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County of Napa Planning, Building & Environmental Services

Napa County Climate Action Plan (CAP)

Public Workshop #4 – Draft CAP

**Watershed Information & Conservation Council
(WICC) – Special Meeting of the Board**

Thursday, February 23, 2017, 3:00 PM



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Introductions

– County staff:

- David Morrison, Director of Planning, Building and Environmental Services
- Jason Hade, Senior Planner, CAP Project Manager

– Consultants: Ascent Environmental, Inc.

- Honey Walters, Principal
- Erik de Kok, AICP, Senior Planner/Project Manager

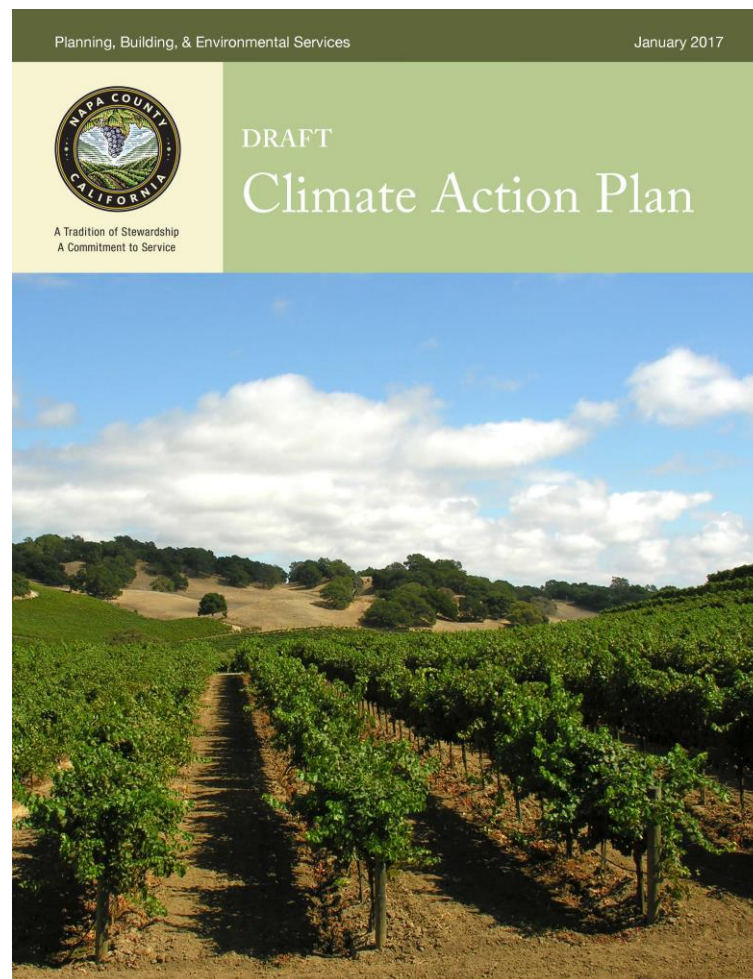


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CAP Purpose and Background

- Reduce greenhouse gas (GHG) emissions in the unincorporated County.
- Adapt to climate change effects and increase resilience.
- Consistent with 2008 General Plan policies and EIR requirements to develop and adopt a CAP.

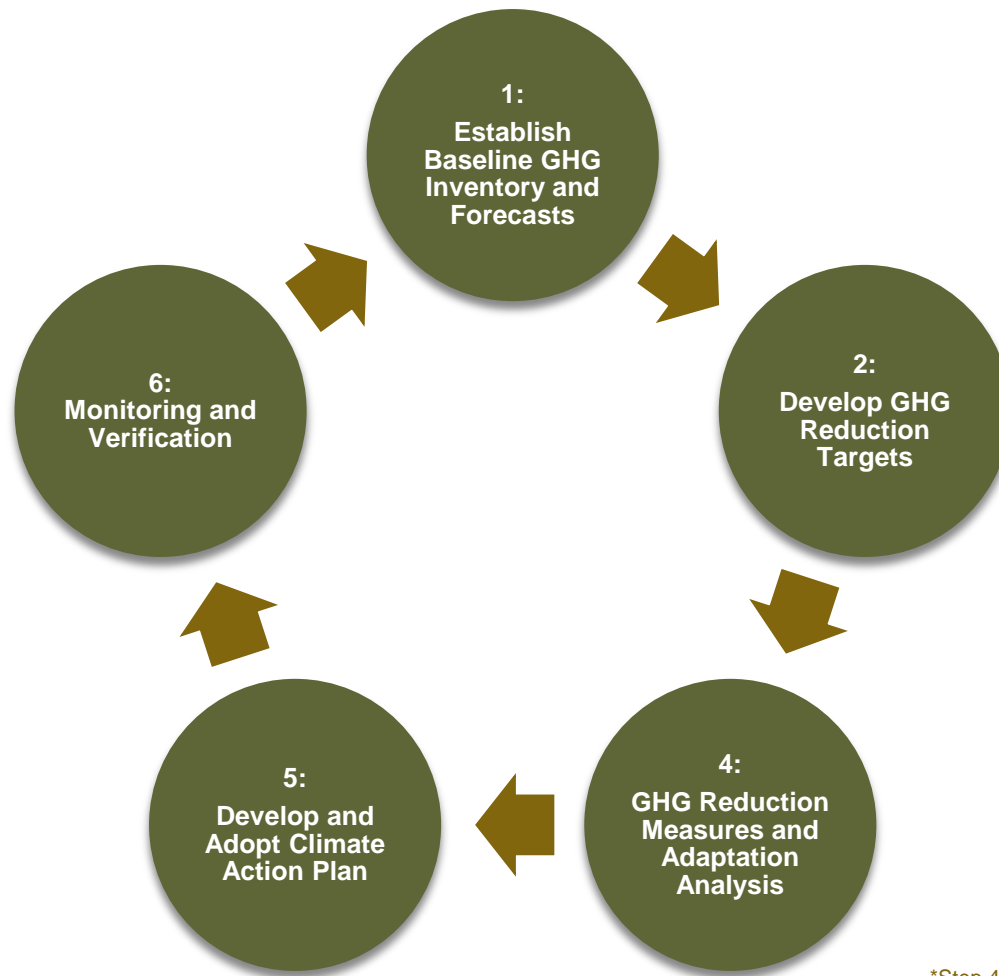




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Climate Action Planning Process



