Detailed Scope and Technical Approach

This attachment provides a more detailed description of Rincon's proposed scope of work, technical methodology, assumptions, deliverables, and project approach for the Humboldt Natural and Working Lands Carbon Stock and Management Study. The attachment is intended to supplement the high-level scope summary included in the main proposal by further illustrating the rigor, transparency, implementation-focused nature, and contractual scope framework of Rincon's approach. The proposed scope, schedule, and budget are based on the assumed project timeline and level of coordination identified herein; substantial schedule extensions, delays, or changes in review duration may require corresponding adjustments to project management scope, level of effort, and associated costs.

The following sections describe Rincon's proposed technical workflow, data management approach, stakeholder coordination strategy, carbon stock and sequestration methodologies, quality assurance and quality control procedures, assumptions, and anticipated deliverables for each task. These detailed task descriptions, assumptions, and deliverable components are intended to provide a clear framework for project execution and are anticipated to serve as the basis for refinement and incorporation into the final professional services agreement and project scope of work with Humboldt County. Unless otherwise requested by the County, all deliverables are assumed to be provided in electronic format only; hardcopy deliverables, printing, and large-format production are not included in the proposed scope or budget.

This additional detail is provided to support the County's review of the proposed approach, clarify how Study objectives will be achieved, and demonstrate how the project framework is designed to produce a scientifically defensible, transparent, repeatable, and implementation-ready planning resource for Humboldt County and its partner agencies.

Scope of Work

Task 1. Project Planning Framework

Task 1 will establish the project foundation, confirm roles and decision-making procedures, refine the County's guiding questions, identify available and missing datasets, initiate targeted stakeholder and land manager engagement, and develop the methodology framework that will guide the Carbon Stock Inventory and Feasibility Study.

Task 1.1 Kickoff Meeting and Project Work Plan

Rincon will organize and facilitate a kickoff meeting with County staff shortly after contract execution to confirm the project's technical, planning, schedule, and communication framework and establish a shared understanding of the Study's goals, methodology, deliverables, and intended uses. Rincon anticipates the kickoff meeting will be conducted virtually, although Rincon and LACO can support an in-person meeting in Eureka if preferred by the County (budget currently allows for the Principle/Director and Project manager to attend the kickoff meeting in person).

The kickoff meeting will include discussion of:

- Project goals, desired outcomes, and intended uses of the Study;
- County staff roles, consultant team roles, communication protocols, and decision-making procedures;
- Review of the scope, schedule, budget, deliverables, and assumptions;
- Key project stakeholders and preferred methods of coordination;
- Available datasets, GIS resources, known data gaps, and data management procedures;

- Initial methodology considerations for land classification, carbon stock calculations, sequestration analyses, and stability assessments;
- Coordination with related planning efforts including the RCAP, General Plan, Community Wildfire Protection Plan, CEQA thresholds, conservation planning, and other County or partner agency initiatives;
- Public review, Board of Supervisors presentation, and final acceptance procedures; and
- File-sharing, GIS deliverable formats, calculation documentation, and long-term update expectations.

Following the kickoff meeting, Rincon will prepare a Project Work Plan and Updated Methodology Framework that confirms the final scope, schedule, review milestones, deliverables, communication protocols, assumptions, and decision points. As part of this effort, Rincon will update the RFP's General Approach Table to confirm the final guiding questions, proposed methodologies, data sources, geographic scales of analysis, expected outputs, and known limitations for each major technical component of the Study. The updated framework will serve as the bridge between the County's project goals and the detailed technical analyses completed in Tasks 2 and 3.

The methodology framework will identify:

- Primary datasets and technical methodologies;
- Land cover, land use, ownership, and jurisdictional classifications;
- Proposed maps, charts, GIS layers, and technical outputs;
- Known uncertainties and data limitations;
- Areas requiring stakeholder or land manager input; and
- How each analysis will support future RCAP updates, greenhouse gas inventories, CEQA thresholds, conservation planning, land management, and implementation efforts.

Rincon will also identify any recommended additional guiding questions, analyses, or outputs that could improve the long-term usefulness and implementation value of the Study, including considerations related to carbon durability, co-benefits, implementation readiness, and priority opportunity areas.

Rincon's Principal-in-charge, Director, Project Manager, and Assistant Project Manaher will attend the kick-off meeting if virtual. If in-person, Rincon Project Manager will attend in addition to either the Rincon Principal-in-Charge or Director. LACO will participate in the kickoff process (in-person or virtual), as appropriate, to provide Humboldt-specific planning context, identify local coordination considerations, and support early stakeholder and land manager mapping.

Deliverables

- Kickoff meeting agenda
- Kickoff meeting notes and action items
- Project Work Plan
- Data request and tracker
- Project schedule

Assumptions

- One kickoff meeting will be conducted for up to 2 hours, in-person or virtual as decided by the County.
- County staff will provide one consolidated set of comments on draft Task 1 materials.
- The Project Work Plan and Methodology Framework will be finalized within 30 business days following receipt of County comments.

- The County will provide available GIS datasets, plans, prior studies, and relevant background materials at the beginning of the project.
- Any substantive methodology changes after County approval may require schedule or budget adjustments.

Task 1.2 Stakeholder and Land Manager Engagement Strategy

Rincon and LACO Associates will develop a targeted stakeholder and land manager engagement framework focused on improving the technical accuracy, implementation value, and long-term usability of the Study. Consistent with the County's goals, the engagement approach will prioritize coordination with stakeholders and land managers who have direct knowledge of stewardship practices, land cover conditions, carbon sequestration opportunities, wildfire and restoration activities, and implementation barriers across Humboldt County's natural and working lands.

Rather than functioning as a standalone outreach effort, engagement will be integrated directly into the technical workflow at key decision points throughout the project. Stakeholder and land manager input will help inform refinement of guiding questions, validation of land cover classifications and datasets, understanding of existing management practices, evaluation of feasibility considerations, and development of practical implementation strategies and recommendations.

