



Napa County

1195 THIRD STREET
SUITE 310
NAPA, CA 94559
www.napacounty.gov

Main: (707) 253-4580

Legislation Text

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TO: Napa County Climate Action Committee
FROM: David Morrison, Director Planning, Building and Environmental Services
REPORT BY: Deborah Elliott, Planner III - Sustainability
SUBJECT: Presentation and Discussion of Draft Greenhouse Gas (GHG) Inventory and GHG Forecast Technical Memorandums

RECOMMENDATION

County staff and Ascent Environmental will provide a presentation on the draft Napa County Regional 2019 Community Greenhouse Gas Inventory Update Summary and the draft Napa County Regional Greenhouse Gas Inventory Forecast (2019-2030).

EXECUTIVE SUMMARY

Honey Walters and Brenda Hom from Ascent Environmental will provide a presentation on the draft Napa County Regional 2019 Community Greenhouse Gas Inventory Update Summary and the draft Napa County Regional Greenhouse Gas Inventory Forecast (2019-2030). Staff requests that the Climate Action Committee discuss the draft GHG inventory and forecast and provide comments.

ENVIRONMENTAL IMPACT

ENVIRONMENTAL DETERMINATION: The proposed action is not a project as defined by 14 California Code of Regulations 15378 (State CEQA Guidelines) and therefore CEQA is not applicable.

BACKGROUND AND DISCUSSION

In June 2021, the County received a grant agreement from the Bay Area Air Quality Management District (BAAQMD) in the amount of \$50,000 to prepare a GHG inventory. As directed by the Committee, staff prepared a Request for Proposals (RFP) for consultants to develop an updated regional GHG emissions inventory for the six agencies. The Committee requested that the RFP include optional tasks for consideration of short-lived climate pollutants (SLCP) and an evaluation of the potential for carbon sequestration within Napa

County. The \$50,000 grant from the BAAQMD is anticipated to cover the cost of the GHG inventory but will not cover the cost of the optional tasks. Based on the cost-sharing formula agreed to in the existing JPA, each jurisdiction paid an additional cost for the optional tasks.

The County Board of Supervisors awarded the contract to Ascent Environmental Inc. on November 16, 2021 for a maximum of \$97,485 to prepare a comprehensive update to the Regional Greenhouse Gas (GHG) Emission Inventory, an optional technical memorandum on short-lived climate pollutants, and an optional technical memorandum on the potential for carbon sequestration in Napa County.

GHG Inventory

The GHG inventory document includes a 2019 communitywide greenhouse gas (GHG) inventory update for the Napa County region (region), including the 2019 GHG inventories for each of the six jurisdictions in the County. GHG emissions are attributed to each jurisdiction based on whether the emissions occur within, or originate from activities in, their jurisdictional boundary. The update year of 2019 was selected because this was the latest year in which data were most complete and excludes data anomalies due to the COVID-19 pandemic starting in 2020, such as reduced transportation emissions from increased telecommuting. The 2019 regional GHG inventory is an update to the 2005 regional inventory that was performed in the 2009 Napa Countywide Community Climate Action Framework (Napa County Transportation & Planning Agency). Quantification of the 2019 regional GHG inventory update is based on the International Council for Local Environmental Initiatives (ICLEI) methodologies, specifically, the U.S. Community Protocol for Accounting and Reporting Greenhouse Gas Emissions Version 1.2. To provide locally relevant emissions, additional protocols were used to refine certain sectors (e.g., agriculture, off-road equipment). Consistent with these protocols and past inventories, the community GHG inventories are divided into seven emissions sectors, or sources of emissions.

The regional inventory update relies on the best available and most up-to-date data and calculation methodologies to provide a foundation upon which the jurisdictions and other relevant stakeholders can plan and act to reduce regional GHG emissions.

In summary, total GHG emissions for the region in 2019 were 1,480,602 MTCO₂e (metric tons of carbon dioxide equivalent). Direct comparisons between the 2005 and 2019 inventories are not valid due to the changes in GHG emission calculations, data available, and modeling protocols. However, to the extent that portions of each inventory can be compared, it appears that total GHG emissions decreased by 1% between 2005 and 2019. Reductions in GHG emissions by cleaner vehicles and reduced driving, were primarily offset by a small increase in solid waste emissions and a larger increase in building energy use.

The 2019 inventory detailed individual sectors within regional emissions as follows:

- Building Energy 38.1% of total emissions
- On-road transportation 30.2%
- Solid waste 13.4%
- Off-road equipment 7.8%
- Agriculture 7.0%
- Wastewater 3.1%
- Imported Water 0.4%

The 2019 inventory also evaluated GHG emissions for each individual jurisdiction:

- Unincorporated County 40.4% of total emissions
- City of Napa 40.4%
- American Canyon 10.8%
- St. Helena 4.6%
- Calistoga 2.4%
- Yountville 1.5%

GHG Forecast

The forecast technical memorandum presents an estimated forecast of communitywide greenhouse gas (GHG) emissions for the Napa County region (region), including forecasts for each of the six jurisdictions under “business-as-usual” (BAU) and legislative-adjusted BAU scenarios for the year 2030. These forecasts are based on the results of the 2019 communitywide GHG emissions inventory, as well as associated methods, assumptions, emissions factors, and data sources used to develop the updated emissions inventory described in the Napa County Regional 2019 Community Greenhouse Gas Inventory Update Summary memorandum.

This forecast provides an estimate of future GHG levels based on a continuation of current trends in activity, while also accounting for Federal and State legislative actions to reduce emissions in the future. GHG emissions forecasts provide insights to the scale of regional and local reductions needed to achieve GHG emissions reduction targets. Regional activities could incorporate information contained herein into a General Plan, Climate Action Plan, or other planning document.

The forecast GHG inventory, assuming changes in growth and State/Federal legislation, predicts that total regional GHG emissions would increase 5% by 2030, from 1,480,602 to 1,548,761 MTCO_{2e}. Future

individual sectors are estimated as follows:

- Building Energy 42.1% of total emissions
- On-road transportation 25.3%
- Solid waste 14.5%
- Off-road equipment 8.4%
- Agriculture 5.9%
- Wastewater 3.4%
- Imported Water 0.3%

The forecast inventory also estimated 2030 GHG emissions for each individual jurisdiction as follows:

- Unincorporated County 43.4% of total emissions
- City of Napa 37.8%
- American Canyon 10.9%
- St. Helena 4.3%
- Calistoga 2.2%
- Yountville 1.4%

Timeline

Staff requests that the Committee discuss the draft GHG inventory and forecast and provide comments. Additional comments may be submitted to County staff until October 3, 2022. Submit comments to CAC@countyofnapa.org. At the October Committee meeting, staff plans to bring back a draft matrix of GHG reduction opportunities. The two optional tasks; SLCP and carbon sequestration will be presented to the Committee at a later date.

All grant related requirements must be completed by December 31, 2022.

Attachments

- 1) Draft Napa County Regional 2019 Community Greenhouse Gas Inventory Update Summary

2) Draft Napa County Regional Greenhouse Gas Inventory Forecast (2019-2030)