*Step 4 would happen concurrently with Step 3



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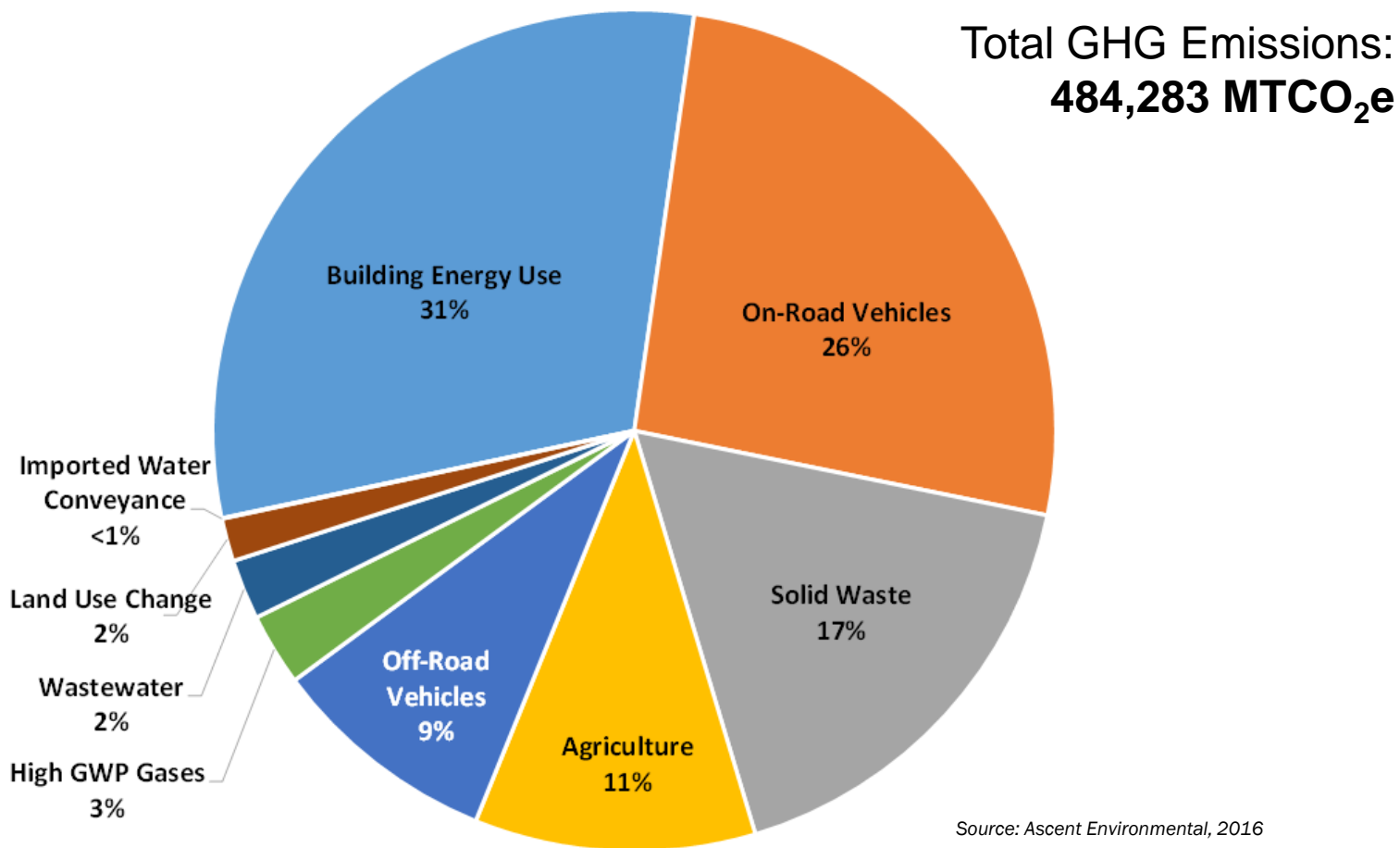
GHG EMISSIONS INVENTORY, FORECASTS AND TARGETS



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Napa County 2014 GHG Emissions Inventory

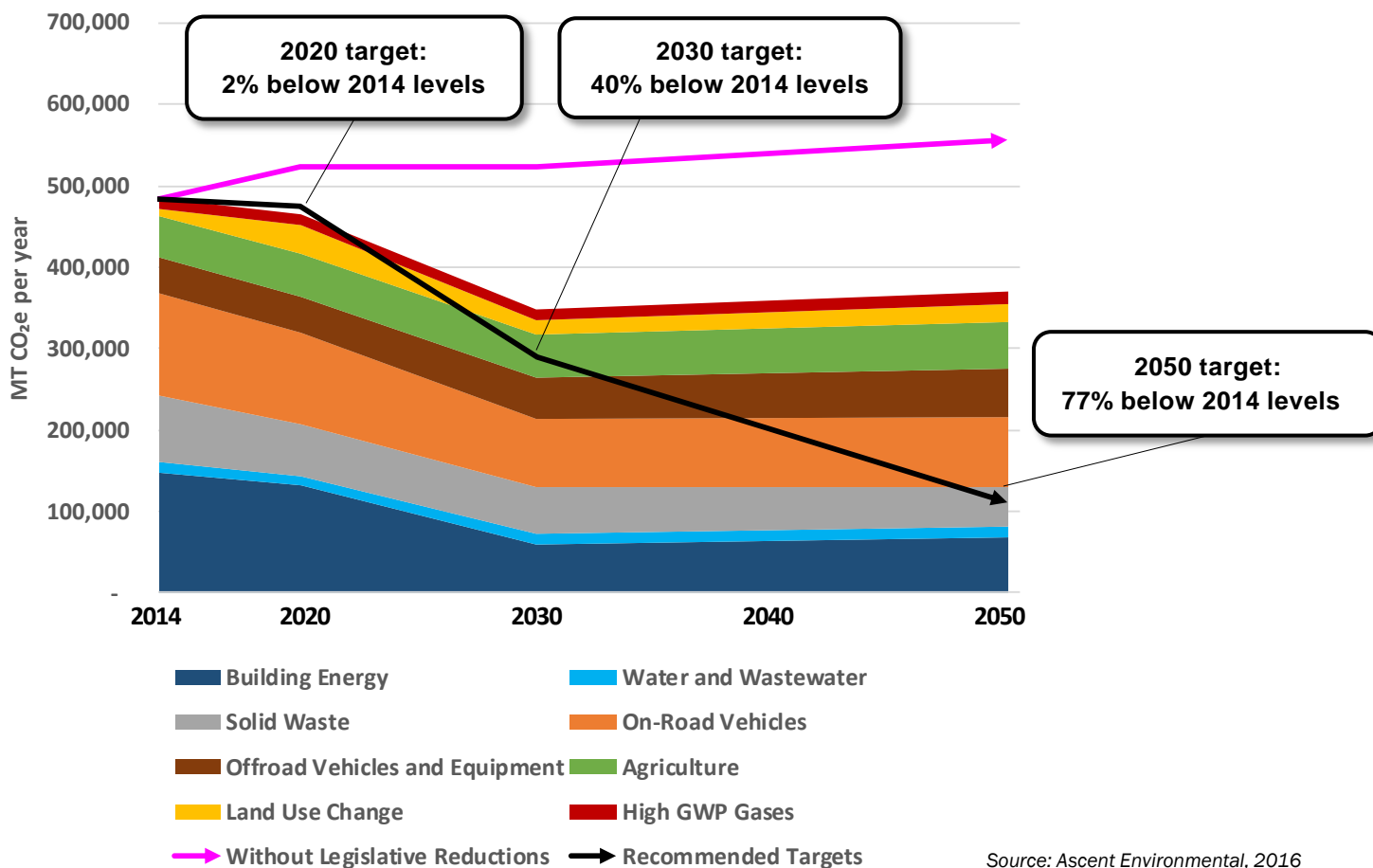




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Napa County GHG Forecasts and Targets