Rincon anticipates coordination with the following stakeholder groups, subject to County direction:

- County departments and RCAP partner agencies;
- Resource Conservation Districts;
- Agricultural operators and agricultural organizations;
- Timberland and forest land managers;
- Public land managers;
- Tribal representatives and Tribal land managers, through County-approved protocols;
- Conservation organizations and land trusts;
- CAL FIRE, Humboldt County Fire Safe Council, prescribed fire, and fuels management partners;
- Wetland, riparian, watershed, coastal, and restoration partners;
- Local agencies and regional planning partners; and
- Additional stakeholders identified by County staff.

The engagement strategy will be developed and identify when input is needed, why it is needed, who should participate, and how the input will inform technical analyses and final deliverables. Examples may include validating land cover assumptions prior to carbon stock calculations, understanding existing stewardship and restoration practices prior to scenario development, and reviewing implementation barriers and opportunities before finalization of management strategies and feasibility recommendations.

LACO Associates will support Rincon by providing local Humboldt County planning context, helping identify and coordinate with appropriate local stakeholders and land managers, advising on outreach sensitivities and regional considerations, supporting meeting logistics, and assisting with distribution of meeting invitations, surveys, or coordination materials. LACO will also help strengthen project buy-in and implementation support through its longstanding relationships with local organizations and landowners, including groups such as the Resource Conservation District, Farm Bureau, and regional land stewardship partners. Rincon will lead preparation of technical content, engagement materials, surveys, facilitation, analyses, and documentation.

Engagement activities are integrated throughout the scope of work and tied directly to key technical tasks to ensure stakeholder and land manager input informs project development at critical decision points. This approach ensures engagement is purposeful, technically relevant, and aligned with the specific

needs of each phase of the Study rather than functioning as a standalone outreach process. By involving project partners, agencies, land managers, and stakeholders throughout development of the Study, the project team can build consensus, strengthen long-term project support and implementation readiness, and identify potential concerns or feasibility issues early in the process. This iterative engagement structure also helps reduce the likelihood of significant revisions later in the project and supports successful adoption and implementation of the final Study.

Deliverables

- Draft Stakeholder and Land Manager Engagement Strategy, which will include:
  - Stakeholder/contact category matrix
  - Input-to-deliverable matrix identifying how engagement will inform technical products
- Final Draft Stakeholder and Land Manager Engagement Strategy

Assumptions

- Engagement will focus primarily on land managers, agencies, technical stakeholders, and implementation partners, in addition to the public meeting required by the RFP.
- The County will review and approve partner lists and outreach materials prior to distribution.
- Rincon will receive one consolidated set of comments on the Stakeholder and Land Manager Engagement Strategy.

Task 1.3 Literature, Data, Policy, and Regulatory Review

Rincon will collect and review existing plans, studies, policies, regulations, GIS datasets, and technical resources relevant to the Humboldt Natural and Working Lands Carbon Stock and Management Study. This effort will establish the technical and policy foundation for the Study, support development of scientifically defensible methodologies, identify available datasets and data gaps, avoid duplication of prior work, and ensure alignment with County, regional, and State climate, conservation, wildfire resilience, and land management objectives.

At a minimum, Rincon anticipates reviewing:

- The 2025 update to the California Air Resources Board Natural and Working Lands Carbon Inventory
- 2017 Carbon Inventory Estimates for the North Coast Resource Partnership
- The Humboldt Regional Climate Action Plan (RCAP) developed by Rincon
- IPCC Guidelines for National Greenhouse Gas Inventories
- Humboldt County Web GIS layers and County-provided spatial datasets
- Relevant natural resource, wildfire hazard, vegetation, land use, ownership, wetland, agricultural, coastal, and LiDAR datasets
- AB 32, SB 32, AB 1279, AB 1757, and other applicable State guidance related to natural and working lands and greenhouse gas reduction
- Humboldt County General Plan and Community Wildfire Protection Plan
- Relevant wildfire resilience, prescribed fire, forest health, agricultural conservation, wetland restoration, watershed, sea level rise, and coastal planning resources
- Applicable conservation, restoration, timberland, public lands, and watershed management plans
- Relevant grant program guidance and funding criteria associated with natural and working lands implementation efforts

Rincon anticipates utilizing datasets and technical resources such as LANDFIRE, CALVEG, National Land Cover Database (NLCD), National Wetlands Inventory, CAL FIRE FRAP data, MTBS fire perimeter data, LiDAR datasets, parcel and land ownership data, agricultural land use datasets, and other regional and County-specific GIS resources, as appropriate. The review will also evaluate the applicability, limitations, and potential refinement needs associated with the CARB 2025 NWL Inventory and other statewide datasets relative to Humboldt County's unique landscape conditions and management context.

Rincon will prepare a Library of Resource Materials and Literature and Data Review Summary Memorandum documenting the resources reviewed, their relevance to the Study, and how each resource will inform land classification, carbon stock calculations, change analyses, carbon stability evaluations, feasibility strategies, policy alignment, and implementation recommendations. The review will also identify key data gaps, uncertainties, and recommended approaches for addressing limitations during subsequent technical analyses.

Deliverables

- List of Related Plans, Studies, Policies, Laws and Regulations for review
- Draft and Final Resource Literature and Data Review Summary Memorandum
- Final Resource Literature and Data Review Summary Memorandum

Assumptions

- The County will provide available GIS files and relevant background materials in a timely manner.
- Rincon will review up to 16 documents that will be confirmed by the County before the review.
- The Literature and Data Review Summary will be limited to resources relevant to the Study's technical methods, policy alignment, and implementation strategy.
- Rincon will receive one consolidated set of comments on the draft Resource Literature and Data Review Summary Memorandum.

