California's coldest, cleanest source water.

Carbon gains are estimated with data from state-approved appraisals used to value the easement, using current timber inventories and modeling the impact of management changes required by the easement. NBCCs, like offsets, provide avoided emissions in the near term, and then continue to build over time as forests are managed differently to become older and more resilient. Future gains are counted as they occur.

Potential Supply: 10M+ acres
California has over 12 million acres of privately owned conifer forest. Less than 5% are conserved, creating significant opportunity for generating supply of NBCCs on forests alone. Changing management on just a fraction of these will lead to gains of at least 150-300 MMT CO2e in the next 10 years by changing forest management practices in productive forests. The range of benefit will be related to the overall acreage which is involved and the types of management for these forests. Conservation investments in these working forests will ensure lasting carbon stores and support changes in forest management that benefit habitat, water security, and local economies.

Costs of state acquisitions for NBCCs:
NBCCs are established though the acquisition of permanent, qualifying conservation easements. Easements are priced through an existing state-approved appraisal process with licensed appraisers and based on rights acquired through the easement. Thousands of such appraisals have been approved by the state under existing programs. NBCCs will be managed under a state-run pool. State sales will generate on-going funding for the acquisition of additional easements and climate resilient restoration. Easements will be monitored, maintained and reported on by accredited land trusts, further reducing costs for this additional alternative mechanism under Cap and Invest.

Forest Conservation

for Climate Mitigation and Adaptation

STRATEGIC INVESTMENTS IN WORKING FOREST EASEMENTS PERMANENTLY REMOVE CARBON DIOXIDE POLLUTION FROM THE ATMOSPHERE, HELP CALIFORNIA PREPARE FOR A CHANGING CLIMATE, AND SECURE OUR WATER SUPPLY.

Working Forest Conservation Easements:

- Are well-established tools to secure permanent and enforceable changes in forest management
- Enhance carbon storage
- Protect wildlife habitat
- Improve watershed function
- Are voluntary agreements made with willing landowners
- Are monitored in perpetuity by a third party, with no ongoing costs to the state