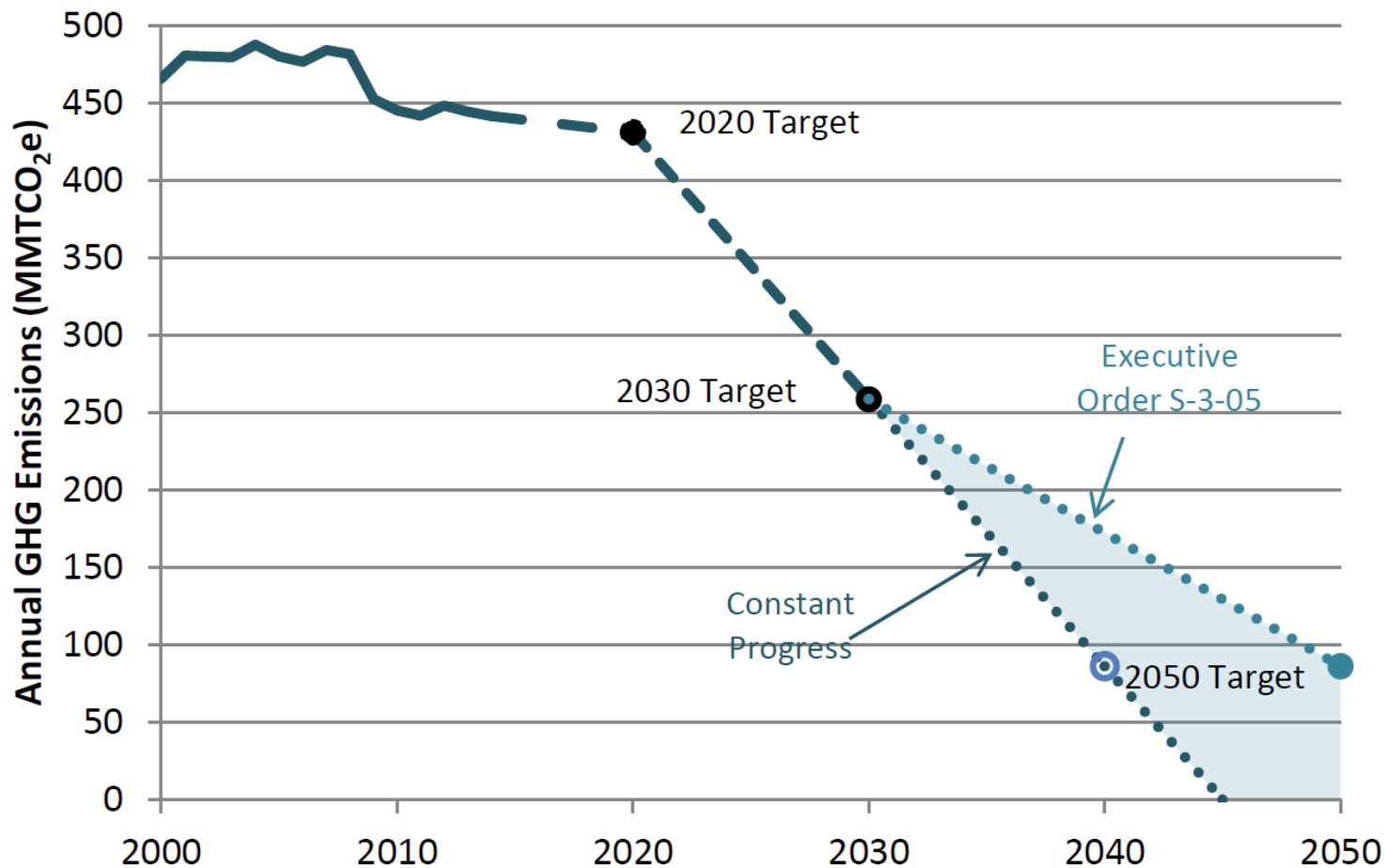




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Statewide GHG Reduction Targets



Source: ARB, Draft 2017 Scoping Plan Update



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GHG REDUCTION MEASURES



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GHG Reduction Measures Summary