Task 1.4 Project Management and Coordination

Rincon will provide ongoing project management and coordination throughout the approximately 2-year project duration to support efficient, transparent, and well-coordinated delivery of the Humboldt Natural and Working Lands Carbon Stock and Management Study. Rincon's Project Manager will serve as the County's primary day-to-day point of contact and will be responsible for overall project administration, schedule and budget management, coordination with County staff and subconsultants, quality assurance and quality control (QA/QC), meeting facilitation, and timely delivery of work products.

Project management activities will include triweekly virtual 30-minute check-in meetings with County staff to review project progress, discuss upcoming tasks and milestones, resolve technical or data-related questions, and identify potential scope, schedule, or budget considerations early in the process. Rincon will maintain a running action item list, decision log, schedule tracker, and data request tracker to support clear communication, accountability, and project transparency throughout the Study. Monthly invoices will be accompanied by concise progress reports and formatted as needed to support compliance with Sustainable Agricultural Lands Conservation (SALC) grant requirements.

Given the sequential and interconnected nature of the technical analyses, Rincon will utilize structured decision checkpoints prior to advancing between major project phases. For example, land cover classifications and methodological assumptions will be reviewed and confirmed prior to completion of carbon stock calculations, and preliminary inventory findings will be reviewed before development and quantification of carbon sequestration feasibility strategies. This phased review structure is intended to reduce rework, support technical consistency, and maintain flexibility while ensuring the Study remains aligned with County priorities and stakeholder input.

Rincon will utilize established project management and coordination systems, including cloud-based file-sharing and document management platforms, to facilitate efficient collaboration among the consultant team, County staff, and project partners. If desired by the County, Rincon can establish a SharePoint site to support document sharing, version control, meeting materials, schedules, data exchange, and ongoing coordination throughout the project. Coordination with LACO Associates and other technical team members will occur regularly to ensure local engagement, technical analyses, and deliverables remain integrated throughout the project lifecycle.

Deliverables

- Triweekly check-in meetings with County staff
- Meeting agendas, notes, and action item tracking
- Monthly progress summaries and invoice support documentation
- Updated project schedule, decision log, and data request tracker
- Ongoing subconsultant coordination and internal QA/QC management

Assumptions

- Rincon assumes triweekly virtual 30-minute coordination meetings throughout the project duration, with additional meetings during major milestone periods as needed.
- Monthly invoices will include concise progress reports formatted to support SALC grant compliance requirements.
- If requested by the County, Rincon will establish and maintain a SharePoint site for project coordination, file sharing, and document management.
- County comments on deliverables will be consolidated into one non-conflicting set of comments per review cycle.
- Unless otherwise noted, each major deliverable includes one County review round and one revision cycle.
- Additional meetings, expanded coordination efforts, or substantial scope changes beyond those assumed may require schedule or budget adjustments.

Task 2. Humboldt Countywide Natural and Working Lands Carbon Stock Inventory and Summary Report

Task 2 will produce the Countywide Natural and Working Lands Carbon Stock Inventory and Summary Report. Rincon will classify and categorize natural and working lands, estimate existing aboveground, root/belowground, and soil organic carbon stocks and annual sequestration rates, evaluate approximately 10-year carbon stock change, assess carbon stock stability, and prepare a report that clearly communicates the results to technical and non-technical audiences.

Task 2.1 Carbon Inventory Methodology Confirmation

Building on the work completed in Task 1, Rincon will finalize the technical methodology, land classification framework, datasets, and carbon accounting approach for the Humboldt Countywide Natural and Working Lands Carbon Inventory. This task will confirm the methodologies used to quantify existing carbon stocks, evaluate carbon stock changes over time, and support future sequestration and feasibility analyses. The methodology will be designed to provide a scientifically defensible and transparent analytical framework that can support future greenhouse gas inventories, climate action planning, grant applications, conservation planning, and substantial evidence under CEQA for future policy development and environmental review.

Rincon anticipates utilizing a methodology generally aligned with the California Air Resources Board (CARB) Natural and Working Lands Carbon Inventory and other State-recognized carbon accounting frameworks while refining the approach to reflect Humboldt County's unique landscape conditions, ownership patterns, working lands, and management practices. Similar to previous countywide carbon inventory efforts completed by Rincon, the analysis will likely utilize datasets such as LANDFIRE Existing Vegetation Type (EVT), Existing Vegetation Cover (EVC), Existing Vegetation Height (EVH), National Land Cover Database (NLCD), CALVEG, National Wetlands Inventory, LiDAR, ownership datasets, wildfire datasets, and County-specific GIS resources.

Rincon will evaluate the suitability and limitations of available datasets and will conduct additional refinement and QA/QC where necessary to improve land cover classifications and carbon accounting accuracy. This may include comparison of statewide datasets with aerial imagery, local vegetation mapping, land manager input, and other regional data sources to identify and correct potential misclassifications. Stakeholder and land manager feedback will be incorporated into the methodology review process to help validate land cover assumptions, stewardship practices, and local landscape conditions prior to finalization of carbon calculations.

As part of this task, Rincon will establish the final land cover and land use classification framework, temporal analysis years, carbon pools to be evaluated (e.g., aboveground biomass, belowground biomass, dead organic matter, litter, and soil carbon), units of measurement, geographic analysis scales, and QA/QC procedures. Rincon will also identify how wildfire, land use change, restoration activities, and land management practices will be incorporated into subsequent carbon stock change and feasibility analyses.

Rincon will prepare a Carbon Inventory Methodology Memorandum documenting the final methodology, datasets, assumptions, classification approach, QA/QC procedures, known limitations, uncertainty considerations, and technical workflow for the carbon inventory analysis.

