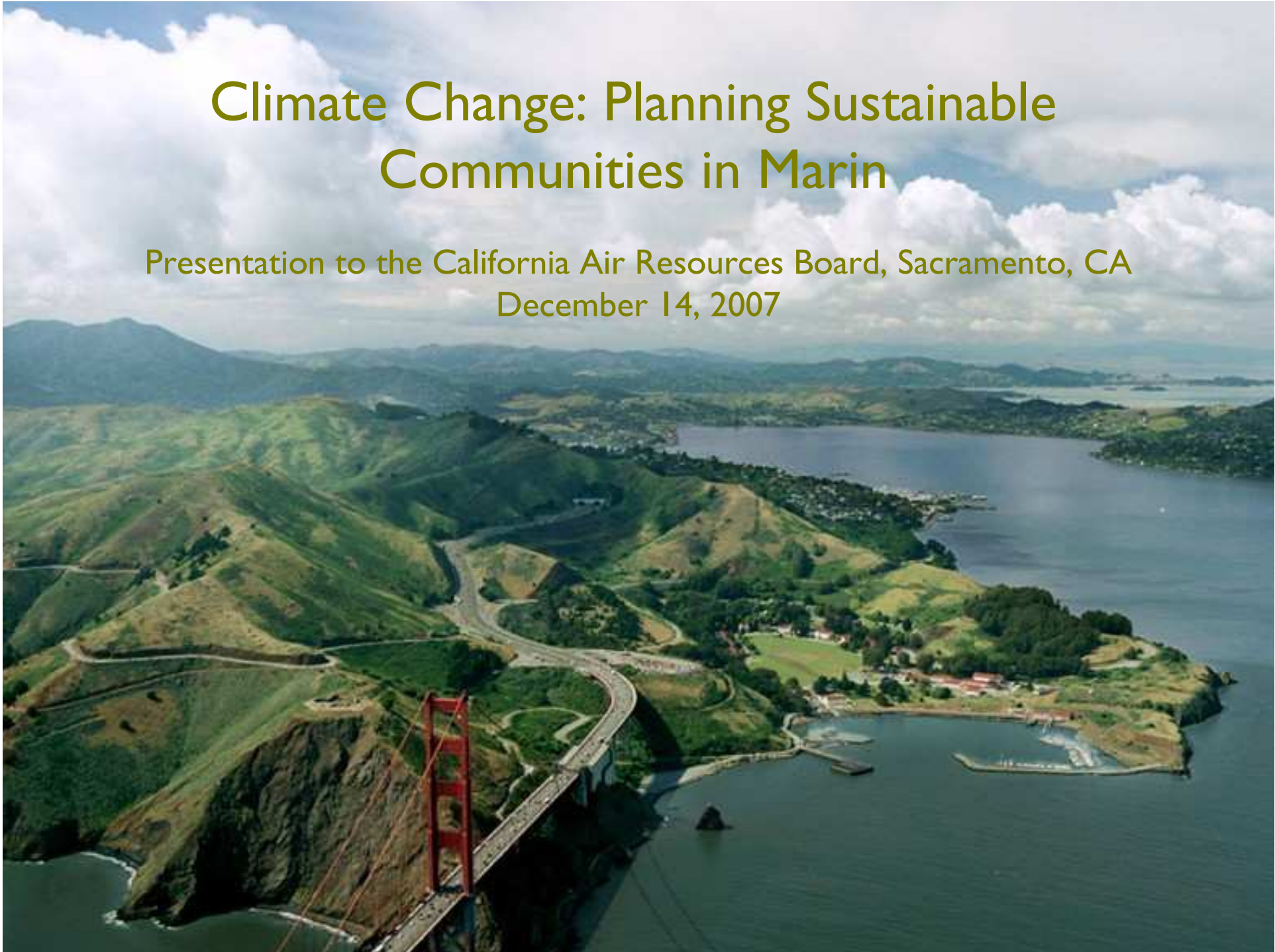