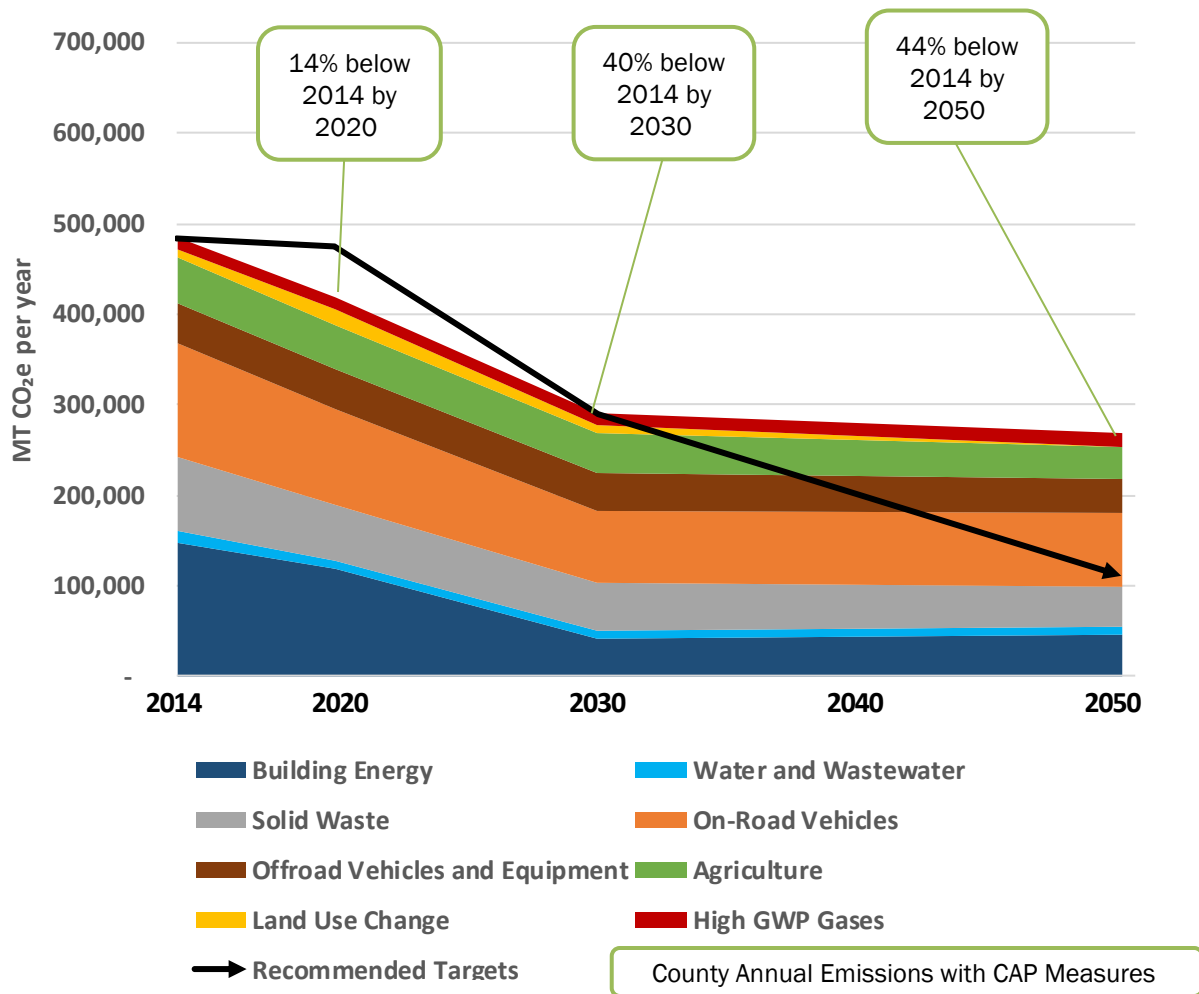
- 42 measures within 7 strategic focus areas
 - 23 are quantifiable

- The proposed measures result in:
 - Substantial reductions below 2020 target
 - Sufficient GHG reductions to achieve the 2030 target
 - Progress towards meeting long-term 2050 target



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GHG Emissions Forecast with GHG Reduction Measures





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Building Energy Measures

10 measures in total. Examples:

- Phase out natural gas in water heating (replacements and new)
- Require energy audits and upgrades for major alterations and additions
- Increase minimum green building standards (CALGreen Tier 1)
- Require new residential construction to meet zero net energy (ZNE)
- Increase participation in Marin Clean Energy’s “deep green” option
- Incentives and financing energy efficiency upgrades in existing buildings



Source: mcecleanenergy.org





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Transportation Measures

15 measures (On- and Off-Road)

Examples:

- Update parking standards
- Increase the supply of EV charging stations
- Increase affordable + workforce housing
- Update employee commute ordinance
- Support commuter rail on Napa Wine Train right-of way
- Switch to alternative fuels in on- and off-road vehicles and equip.
- Switch to cleaner Tier 4 equipment
- Support alternatives to private vehicle use for visitors
- Support telecommuting, transit-oriented development, and interregional transit solutions



Source: Sonoma-Marín Area Rail Transit 2013





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Solid Waste Measures

- Increase Solid Waste Diversion to 80% by 2020, 90% by 2030
 - Reduce waste
 - Increase recycling
- Expansion of food and green waste composting for residential and commercial
 - 85% of food waste by 2030
 - 100% of yard waste by 2030



Source: NapaRecycling.com



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Agriculture Measures

- Convert all diesel or gasoline irrigation pumps to electric
- End open burning of agricultural biomass and flood debris (coord. with BAAQMD)
- Switch to electric or alternatively-fueled agricultural equipment
- Use Tier 4 equipment



Source: Pumpkart.com 2016



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Land Use Change Measures

- Preservation, mitigation, and replanting requirements and programs:
 - Prioritize on-site preservation (goal: 30%)
 - Minimum 2:1 mitigation ratio for removals
 - Minimum 2,500 trees replanted per year (voluntary or mitigation)
 - Expand preservation of forests and woodlands through conservation easements
- Refine protection guidelines for existing riparian woodlands
- Prevent burning of removed trees or woody biomass by repurposing for other uses



Source: Main Street Trees 2016





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Water and Wastewater Measures

- Amend or revise water conservations regulations for landscape design
- Adopt new water conservation ordinance to limit outdoor watering
- Expedite and/or reduce permit fees for water conservation measures
- Require water audits for new or significant expansions of large commercial or industrial facilities



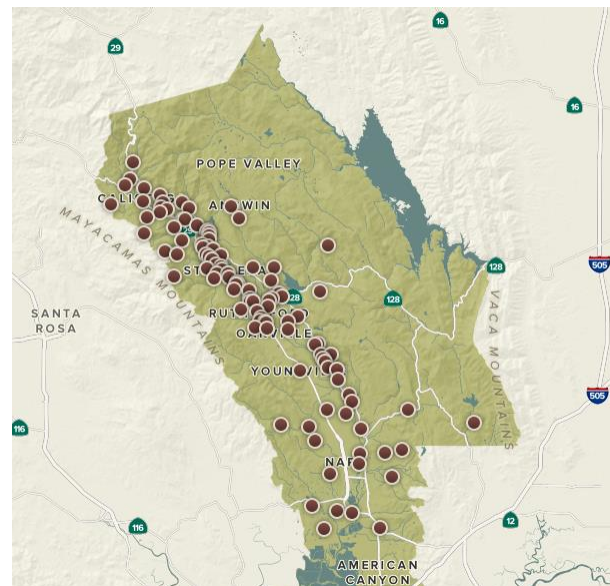


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Multi-Sector Measures

- Provide incentives for Napa Green Certified wineries and vineyards, with a goal of 100% certified by 2030
- Promote the sale of locally-grown foods and/or products
- Establish a local carbon offset program
- Work with other local jurisdictions within the County to develop a unified CAP



Source: NapaGreen.org



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CLIMATE VULNERABILITY AND ADAPTATION



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Climate Change Effects in Napa County