Additional Information Regarding LANDFIRE data: LANDFIRE is a collaborative program between the United States Forest Service and Department of the Interior that provides both current and historic vegetation and fuel mapping to aid wildfire management planning. LANDFIRE is regularly updated and is currently available for 2001, 2008, 2010, 2012, 2014, 2016, 2020, 2021, 2022, 2024, 2025 (staggered release) is expected to be released on an annual basis. LANDFIRE data schema includes existing vegetation type, height, and cover which is required to estimate carbon stock. These parameters are used in combination with CARB's carbon estimates developed for the State's Natural and Working Lands Inventory, which are based off of LANDFIRE data descriptions. LANDFIRE is currently the only publicly-available data to conduct carbon stock inventories because: 1) it is provided regularly so changes in landcover can be assessed; 2) has a documented methodology; and 3) has existing vegetation type, height, and cover for all vegetation types. Limitations with LANDFIRE data are accuracy and resolution. Because LANDFIRE is a national modeled dataset it contains inaccuracies that differ between habitat types and years that the data is provided. Also, the data is provided at a 30-meter resolution and therefore, doesn't capture smaller scale differences in vegetation/land cover. Through Rincon's experience conducting carbon sequestration studies we have found that a robust QA/QC process with knowledge stakeholders can significantly increase the accuracy of the data.

Deliverables

- Draft Carbon Inventory Methodology Memorandum
- Final Carbon Inventory Methodology Memorandum
- Virtual methodology review meeting with County staff and technical partners

Assumptions

- The County will provide available GIS datasets and relevant background information in a timely manner.
- Rincon will receive one consolidated set of comments on the draft methodology memorandum.
- No analysis will be conducted until the final methodology memorandum is approved.
- Significant methodology revisions requested after methodology confirmation may require schedule or budget adjustments.

Task 2.2 Landcover Quality Assurance and Quality Control Engagement

Accurate land cover classification is the foundation of a scientifically defensible and transparent carbon inventory. Based on Rincon's experience preparing countywide Natural and Working Lands carbon inventories throughout California, early quality assurance and quality control (QA/QC) of land cover datasets is one of the most important steps in reducing uncertainty, avoiding costly rework, and ensuring the resulting analyses can support future greenhouse gas inventories, CEQA substantial evidence, climate planning, and implementation efforts. Rincon's approach integrates stakeholder and land manager review early in the inventory process to validate assumptions and refine classifications before carbon calculations are finalized.

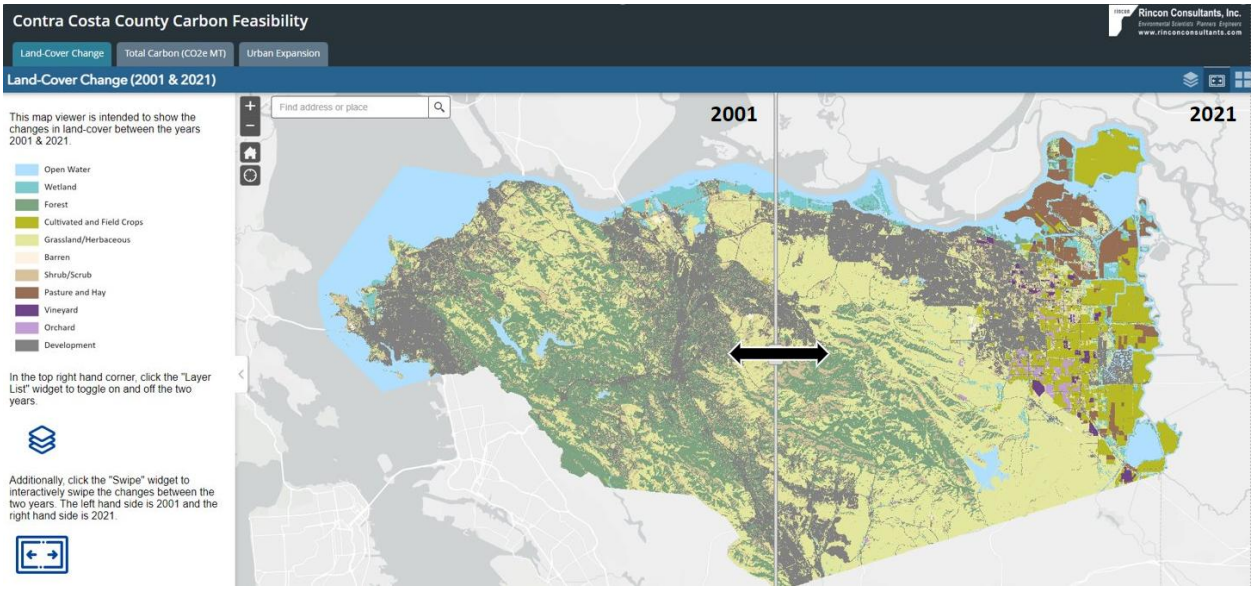
Rincon will develop and refine land cover classifications for two analysis years to support both the existing baseline inventory and approximately 10-year carbon stock change analysis. The classification framework will be designed to support carbon accounting, sequestration analyses, land cover change evaluation, ownership summaries, mapping, and future inventory updates.

Rincon anticipates the following major QA/QC and land cover refinement steps:

1. Develop an ArcGIS Online web-based review platform to display draft land cover classifications and apparent land cover changes between analysis years
2. Provide review instructions and a comment form to facilitate location-specific feedback from County staff, land managers, agencies, Tribes, and technical stakeholders
3. Review and evaluate stakeholder comments and determine appropriate classification refinements
4. Conduct targeted desktop validation and updates of the landcover data as needed

Rincon's Landcover Edit Tool (ArcGIS Online review platform) will allow reviewers to identify potential misclassifications, flag areas of concern, provide corrected classification information where known, and identify locations requiring additional review. Stakeholders will also be encouraged to provide contextual information regarding local land management practices, disturbance history, restoration activities, and ownership or land use conditions that may influence classification accuracy. See Contra Costa County's example Landcover Edit Tool below.