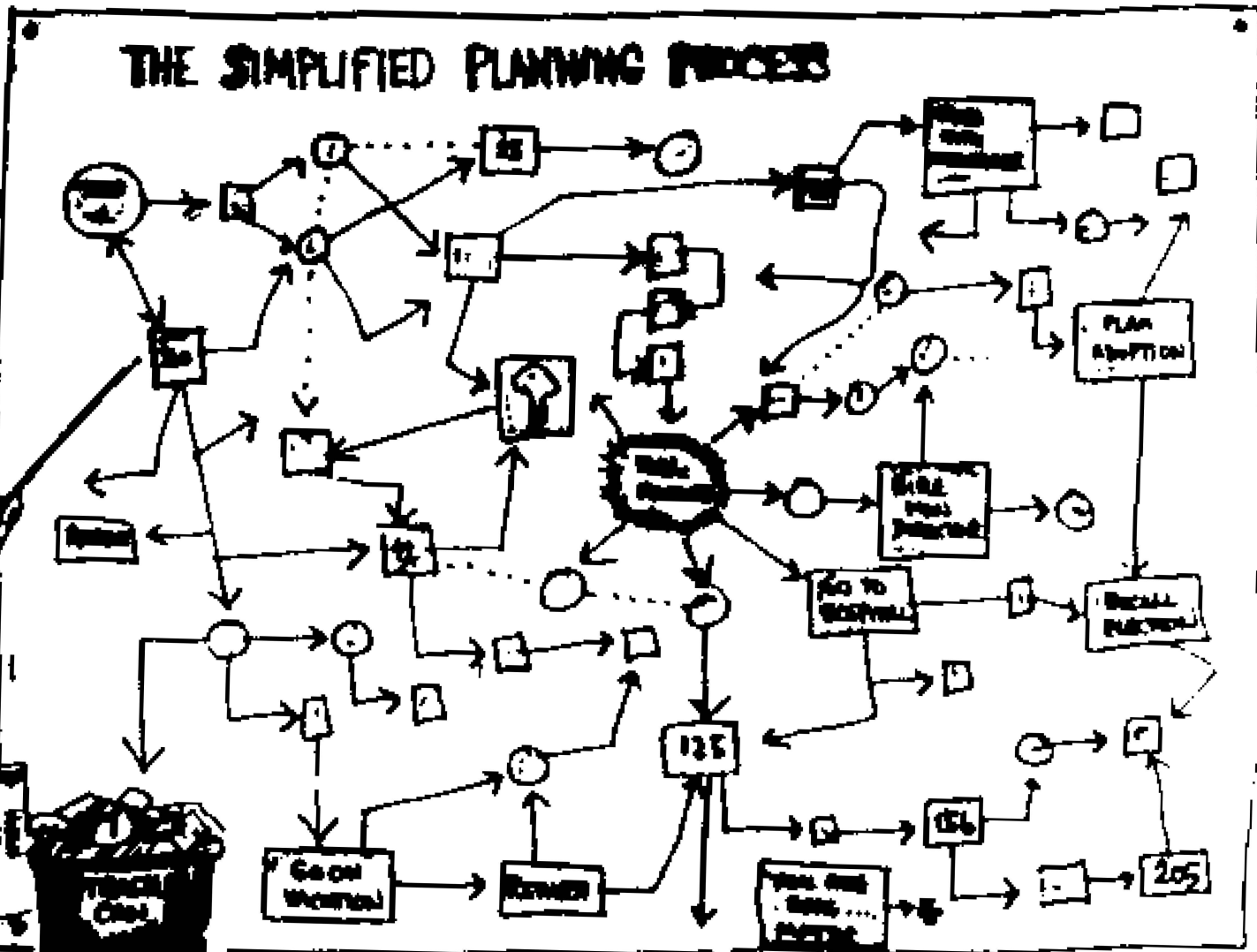