– Increasing Temperatures



– Changes in Precipitation Patterns



– Loss of Water Supply



– Increased Wildfires



– Sea-Level Rise and Increased Flood Risk



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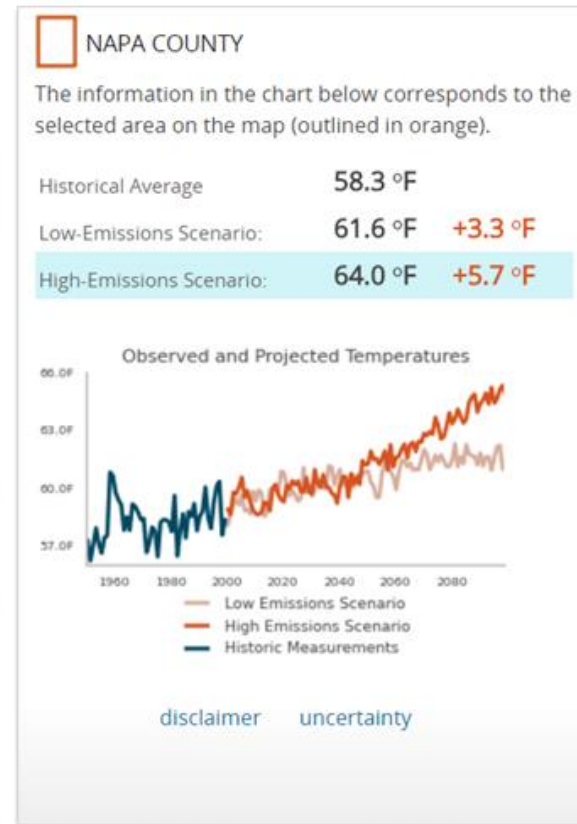
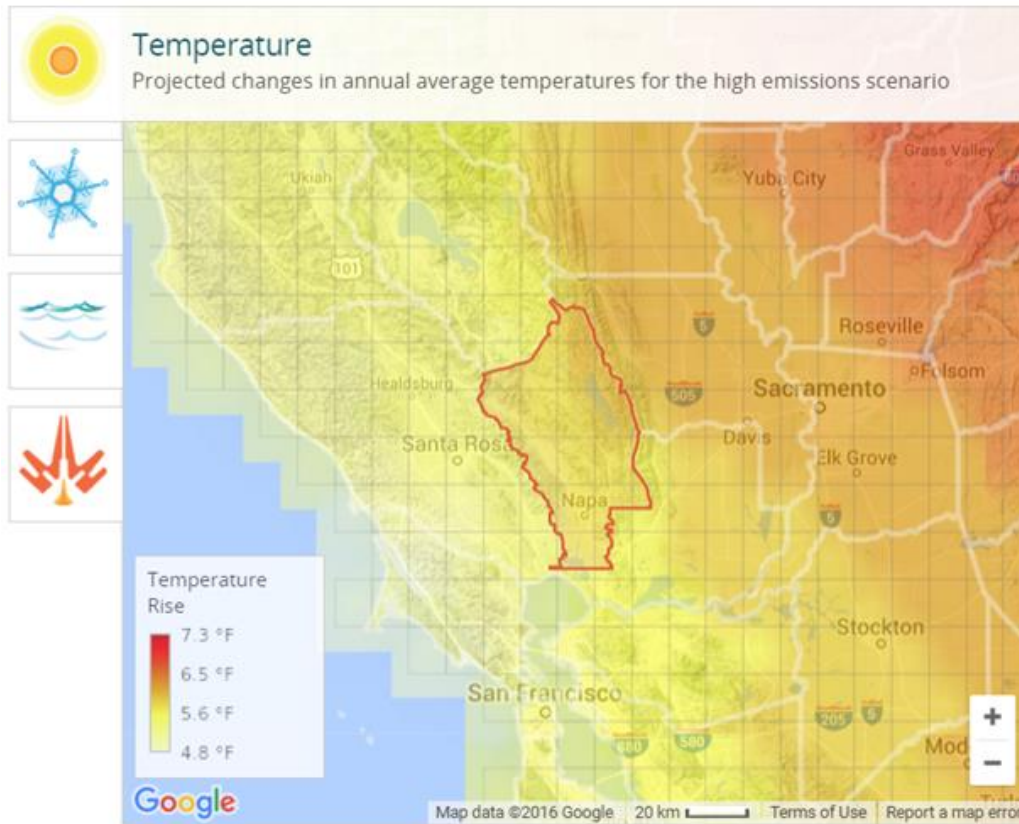
Increasing Average Temperatures