Example Contra Costa County Landcover Edit Tool Used for Landcover QA/QC



Rincon will facilitate up to three targeted data review meetings with County staff and selected stakeholders to review draft classifications, discuss areas of uncertainty, and refine the datasets prior to completion of carbon stock calculations. Based on Rincon's lessons learned from previous countywide carbon sequestration studies, incorporating local knowledge and anecdotal evidence early in the process is critical to improving technical defensibility, stakeholder confidence, and long-term implementation support.

LACO Associates will help identify appropriate local reviewers, support distribution of review instructions, assist with local meeting logistics, and provide local context regarding land use, ownership patterns, regional sensitivities, and stakeholder coordination. LACO's longstanding relationships with local organizations, landowners, and resource management partners will help strengthen participation and project buy-in throughout the review process. Rincon's GIS and carbon analysis team will lead the classification methodology, spatial analysis, QA/QC process, technical review, and final classification determinations.

Deliverables

- Draft and final Landcover Edit Tool (web-based ArcGIS Online platform)
- Stakeholder review instructions and digital comment form
- Up to three targeted data review meetings/workshops:
  - Initial platform orientation and review meeting;
  - Draft results and stakeholder feedback meeting; and
  - Final QA/QC and refinement review meeting
- Updated land cover classification datasets and associated metadata

Assumptions

- The County and LACO Associates will assist in identifying appropriate reviewers and supporting timely stakeholder participation.
- Stakeholder review comments will be provided within approximately three weeks of distribution of draft review materials to maintain the project schedule.

Task 2.3 Carbon Sequestration of Land/Carbon Types Calculations

Following confirmation of the methodology framework, Rincon will conduct the countywide carbon stock and sequestration analyses for Humboldt County's natural and working lands. The analysis will quantify existing carbon stocks and sequestration potential across major land cover, land use, ownership, and management categories throughout the County.

Rincon will calculate carbon stocks for relevant carbon pools, anticipated to include aboveground biomass, belowground biomass, dead organic matter, litter, and soil carbon, as appropriate based on available datasets and accepted methodologies. Calculations will be completed for multiple analysis years, where feasible, to evaluate changes in carbon stocks over time and identify areas of carbon gain, loss, stability, and transition. The analysis will evaluate carbon sequestration and carbon stock characteristics across forests, timberlands, wetlands, riparian areas, grasslands, shrublands, agricultural lands, coastal resources, public lands, Tribal lands, and other relevant land cover categories.

Draft land cover and carbon stock maps, spatial analyses, and summary tables will be provided for County and stakeholder review prior to finalization. Final land cover and carbon stock maps, summary tables, and associated figures will be refined and incorporated into the Draft and Final Carbon Stock Inventory Summary Report.

Deliverables

- Countywide carbon stock and sequestration calculations
- GIS-based carbon stock mapping and spatial analysis outputs
- Draft land cover and carbon stock maps and summary tables
- Final land cover and carbon stock maps and summary tables

Assumptions

- Available datasets and methodologies will support countywide planning-level analyses rather than parcel-level carbon accounting.
- Rincon will receive one consolidated set of comments on the draft land cover and carbon stock maps and summary tables
- The Carbon Stock Inventory Summary Report will not be developed until the final land cover and carbon stock maps and summary tables

Task 2.4 Draft and Final Carbon Stock Inventory Summary Report

Rincon will prepare a Draft and Final Carbon Stock Inventory Summary Report documenting the methodologies, analyses, findings, mapping, and technical conclusions associated with the Humboldt Countywide Natural and Working Lands Carbon Inventory. The report will establish Humboldt County's baseline natural and working lands carbon stock conditions, evaluate carbon stock changes over time, summarize carbon sequestration characteristics across land cover and ownership categories, and identify key trends influencing long-term carbon storage and stability.

Following completion of the final land cover and carbon stock maps and summary tables, Rincon will provide more of existing carbon stocks and annual sequestration rates for Humboldt County's natural and working lands using the finalized methodology developed in Task 2.1 through Task 2.3. The Inventory is anticipated to include aboveground biomass carbon, belowground/root biomass carbon, and soil organic carbon, as supported by available datasets and accepted methodologies. The analysis will also evaluate carbon stock changes across approximately a 10-year period to help identify areas of carbon gain, loss, stability, and landscape transition.

The analysis will summarize carbon stock and sequestration results countywide and across relevant categories, anticipated to include:

- Land cover and land use types;
- Public versus private lands;
- County-owned lands;
- Incorporated and unincorporated areas, as appropriate;
- Forestlands and timberlands;
- Wetlands and riparian areas;
- Grasslands and shrublands;
- Agricultural lands and working landscapes;
- Tribal lands or other special ownership categories, subject to County direction, data availability, and appropriate protocols; and
- Other relevant natural and working lands classifications identified during the Study.

Rincon will prepare narrative descriptions, maps, charts, graphics, tables, GIS-based visualizations, and technical summaries designed to clearly communicate findings to County staff, partner agencies, stakeholders, decision-makers, and the public. Draft land cover and carbon stock maps, spatial analyses, and summary tables will be provided for County and stakeholder review prior to finalization. Final land cover and carbon stock maps, summary tables, figures, and supporting analyses will be refined and incorporated into the Draft and Final Carbon Stock Inventory Summary Report.

The report will document key assumptions, methodologies, uncertainty considerations, limitations, and QA/QC procedures to support transparency, repeatability, and future updateability of the inventory. Rincon will also prepare GIS layers, technical documentation, and calculation outputs in formats that can support future RCAP updates, greenhouse gas inventory updates, dashboard metrics, CEQA analyses, grant applications, implementation tracking, and future natural and working lands planning efforts.

The Draft Report will be provided for County review and comment prior to preparation of the Final Report. Rincon will incorporate one consolidated set of County comments into the Final Carbon Stock Inventory Summary Report.

