California Air Resources Board

1001 I Street

Sacramento, CA 9814

VIA Website Download at: <https://www.arb.ca.gov/lispub/comm2/bcsubform.php?listname=nwl-2021-tech-ws&comm_period=1>

RE: Comments on Natural and Working Lands, 2022 Scoping Plan Update

Dear Air Resources Board and Staff:

Please accept these comments from Green Diamond Resource Company on the Natural and Workings Lands, 2022 Scoping Plan Update as presented in the Technical Workshop on July 20, 2021. Our comments are keyed by page number to the July 20, 2021, on-line presentation.

Green Diamond Resource owns and manages 375,000 acres in Humboldt and Del Norte Counties. We are a family- owned company that was established in Washington State in 1890 and has been in California since 1945. We operate under the sustained yield requirements of the CA Forest Practice Rules (CCR 913.11), and state and federal permits that include: federal Habitat Conservation Plans (northern spotted owl and listed salmonid species), state Safe Harbor Agreement (Humboldt marten), property-wide state water quality Waste Discharge Requirements, and state DFW property-wide 1600 Stream Alteration Agreement (MATO). We also have an approved carbon project on approximately 32,000 acres of our California Timberlands. Our timberlands are nearly all zoned Timber Production Zone and are certified under the Forest Stewardship Council® standards that require the protection of all old-growth stands, and we have several conservation easements that protect habitat and prevent subdivision or development.

Our comments on the Natural and Working Lands presentation at the July 20, 2021, Technical Workshop are as follows:

P12, IPCC Conceptual Framework; stasis vs transition:

This slide includes a footnote that indicates Forest Land includes “Tree-dominated & shrub-dominated lands”. This is contrary to convention and these very different vegetation types should not be combined. The following is the US Forest Service definition Forest Land and Timberland (source: US Forest Service Forest Inventory and Analysis (FIA) website):

**Forest land**: Land that has at least 10 percent crown cover by live tally trees of any size or has had at least 10 percent canopy cover of live tally species in the past, based on the presence of stumps, snags, or other evidence. To qualify, the area must be at least 1.0 acre in size and 120.0 feet wide. Forest land includes transition zones, such as areas between forest and nonforest lands that meet the minimal tree stocking/cover and forest areas adjacent to urban and built—up lands. Roadside, streamside, and shelterbelt strips of trees must have a width of at least 120 feet and continuous length of at least 363 feet to qualify as forest land. Unimproved roads and trails, streams, and clearings in forest areas are classified as forest if they are less than 120 feet wide or less than an acre in size. Tree-covered areas in agricultural production settings, such as fruit orchards, or tree—covered areas in urban settings, such as city parks, are not considered forest land.

**Timberland**: Forest land that is producing or is capable of producing crops of industrial wood and not withdrawn from timber utilization by statute or administrative regulation.  (Note: Areas qualifying as timberland are capable of producing in excess of 20 cubic feet per acre per year of industrial wood in natural stands.  Currently inaccessible and inoperable areas are included.) 

The CA Forest Practice Act defines Timberlands at PRC § 4526: “means land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species, on a district basis, is defined in 14 CCR § 895.1.” The Forest Practice Act and implementing regulations (the Forest Practice Rules) do not apply to non-timberland, and therefore do not apply to “Shrub Lands”.

Shrub Lands and Forest Lands and substantially different vegetation types and should be analyzed separately. The carbon stocks are much higher on the Forest Lands and, when averaged, disturbances in Shrub Lands will grossly overstate carbon releases. We suggest modeling should segregate Forest Lands from Shrub Lands.

P13: Geospatially Explicit Inventory Outputs:

The pie chart on this slide shows the disturbance agents from 2001 to 2014. The single highest disturbance agent is wildfire (74%). This represents the immediate release of black carbon through uncontrolled combustion, followed by continued carbon release through the decay of standing and fallen dead trees. The combined commercial timber harvest represents 20% of the total. Timber harvested from these acres is then converted to long-term carbon storage in the form of solid wood products, and the byproducts (sawdust, chips, bark, and shavings) are typically used to generate biomass energy or produce paper products.

Given that 74% of disturbance is from wildfires, the greatest opportunity to reduce the release of biogenic carbon is to reduce the acres impacted by wildfire and the intensity of the fire. The additional benefit of reduced wildfire is to prevent tree mortality thereby allowing the standing trees to continue to sequester carbon. As part of the analysis the rate of reforestation should also be considered. Although not required by the Forest Practice Act, most private timberland owners salvage harvest and replant after a fire. This may not be done on federally managed lands. This represents a huge opportunity for replacing carbon stocks lost to wildfire.