LOCAL CLIMATE SNAPSHOTS

Napa County, CA



Use Metric Units Use County Average

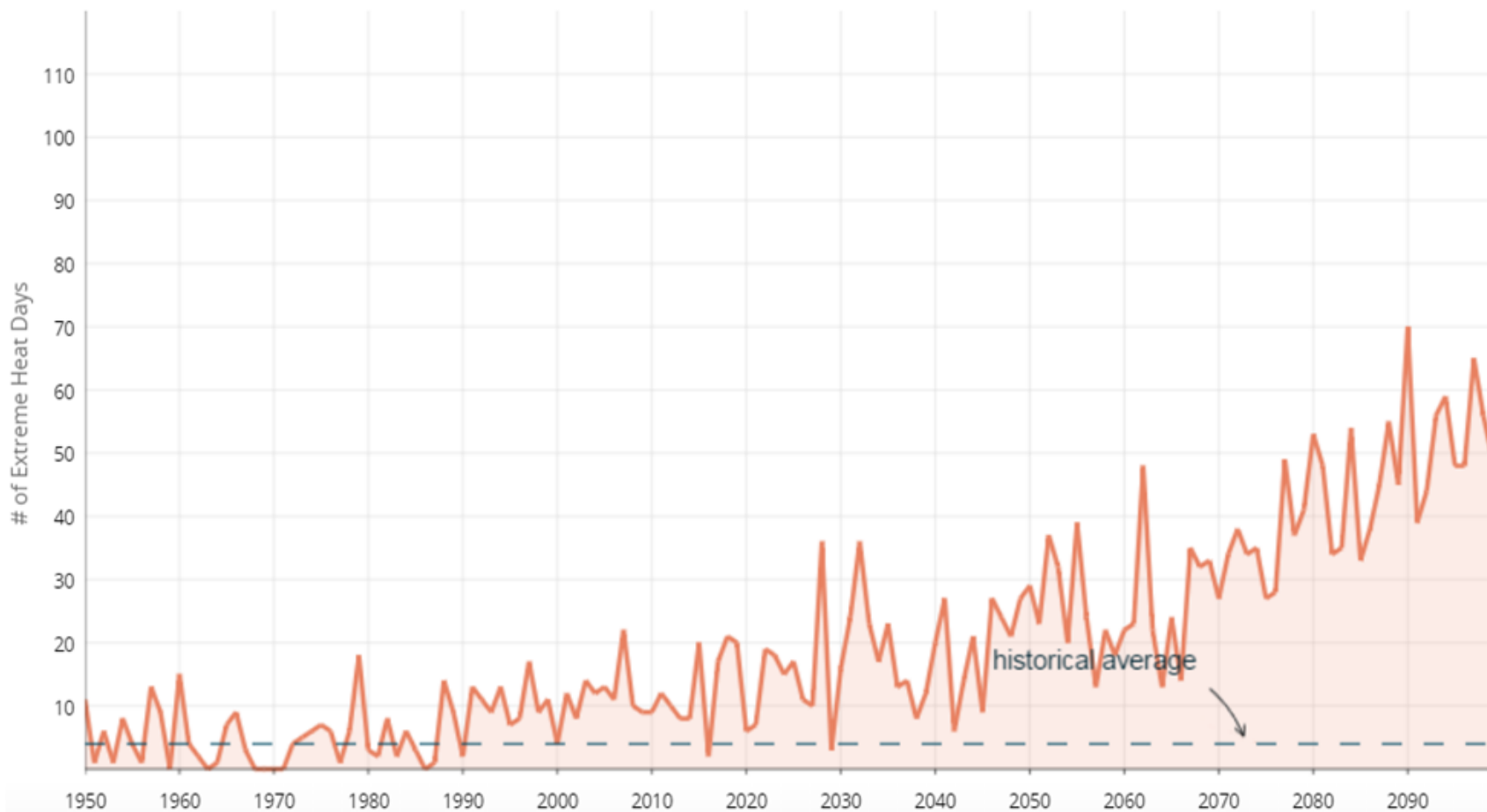




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Increasing Extreme Heat Days