Deliverables

- Draft Carbon Stock Inventory Summary Report
- Final Carbon Stock Inventory Summary Report

Assumptions

- Carbon estimates will be reported in units coordinated with County staff, anticipated to include metric tons of carbon dioxide equivalent (CO2e).
- The County will provide one consolidated set of comments on the Draft Carbon Stock Inventory Summary Report.
- The report will present planning-level technical analyses appropriate for countywide planning, implementation, and policy development purposes.

Task 2.5: Data Transfer, Documentation, and Future Update Protocol

To support long-term usability, transparency, and future updateability of the Humboldt Natural and Working Lands Carbon Stock and Management Study, Rincon can provide a comprehensive data transfer and documentation package designed to allow the Study methodologies, datasets, assumptions, and workflows to be understood, replicated, maintained, and updated by County staff or future consultants.

This task is intended to support future RCAP updates, greenhouse gas inventory updates, implementation tracking, grant applications, CEQA analyses, and ongoing natural and working lands planning efforts by providing organized technical documentation and supporting datasets in a clear and accessible format.

The final data package may include, as applicable:

- Final GIS layers, map files, and metadata;
- Carbon inventory calculation workbooks, supporting datasets, and transferable calculation tools/scripts;
- Methodology documentation, assumptions logs, uncertainty documentation, and scientific references;
- QA/QC procedures, technical review documentation, and processing notes;
- Instructions and recommendations for future inventory updates, data inputs, and update intervals; and
- Documentation of known data gaps, technical limitations, and recommended future improvements.

As part of this task, Rincon can also prepare a Future Inventory Update Protocol describing recommended procedures for updating the carbon inventory and feasibility analyses over time, including suggested datasets, update workflows, quality control considerations, and opportunities to improve technical accuracy in future study iterations.

If desired by the County, Rincon can also provide a technical handoff and training session to walk County staff through the organization of datasets, GIS layers, calculation files, update procedures, and technical workflows associated with the Study.

Deliverables

- Final electronic data transfer package
- GIS layers, map files, metadata, and data dictionary
- Final calculation files, scripts, and supporting datasets, as applicable
- Final methodology, QA/QC, assumptions, and uncertainty documentation
- Future Inventory Update Protocol
- Staff training and technical handoff session materials, if requested

Assumptions

- Rincon will provide electronic files only.
- Proprietary tools, licensed datasets, or third-party software may be subject to licensing restrictions and may not be transferable.
- Rincon will document any known restrictions on data use, transfer, or licensing.
- County staff will provide a preferred file organization structure and data transfer method, if applicable.
- Staff training or technical handoff sessions, if requested, will be limited to one session unless otherwise scoped.

Task 3. Carbon Sequestration Feasibility Study and Final Humboldt Natural and Working Lands Carbon Stock and Management Study Report

Task 3 will use the Inventory results to identify feasible land management strategies and best management practices that can maintain, enhance, or protect carbon sequestration in Humboldt County. The Feasibility Study will evaluate where and through what activities the County and its partners may have the greatest opportunity to optimize carbon sequestration while maintaining long-term carbon stability and supporting broader County goals.

Task 3.1 Land Management Activities Implementation Development

Building on the carbon inventory and baseline analyses completed in Task 2, Rincon will work with the County, LACO Associates, and project stakeholders to identify, evaluate, and prioritize land management activities and nature-based climate solutions that can help maintain and enhance long-term carbon sequestration capacity throughout Humboldt County. This task will focus on implementation-oriented strategies that support carbon sequestration, wildfire resilience, ecosystem health, working lands viability, and broader environmental and community co-benefits.

Using guidance from the California Air Resources Board (CARB) Scoping Plan, State Natural and Working Lands guidance, scientific literature, and Rincon's prior countywide Natural and Working Lands studies, Rincon will develop a suite of potential land management strategies and carbon sequestration activities appropriate for Humboldt County's forests, timberlands, agricultural lands, wetlands, grasslands, riparian systems, coastal areas, and other working landscapes.

Potential strategies anticipated to be evaluated may include:

- Prescribed grazing
- Fuel reduction and vegetation management
- Prescribed fire
- Forest health and reforestation activities
- Urban forestry
- Native grassland and oak woodland restoration
- Riparian and wetland restoration
- Compost application and soil health practices
- Agricultural stewardship and range planting
- Other regionally appropriate nature-based climate solutions identified through stakeholder coordination.

Rincon will develop and utilize a land management activity framework to review existing County and regional policies, programs, plans, and initiatives relevant to carbon sequestration, land stewardship, climate adaptation, wildfire resilience, and conservation planning. This effort will help identify existing implementation efforts, policy gaps, barriers, funding needs, partnership opportunities, and implementation readiness considerations.

To support implementation tracking and long-term County use, Rincon will also develop a GIS-based ArcGIS Online implementation viewer to compile and visualize spatial information regarding existing and proposed land management activities occurring throughout Humboldt County. The viewer will support identification and mapping of carbon sequestration and land stewardship activities such as fuels reduction, prescribed fire, restoration projects, agricultural stewardship practices, wetland enhancement, and other nature-based climate solutions. The GIS viewer will support development of implementation maps and spatial analyses for inclusion in the Study while also providing the County with a long-term resource to help monitor, track, and communicate implementation progress and associated carbon sequestration benefits over time. The viewer may also support future RCAP updates, grant applications, implementation coordination, and broader County climate and resilience initiatives.

Following identification of priority land management activities, Rincon will conduct planning-level carbon sequestration scenario analyses to estimate the potential influence of varying implementation levels on future carbon storage and sequestration capacity.

