



August 5, 2013

Michael Tollstrup  
California Air Resources Board  
1001 "I" Street  
Sacramento, CA 945814

Submitted via CARB comments webpage:

<http://www.arb.ca.gov/cc/scopingplan/2013comments.htm>

RE: Comments on the California Air Resources Board (ARB) 2013 Update to AB 32 Scoping Plan

Dear Mr. Tollstrup,

The California Coastal Conservancy appreciates the opportunity to comment on ARB's 2013 Update to the AB 32 Scoping Plan. We strongly support the inclusion of Natural and Working Lands as a sector in the update and believe that the protection of natural resources and working lands will be a critical component to meeting the state's short and long-term GHG reduction goals under AB 32. We respectfully urge the ARB to add an ocean and coastal sector, as these habitats store a significant amount of carbon while providing ecosystem services and other benefits. We support ARB's decision to consider co-benefits, to coordinate with other plans and policies in the update, and to support and promote adaptation strategies that also result in emissions reductions or sequestration. Finally, the California Coastal Conservancy has a long track record of developing and implementing natural resource, ocean, and working lands conservation projects that contribute to GHG reductions while providing other benefits. We welcome the opportunity to work with ARB to implement ready to go projects that also meet AB 32 GHG reduction goals.

#### Natural and Working Lands Sector

Natural and working lands sequester significant amounts of carbon and can be managed to enhance their sequestration rates. We request that the sector description explicitly include all natural resource lands and waterways that sequester carbon and should identify riparian corridors, fresh water marshes and tidal marshes. An overlying principle for this sector should be that priority be placed on maintaining or enhancing the capacity of natural or working lands to sequester and store carbon where such areas are most threatened (by inundation, conversion, or avoidable degradation), and where they provide the greatest co-benefits

(wildlife habitat, flood protection, food production, implementing sustainable communities strategies).

Conservation of open space and working lands near urban cores will support implementation of regional sustainable community strategies and meet ARB's regional greenhouse gas emission reduction targets for vehicle miles traveled. These lands can be protected through strategic buy-back and conservation easement acquisitions, and we urge ARB to identify the significant long-term benefits that will be achieved through these actions in the 2013 update.

Protection of natural resources in urban areas will also contribute to significant GHG reductions while providing many co-benefits. Urban greening projects reduce the heat island effect, which in turn reduces energy usage and improves public health. Development of greenways and trails increases carbon sequestration while encouraging non-motorized transit. Many urban greening projects in the coastal and San Francisco Bay area can be sited and designed to serve disadvantaged communities as identified by the California Environmental Protection Agency.

### Ocean and Coastal Sector

Recent research has highlighted the valuable role ocean and coastal ecosystems play in sequestering carbon dioxide and helping to reduce the magnitude of climate change. Although the global area of coastal ecosystems are much smaller than that of terrestrial forests, the contribution these habitats play in the process of carbon sequestration is much greater than terrestrial ecosystems of similar size. Though there is a need for additional research to understand how these habitats sequester and store carbon, there is evidence that kelp forests, seaweed beds, and oceanic plankton have the potential to reduce greenhouse gas impacts by storing carbon.

A study conducted by the International Union for Conservation of Nature (The Management of Natural Coastal Carbon Sinks, 2009) states that "protecting and restoring coastal marine ecosystems have significant multiple benefits that are global (carbon sequestration) to local (community fisheries) in scale". The report also identifies specific benefits of and the potential for sea grass and kelp habitats to store carbon. For example, studies have found that sea grass is responsible for approximately 10-15% of the total carbon storage in the ocean. Turnover time of sea grass biomass is long, making the role of sea grasses in the ocean carbon budget significant. Carbon cycling within kelp forests is characterized by rapid biomass turnover, though little is known about how much of the carbon is incorporated into long-term carbon reservoirs.

Despite the potential value of these marine and coastal habitats in sequestering carbon, and the other goods and services they provide, these systems are being lost at critical rates and action is urgently needed to prevent further degradation and loss. Both kelp and seagrass beds are threatened by human activities, especially high nutrient loads, pollution, and some fishing

practices. These activities can be managed to reduce impacts, and restoration of these habitats has shown some success. For example, the Coastal Conservancy has funded successful kelp restoration projects in Southern California. Given the significant loss of kelp, it is estimated that there are about 40,000 acres that could be restored in Southern California.

Restoration and protection of sea grass and kelp beds results in many co-benefits, including providing habitat, improving water quality and producing biofuels. Recognition of the carbon sequestration value of vegetated coastal ecosystems provides a strong argument for their inclusion in the update as a sector and for their protection and restoration and to improve scientific understanding of the underlying mechanisms that control carbon sequestration in these ecosystems.

We thank the ARB for the opportunity to comment in advance of the release of the Draft Update of the 2013 Scoping Plan, and we look forward to reviewing the Draft Update. We welcome the opportunity to provide additional information to your staff regarding the forest, wetland, working lands, and urban greening projects that the Conservancy has supported to date and to clarify how we can assist ARB in meeting the state's GHG reduction goals.

Sincerely,  
Nadine Peterson  
Deputy Executive Officer  
CA Coastal Conservancy