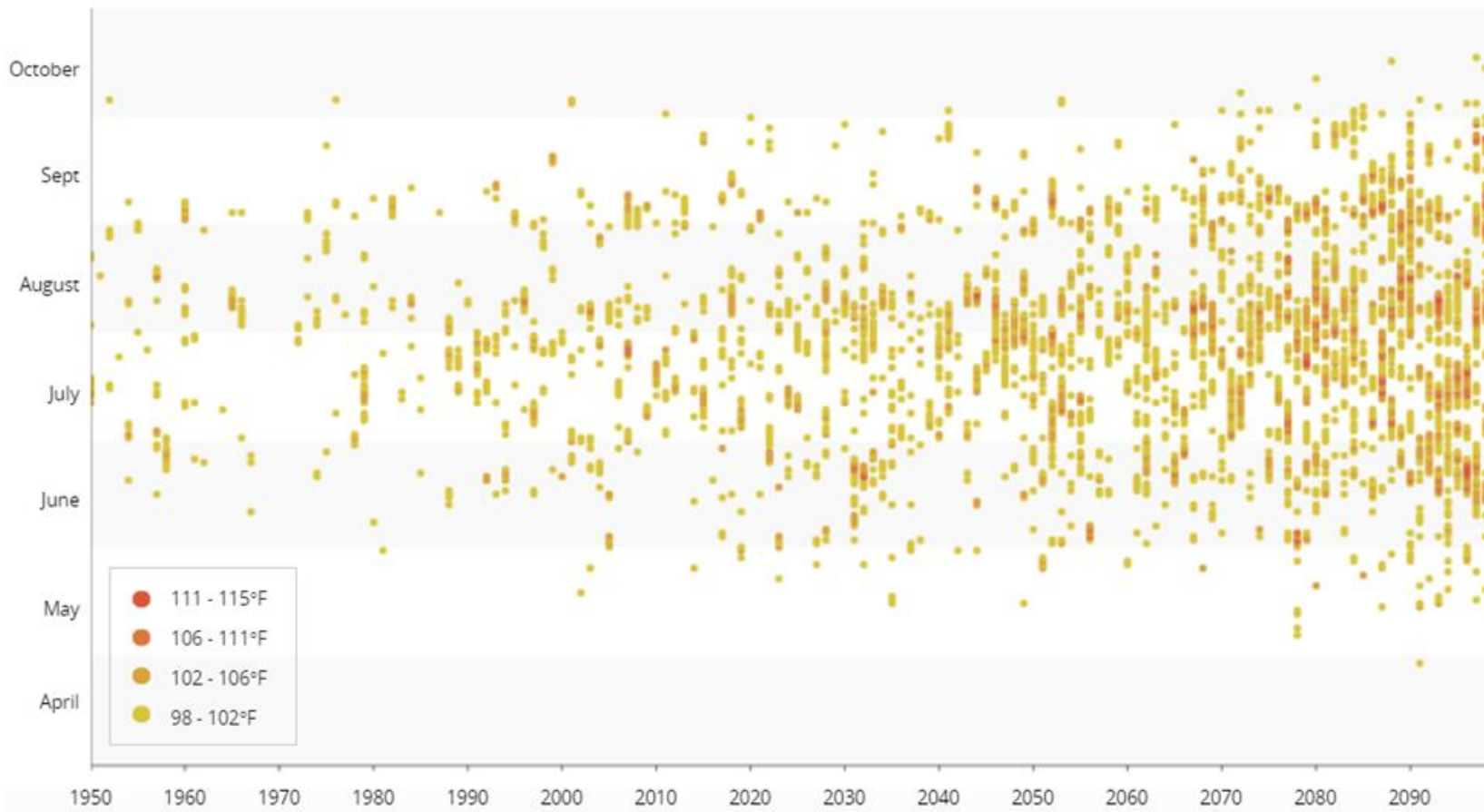




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Timing of Extreme Heat Days





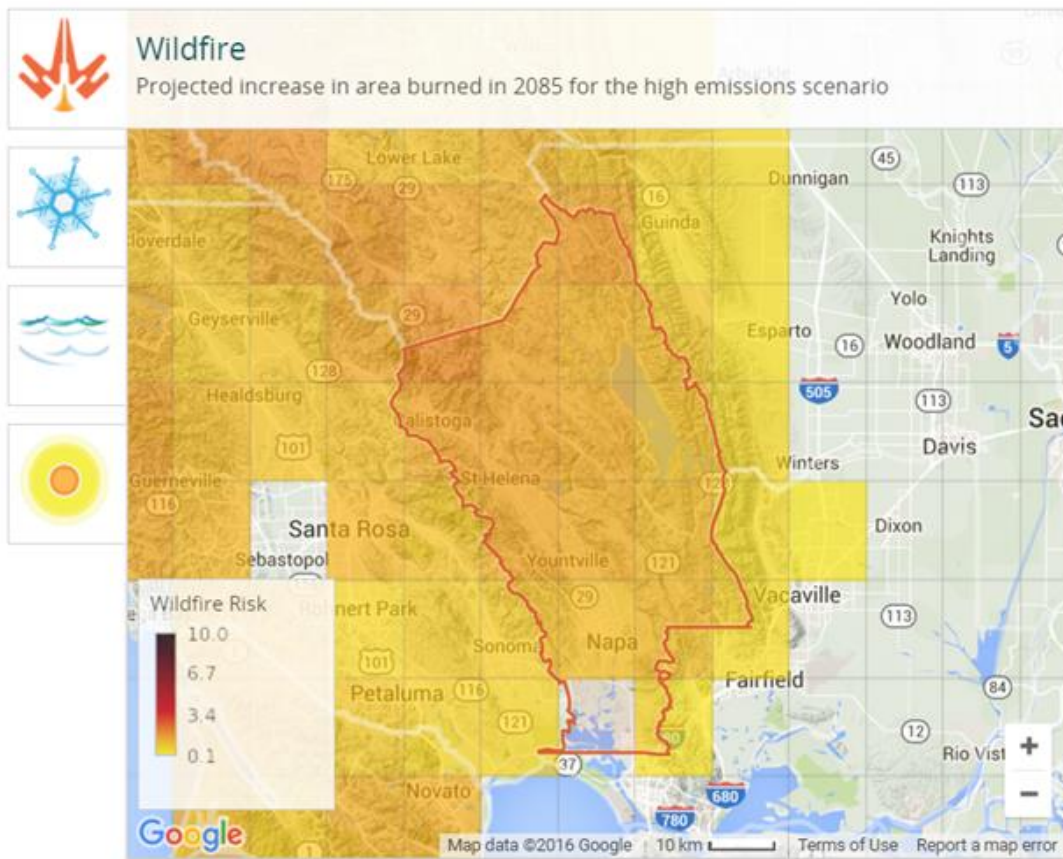
Adaptation Measures: Temperature

- Building Energy GHG Measures: adaptive co-benefits
- Update Excessive Heat Response Plan
- Heat-illness prevention and education
- Cool roofs and green roofs
- Cool pavement
- Increase parking lot shading
- Monitor effects on agriculture and tourism
- Further research on grape crop mix heat tolerance



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Increasing Wildfire Risk





Adaptation Measures: Wildfire

- Map and identify specific locations and critical infrastructure at increased risk due to climate change
- Coordination with fire districts, CalFIRE, OES, on changes to emergency preparedness and hazard mitigation efforts
- Enhanced design and maintenance measures to reduce risk:
 - Thinning vegetation, proactive management
 - Increase defensible space

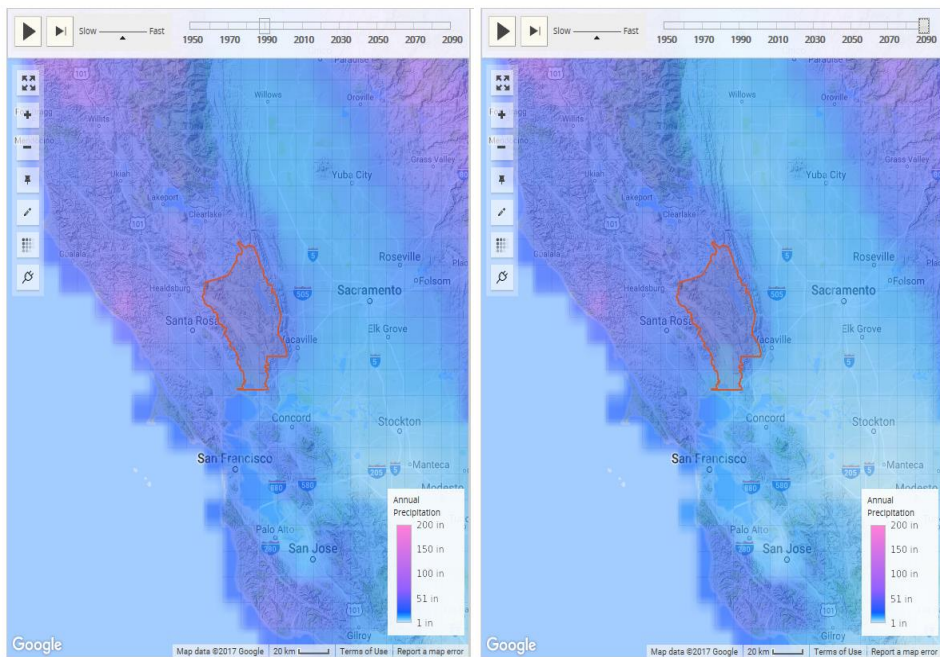


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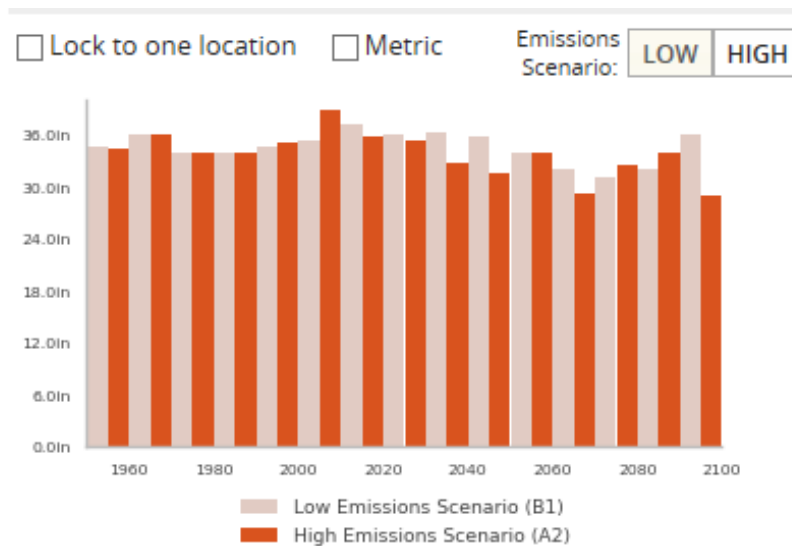
Changes in Precipitation