Treating forest fuels by thinning has demonstrated success in reducing the impact of wildfires (both acres burned and fire intensity). Thinning generates commercial diameter material as well as smaller material. This smaller material is either piled and burned on site, mulched, removed and open burned offsite, or removed and burned in a biomass facility to generate electricity. From a standpoint of releasing biogenic carbon into the atmosphere, controlled combustion in biomass facility that also generates electricity that replaces fossil fuel is the best option. Unfortunately, the price structure for biomass-based energy does not currently support the removal and transportation of the smaller non- sawlog material to biomass plants.

P14: NWL Inventory Summary:

The graph on the right of this slide shows the MMT of carbon for “Forests and Other Natural Lands” dropping from 2650 MMT to 2500 MMT between 2001 and 2014. This is surprising given that the US Forest Service FIA data show forest inventory as increasing during this period. While some portions of the National Forest lands are showing a net reduction of timber volume due to insect mortality and fire, the overall trend for combined public and private Forest Lands is a net increase in standing timber volume. This further demonstrates the need to separate Forest Land from Shrub Land.

P29: Literature Synthesis

We would encourage the review of the US Forest Service FIA date as a representation of both changes in Forest Land inventory over time as well as current standing timber inventory and growth rates. We also encourage a review of the CA Forest Practice Rules for sustained yield requirements. Large timberland owners (>50,000 acres) are required to demonstrate how they will reach a balance of growth and harvest at the end of a 100-year planning period.

There is also benefit in coordinating with CAL FIRE on the acres covered by sustained yield requirements (for all timberland owners >50,000 acres) and small landowners with Non-Industrial Timber Management Plans (NTMPs). The sustained yield information is considered confidential by some owners, but CAL FIRE may be able to combine the information to demonstrate that there is annual net growth over harvest for these larger owners. This is consistent with the results reported by the US Forest Service FIA data.

It will also be useful to understand the acres of Forest Lands covered by carbon projects, as well as other landscape-based permits and agreements such as Habitat Conservation Plans, and Conservation Easements that affect habitat retention.

P31: Modeling

The US Forest Service FIA empirical data should be used wherever possible instead of modeling. At least, the model should be checked against the FIA data.

P37: Environmental Justice Considerations

Environmental justice should consider impacts to rural and Tribal communities from the impacts of wildfire. These communities have suffered disproportionate impacts that include lost of life and property, and long-term exposure to unhealthy smoke conditions. These communities would greatly benefit from a plan that includes the treatment of forests to reduce wildfire hazards and impacts.

P43: RHESSys Model:

This model does not separate silviculture systems and therefore considers all harvesting as equal impact. The information provided does not indicate if the model considers tree growth and how forest growth and reforestation are addressed.

P51: Baseline

According to this slide the period 2001-2014 had the “highest quality published data”. What sources were reviewed for this information? Was the US Forest Service FIA information reviewed and considered? For actual timber harvesting volume removal rates was the State Board of Equalization timber harvest summary by county and year reviewed?

P57: Alternative Scenarios

This slide includes the following three points:

* Scenarios are determined by stakeholder objectives, priorities, and aspirations
* CARB is NOT predetermining a carbon target, and then figuring out how to achieve it
* CARB is NOT quantifying the “optimal” scenario to maximize ecosystem benefits

It is not clear who is the “stakeholder”- the landowner or a state, regional of local agency?

P59: Determining a carbon target

The following list is included on this slide:

* Between now and mid-century
* Two components:
  + A carbon stock change vs. baseline
  + A carbon sequestration rate based on a moving average around 2045
* Bottom-up approach
* Stakeholder input on the desired scenario will inform the CARB board
* CARB board will vote on the carbon target as part of the overall Scoping Plan
* Based on the scenarios outcome, information from the synthesis, and stakeholder engagement
* Provides a metric to measure progress and for accountability
* Scoping Plan is an actionable blueprint for State and local agencies to use to address climate change

While this is identified as a “bottom-up approach”, it appears that CARB votes on the “carbon target”. It is then unclear how with carbon target will be achieved through the Scoping Plan. The information provided on slide #59 states the Scoping Plan “is an actionable blueprint for State and local agencies to use to address climate change”. Does this suggest the carbon target will be achieved by mandates implemented by regulatory actions?

Thank for the opportunity to provide these comments on the Natural and Working Lands review.

Sincerely,

A close-up of some writing

Description automatically generated with low confidence

Gary C. Rynearson, Manager

Forest Policy and Communications