Appendix E

Supporting Measures

As shown in Table E-1, 19 measures have been identified as supporting measures. The county believes these measures are important to reduce greenhouse gas (GHG) emissions, but for which (a) there are no developed quantification methods or sufficient data available to support quantifying expected emission reductions; or (b) would not reduce emissions contained within the emissions inventory.

For example, there are no developed quantification methods and/or sufficient data for the following measures: *Reduce agricultural water consumption and irrigation-related energy-use*, *Reduce wastewater treatment emissions*, and *Reduce stormwater generation*.

There are relevant quantification methods for manure management associated with confined cattle operations, but not for horses, as in a measure to *Reduce livestock methane emissions*, and there are not current data available on existing consumer behavior (e.g., where they purchase goods or where those goods originate) as related to the measure to *Increase consumption of local agricultural products*.

Per discussions with the Yolo County Agriculture Commissioner, data on crop irrigation practices are highly variable by season (e.g., portions drawn from surface water versus groundwater) and, thus, the annual reduction potential would vary year-to-year.

Nonetheless, it is important to note that implementation of these supporting measures would result in GHG reductions within the unincorporated County even though the precise level cannot be quantified for the reasons outlined above. In general, GHG reduction potentials (MT CO_2e/year) are quantified by determining the scaled percent reduction. This first involves the identification of the percent reduction (e.g., as identified in the reduction mechanism or as substantiated in research and guidance documents), which is then applied to the size of the affected emissions inventory sector, and adjusted by the assumed participation rate. Though this type of specific information is not available for the supporting measures, their implementation could result in an aggregate GHG reduction (in 2030) generally ranging from 10-20%. It is important to note that this percent reduction range is not based on a quantitative analysis or in any way developed in a manner equivalent to the robust and substantiated process performed for the quantified primary measures. Rather, it is based on general estimates of percent reductions, the magnitude of affected emissions, and assumed participation rates. This general, aggregate estimate for the supporting measures was derived and extrapolated from information associated with those measures that are similar in nature and scope (e.g., applicable within the same sector), and are based on the consultant's experience in the field of climate action planning. Based on these assumptions, the general aggregate GHG reduction of 10-20% is provided for informational purposes only and should be further defined (and verified) in the monitoring stage of this plan.

Table E-1: Supporting Measures	
Sector	**Supporting Measures**
Agriculture	Increase use of biofuels or low-carbon fuels in field equipment
	Conservation Tillage
	Reduce methane emissions from manure management in horse facilities
	Increase consumption of local agricultural products
	Reduce agricultural water use through alternative irrigation techniques
	Expand surface irrigation infrastructure
	Expand use of bioengineered crops
Energy	Energy efficient appliances , lighting, and equipment in existing buildings
	Require energy efficient appliances, equipment, and lighting in new construction
	Pursue a district energy program in high density, mixed-use development
	Encourage industrial process energy efficiency
	Reduce embodied energy content of construction materials
	Promote greywater and rainwater collection and non-potable water systems
	Establish a standard of no net increase in water demand for new buildings
Solid Waste and Wastewater	Reduce waste emissions from organic materials
	Reduce disposal of non-organic materials through increased recycling
	Increase construction and demolition waste diversion standards
	Reduce wastewater treatment emissions
	Increase natural stormwater retention through implementing low impact development strategies
Total Estimated Aggregate GHG Reduction from Supporting Measures	10-20% (139,496-278,991 MT CO_2e/year in 2030)[1]

[1] It is important to note that this percent reduction range is not based on a quantitative analysis or in any way developed in a manner equivalent to the robust and substantiated process performed for the primary measures. Rather, it is based on general estimates of percent reductions, magnitude of affected emissions, and participation rates. This general, aggregate estimate for supporting measures was derived and extrapolated from information associated with primary measures that were similar in nature and scope (e.g., sector applicability) and based on the consultant's experience in the field of climate action planning. The general aggregate GHG reduction of 10-20% is provided for informational purposes only and is only a possible estimate that should be further defined (and verified) during the monitoring stage of this plan.