PRECIPITATION: DECADEAL AVERAGES MAP



1990

2090

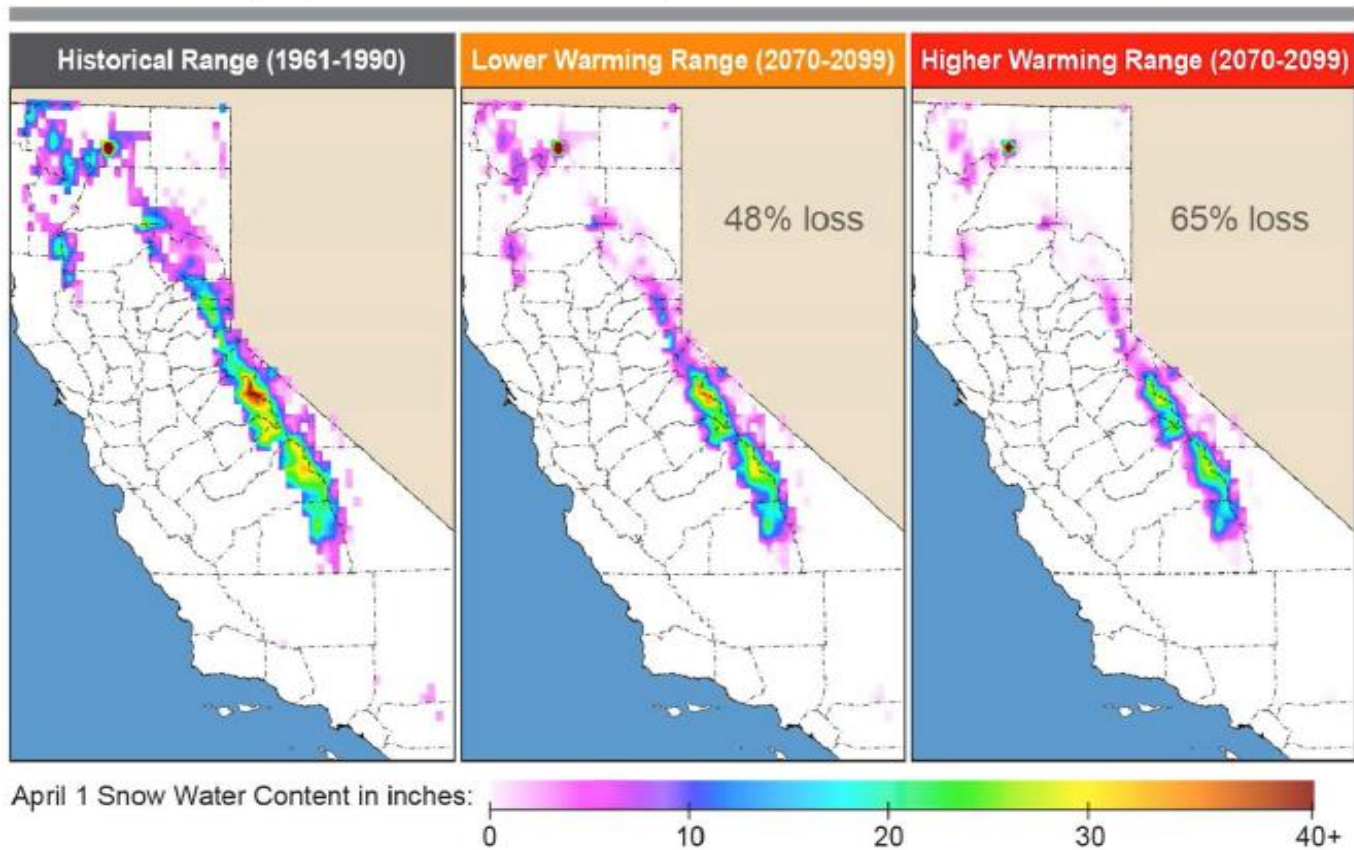




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Snow Pack Loss

Historical and projected California snowpack



Source: CA DWR, 2013



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Adaptation Measures: Water Supply

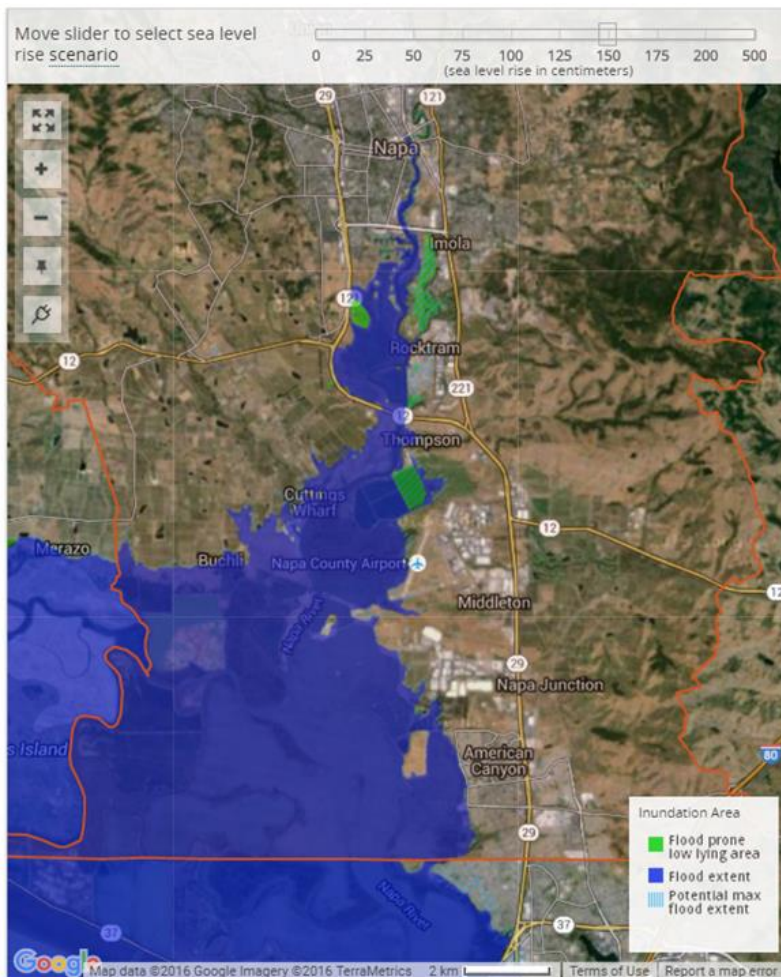
- Water conservation and efficiency measures (GHG co-benefits)
- Rainwater catchment and storage
- Conjunctive use / groundwater recharge
- Support Napa Green Land Certification (GHG co-benefits)
- Regional collaboration and coordination



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Sea-Level Rise (SLR) and Flooding





Adaptation Measures: SLR, Flooding

- Map Critical Infrastructure Locations Vulnerable to SLR and Flooding
- Update Floodplain Mapping
- Coordinate Emergency Evacuation and Supply Transportation Routes
- Update the County's Operational Area Hazard Mitigation Plan to Address SLR Flooding and Climate Change
- Increase Use of Pervious Pavements and Landscaping in Developed Areas
- Identify Streamside Restoration Areas
- Replant Bare or Disturbed Areas



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CAP IMPLEMENTATION AND MONITORING



CAP Implementation and Monitoring Programs

- Implementation activities may include:
 - Code Updates
 - Financing and Incentives
 - Program Research and Development
 - Partnerships
 - Education and Outreach
- Update GHG emissions inventory every 5 years
- Collect data and report on the status of implementation
- Use CAP Consistency Checklist to streamline project-level GHG analysis (CEQA Guidelines, Section 15183.5)



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SCHEDULE AND NEXT STEPS

- **March 10:** Deadline for public comments on Draft CAP
- April: Final Draft CAP
- May/June: Public hearings and adoption



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COMMENTS & QUESTIONS