Rincon will also evaluate qualitative co-benefits associated with recommended strategies, which may include:

- Wildfire resilience

- Habitat and biodiversity enhancement
- Watershed and water quality benefits
- Soil health improvements
- Coastal and ecosystem resilience
- Air quality improvements
- Agricultural productivity and working lands viability
- Community and equity-related benefits

The results of the land management activities analyses will be documented in a Draft and Final Carbon Sequestration Feasibility Study that summarizes implementation strategies, estimated implementation acreage assumptions, co-benefits, feasibility considerations, scenario results, uncertainties, and recommendations for future implementation and funding coordination.

Deliverables

- Draft land management activity framework
- Final land management activity framework

Assumptions

- Scenario analyses will be conducted at a countywide planning scale using available datasets and planning-level assumptions and will not constitute parcel-specific implementation modeling.
- The County will provide one consolidated set of comments on land management activity framework.

Task 3.2 Land Management Activities Engagement

To support development of practical, locally informed, and implementation-ready carbon sequestration strategies, Rincon and LACO Associates will conduct targeted stakeholder and land manager engagement activities focused on land management practices, stewardship priorities, implementation feasibility, and partnership opportunities throughout Humboldt County.

Engagement activities will include stakeholder interviews, land manager coordination, surveys, and a collaborative land management activities workshop designed to gather technical input and build consensus around potential carbon sequestration and nature-based climate solutions. The workshop will convene County departments, Resource Conservation Districts, Tribes, wildfire resilience organizations, land managers, agricultural and timber representatives, conservation organizations, researchers, and other stakeholders identified by the County. The workshop and engagement activities will focus on:

- Existing land management activities and stewardship efforts
- Opportunities to increase carbon sequestration and landscape resilience
- Feasibility considerations and implementation barriers
- Funding opportunities, partnerships, and coordination needs
- Prioritization criteria and implementation opportunities

Rincon will prepare engagement materials, facilitate discussions, document stakeholder input, and integrate findings directly into development of the Carbon Sequestration Feasibility Study and implementation scenario analyses. LACO Associates will support local coordination, stakeholder outreach, meeting logistics, and relationship-building efforts through its longstanding relationships with local organizations, landowners, and resource management partners.

This iterative engagement process is intended to build consensus, strengthen long-term project buy-in, identify implementation constraints early, and ensure recommended strategies are technically feasible,

locally supported, and aligned with ongoing stewardship and land management efforts throughout the County.

Deliverables

- Stakeholder interview and survey materials
- Up to three stakeholder or agency interviews
- One land management activities workshop and supporting materials
- Workshop summary memorandum documenting key findings and recommendations

Assumptions

- Stakeholder engagement activities will focus on targeted technical and implementation coordination rather than broad public outreach.
- The County and LACO Associates will assist in identifying appropriate workshop participants and stakeholders.
- Rincon assumes one land management activities workshop.
- Workshop format (virtual or in-person) will be finalized in coordination with the County.
- The County will be responsible for costs associated with meeting venues, facility rentals, catering, audio/visual equipment, and other in-person meeting logistics, if applicable.
- The County will provide one consolidated set of comments on workshop summaries and engagement-related deliverables.

Task 3.3 Draft Carbon Sequestration Feasibility Study Report

Building on the carbon inventory and baseline analyses completed in Task 2, the land management activities and implementation framework developed in Task 3.1, and the stakeholder and land management coordination completed in Task 3.2, Rincon will prepare a Draft Carbon Sequestration Feasibility Study evaluating science-based carbon sequestration practices, nature-based climate solutions, and land management strategies that could help Humboldt County maintain and enhance long-term carbon sequestration capacity.

The carbon feasibility study report will focus on practical, implementation-oriented strategies that align with Humboldt County's landscape conditions, working lands, wildfire resilience needs, conservation priorities, and community values. Rincon will evaluate carbon sequestration and land management practices identified through State guidance documents, scientific literature, prior natural and working lands studies, the implementation strategy development process completed in Task 3.1, and stakeholder input gathered throughout the project.

Potential strategies anticipated to be evaluated may include:

- Forest management and reforestation;
- Prescribed fire and fuels reduction;
- Wetland and riparian restoration;
- Grassland and rangeland management;
- Agricultural stewardship practices;
- Urban forestry and habitat enhancement;
- Coastal resilience strategies; and
- Other regionally appropriate nature-based climate solutions.

Rincon will develop a carbon sequestration and nature-based solutions matrix summarizing potential strategies, implementation considerations, sequestration benefits, co-benefits, feasibility factors, implementation readiness, funding opportunities, and known uncertainties. The matrix will evaluate considerations such as wildfire resilience benefits, habitat enhancement, watershed and coastal resilience, operational feasibility, compatibility with working landscapes and local industries, and opportunities for partnership development and future implementation funding.

Using the finalized land management activities, implementation assumptions, and prioritization criteria developed through Task 3.1 and refined through Task 3.2, Rincon will conduct planning-level carbon sequestration scenario analyses to estimate the potential influence of varying implementation levels on future carbon storage and sequestration capacity.

Rincon will also prepare a qualitative assessment of co-benefits associated with recommended strategies, which may include:

- Wildfire resilience;
- Habitat and biodiversity enhancement;
- Watershed and water quality benefits;
- Soil health improvements;
- Coastal and ecosystem resilience;
- Air quality improvements;
- Agricultural productivity and working lands viability; and
- Community and equity-related benefits.

The draft carbon sequestration feasibility study report of the Humboldt Natural and Working Lands Carbon Stock and Management Study will summarize recommended strategies, implementation opportunities, estimated implementation acreage assumptions, scenario analysis results, co-benefits, uncertainties, and considerations for future implementation, monitoring, funding, and partnership development.

Deliverables

- Draft Carbon Sequestration Feasibility Study of the Humboldt Natural and Working Lands Carbon Stock and Management Study

Assumptions

- Feasibility analyses and scenario modeling will be conducted at a countywide planning scale and will not constitute parcel-specific implementation plans or engineering analyses.
- The County will provide one consolidated set of comments on the draft feasibility study report and associated technical deliverables.
- Final of the draft feasibility study report will be included as part of the Humboldt Natural and Working Lands Carbon Stock and Management Study.