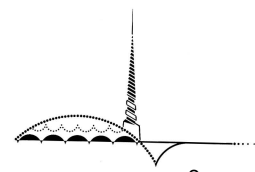
Climate Change: Planning Sustainable Communities in Marin

Presentation to the California Air Resources Board, Sacramento, CA
December 14, 2007





HARMAN



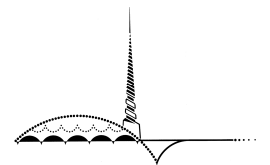
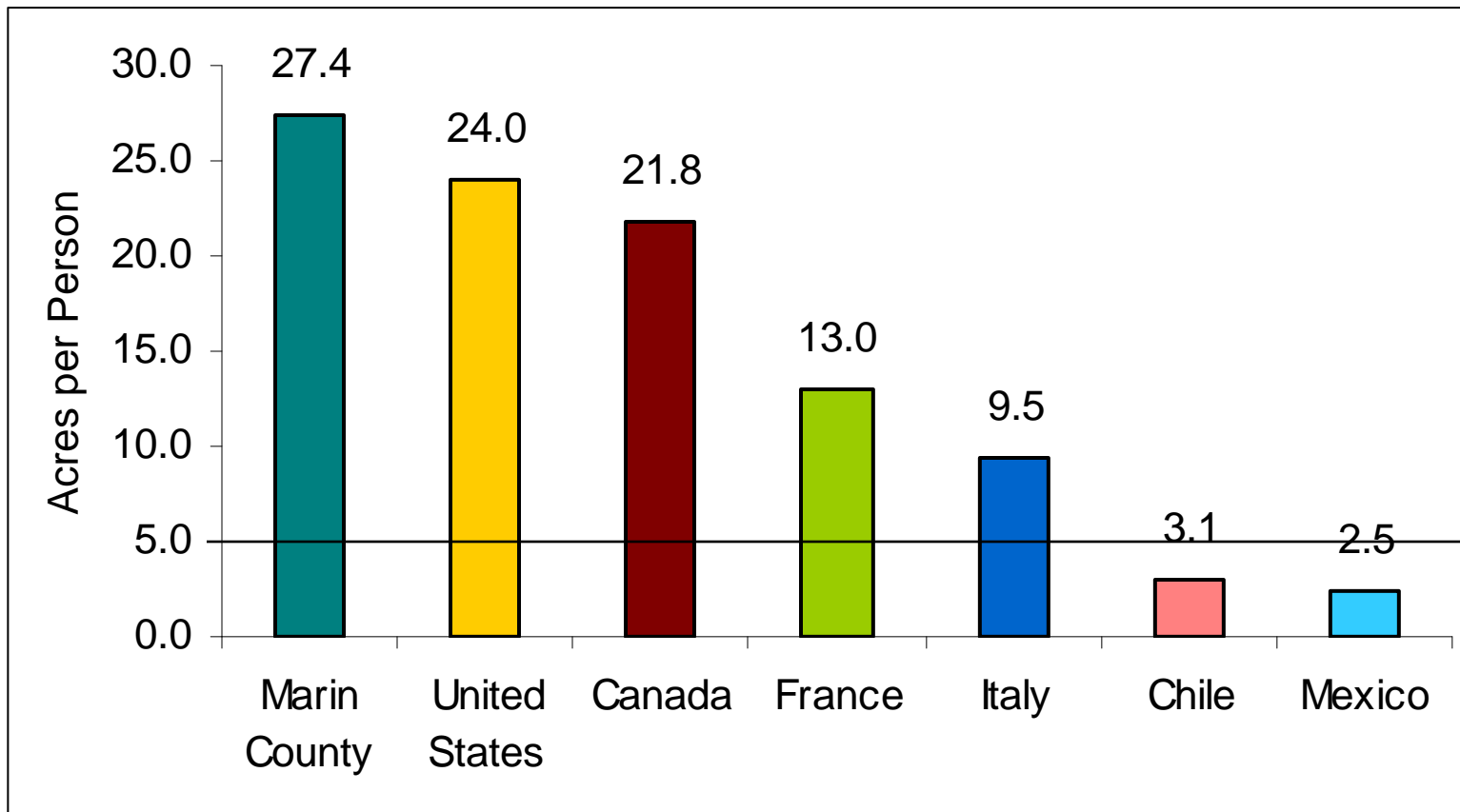


“Planning sustainable communities”
is the overarching theme of the CWP update

CWP Definition of Sustainability:

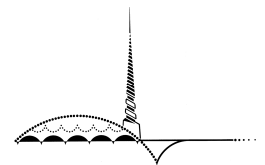
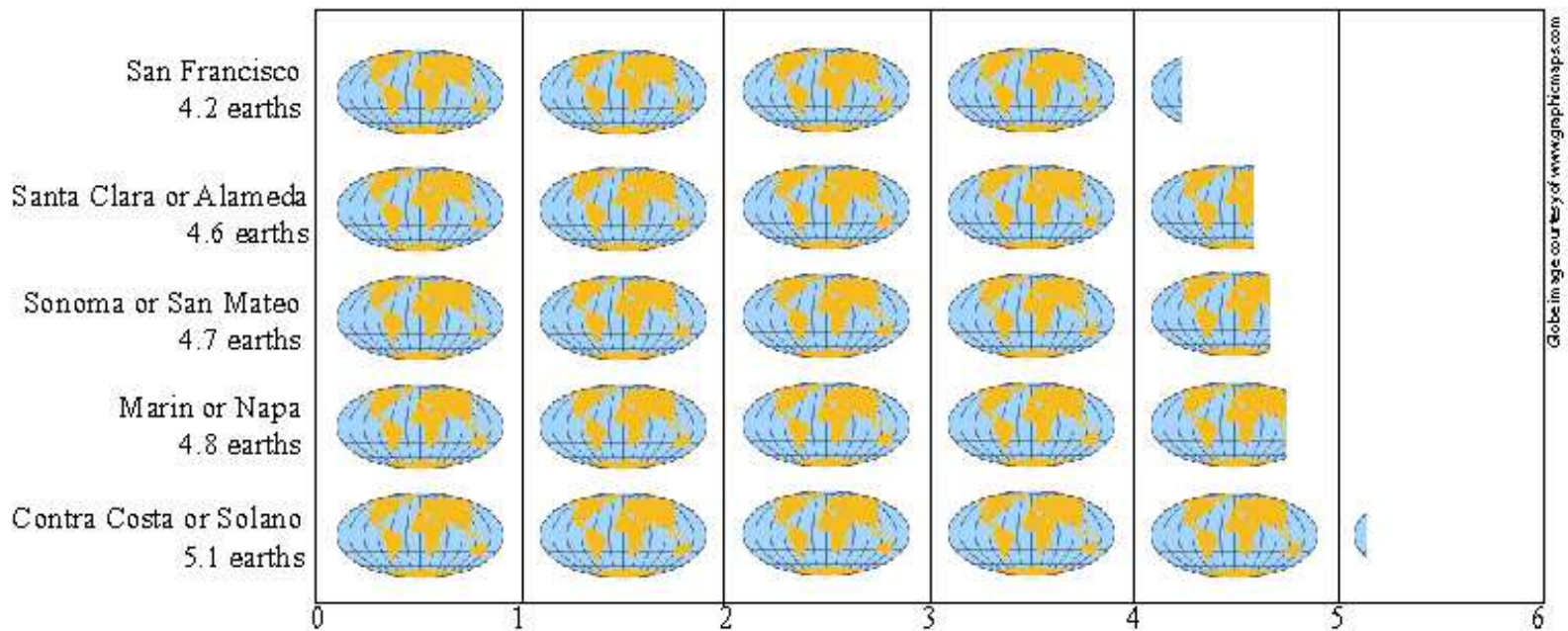
- Aligning our built environment and socioeconomic activities w/ the natural systems that support life
- Adapting human activities to the constraints and opportunities of nature
- Meeting the needs of both the present and the future

Ecological Footprint Comparison

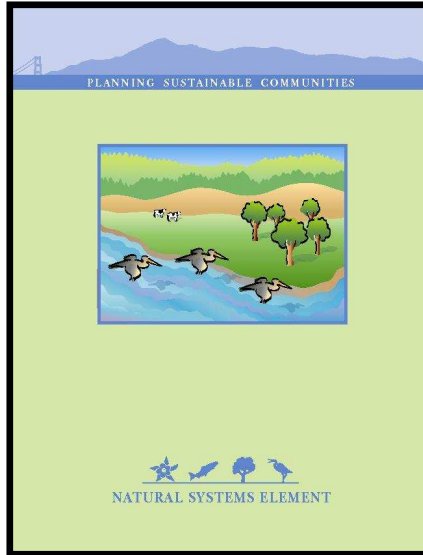


How Does Marin's Footprint Compare?