Task 3.4 Draft and Final Humboldt Natural and Working Lands Carbon Stock and Management Study Report for Public Review

Rincon will prepare the Draft and Final Humboldt Natural and Working Lands Carbon Stock and Management Study Report integrating the technical analyses, stakeholder engagement findings, land management activity development, implementation scenario analyses, and carbon sequestration feasibility evaluations completed throughout Tasks 1 through 3.3.

The report will serve as both a technical resource and an implementation-focused planning document intended to support future RCAP updates, greenhouse gas inventory updates, CEQA analyses, conservation planning, climate resilience initiatives, grant applications, land stewardship efforts, and long-term implementation tracking. The Study will establish Humboldt County's baseline natural and working lands carbon stock conditions, evaluate carbon stock changes over time, assess long-term carbon sequestration potential and carbon stability considerations, and identify practical land management and nature-based climate strategies that align with Humboldt County's working landscapes, local industries, and community priorities.

The report will summarize:

- Existing carbon stocks and sequestration rates across Humboldt County's natural and working lands;
- Carbon stock changes over time and landscape transition trends;
- Land cover classifications, carbon accounting methodologies, assumptions, and QA/QC procedures;
- Carbon sequestration feasibility findings and implementation scenario analyses;
- Recommended land management activities and nature-based climate solutions;
- Estimated implementation acreage assumptions and implementation readiness considerations;
- Wildfire resilience, habitat, watershed, agricultural, and other qualitative co-benefits;
- Funding, partnership, and implementation opportunities; and
- Recommendations for future inventory updates, implementation tracking, and long-term stewardship coordination.

Rincon will prepare maps, charts, graphics, tables, infographics, dashboards, and GIS-based visualizations to communicate technical findings in a clear, visually accessible, and implementation-oriented format for County staff, partner agencies, stakeholders, decision-makers, and the public. The report will also document key methodological assumptions, uncertainties, data limitations, and technical workflows to support transparency, repeatability, and defensibility of the Study and provide substantial evidence for future CEQA-related planning and policy efforts.

Draft land cover maps, carbon stock maps, feasibility analyses, implementation scenario outputs, and summary tables developed throughout Tasks 2 and 3 will be incorporated into the Draft Report for County review. Following County review and incorporation of initial comments, Rincon will prepare a Public Review Draft version of the Study for public circulation and stakeholder review. Rincon will coordinate with the County to support the public review process, including preparation of review materials and compilation of comments received during the public review period.

Following completion of the public review period, Rincon will review and evaluate public and stakeholder comments and prepare revisions to the Study, as appropriate. Rincon will work with the County to develop responses to comments and incorporate agreed-upon revisions into the Final Humboldt Natural and Working Lands Carbon Stock and Management Study Report for Board of Supervisors consideration and final public distribution.

The final deliverable package will include supporting GIS layers, metadata, technical appendices, calculation files, implementation matrices, assumptions logs, and update guidance intended to support future County use, long-term monitoring, implementation tracking, and future updates to the Study.

Deliverables

- Draft Humboldt Natural and Working Lands Carbon Stock and Management Study Report
- Public Review Humboldt Natural and Working Lands Carbon Stock and Management Study Report
- Final Humboldt Natural and Working Lands Carbon Stock and Management Study Report

Assumptions

- The County will provide one consolidated set of comments on the Draft Report prior to release of the Public Review Draft.
- Rincon assumes one public review period and one round of revisions following receipt of public and stakeholder comments.
- The report will be designed to meet accessibility requirements and public distribution needs, consistent with applicable ADA accessibility standards.
- Public review coordination and response to comments will be conducted in collaboration with County staff.
- Additional design iterations, expanded outreach materials, substantial report restructuring, or additional review cycles beyond those assumed may require schedule or budget adjustments.

Task 3.5 Board of Supervisors Meeting Support

Rincon will support County staff during presentation of the Humboldt Natural and Working Lands Carbon Stock and Management Study to the Board of Supervisors. Support activities will include preparation of a draft staff report, development of presentation materials, coordination with County staff regarding key messages and presentation structure, and participation in the Board meeting to present technical findings and respond to questions.

Rincon will prepare a draft staff report summarizing the purpose of the Study, key findings, recommended actions, implementation considerations, stakeholder engagement outcomes, and requested Board actions, as directed by County staff. Rincon will coordinate closely with County staff to ensure the staff report aligns with County formatting requirements, decision-making processes, and agenda timelines. Rincon will also prepare concise and visually accessible presentation materials summarizing the Study's major findings, carbon inventory results, sequestration opportunities, implementation strategies, co-benefits, and recommendations. Presentation content will be tailored to communicate complex technical information in a clear and actionable format appropriate for decision-makers and public audiences.

Rincon and LACO Associates will coordinate with County staff in advance of the meeting to review presentation materials, discuss anticipated questions or areas of interest, and refine messaging related to implementation opportunities, stakeholder coordination outcomes, and future planning considerations.

Deliverables

- Draft Board of Supervisors staff report
- Board of Supervisors presentation materials
- Coordination meeting(s) with County staff prior to Board presentation
- Attendance and presentation support at one Board of Supervisors meeting

Assumptions

- Rincon assumes attendance at one Board of Supervisors meeting.
- The Board meeting will be held in person or virtually based on County preference.
- County staff will provide direction regarding staff report formatting requirements, presentation format, agenda timing, and key messaging priorities.
- The County will provide one consolidated set of comments on the draft staff report and presentation materials.
- Additional hearings, workshops, or substantial revisions to presentation materials or staff reports beyond the assumed scope may require schedule or budget adjustments.