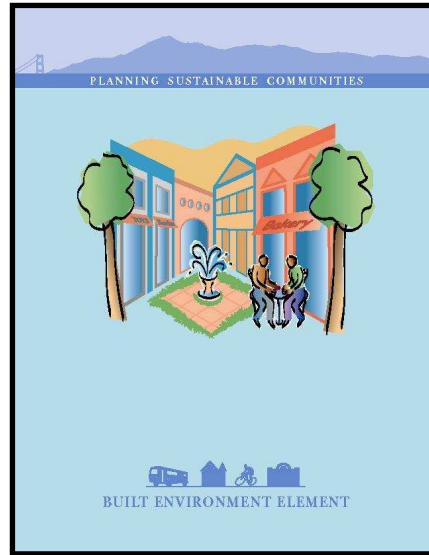
Number of earths that would be required to serve the footprint of each S.F. Bay Area County:



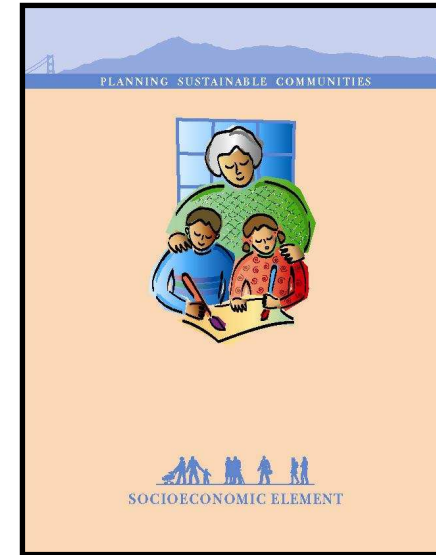
Marin Countywide Plan



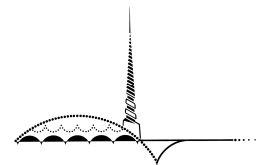
Natural
Systems and
Agriculture



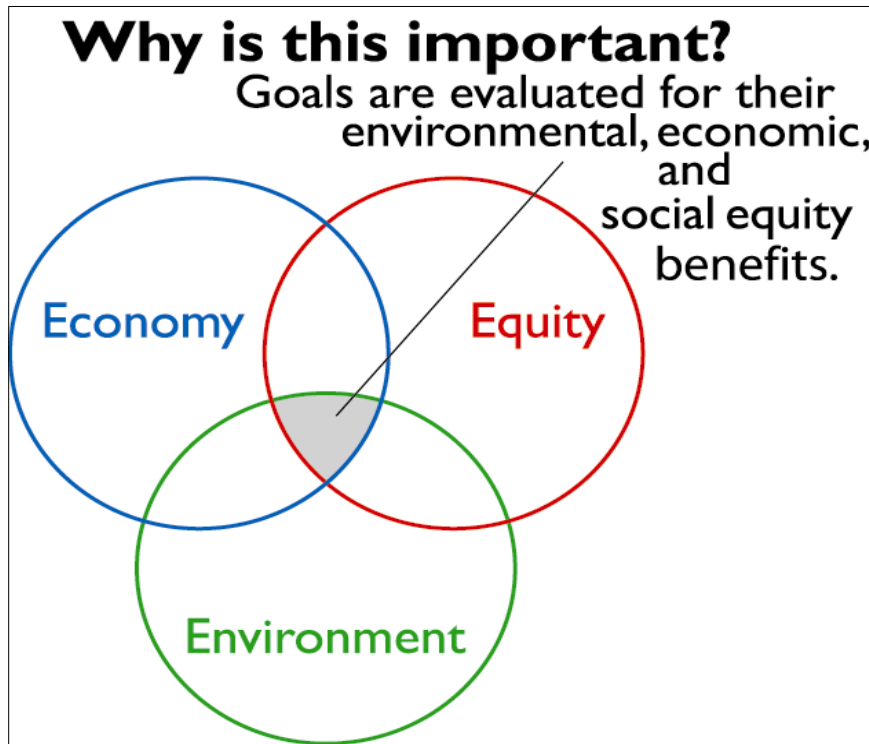
Built
Environment



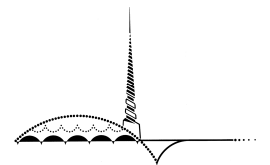
Socioeconomic



Countywide Plan

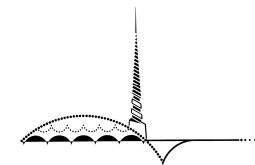
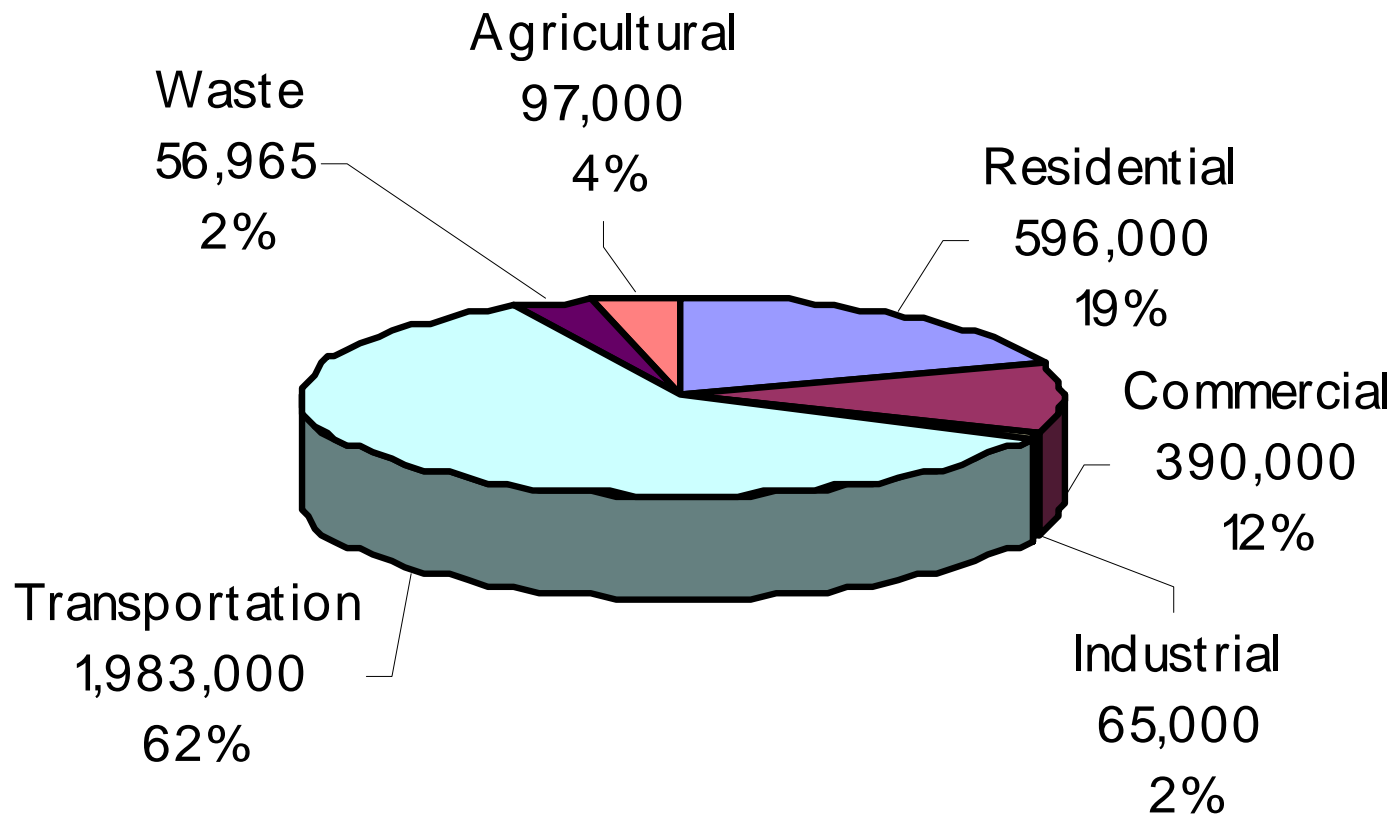


- Each element addresses:
- What are the desired outcomes?
- Why it is important?
- How will results be achieved?
- How will success be measured?



2005 Countywide GHG Emissions:

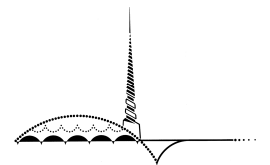
Tons CO₂e & Percent by Sector



Key Climate Change Goals



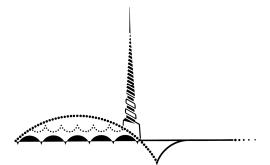
- Reduce GHG emissions
- Monitor climate change
- Adapt to climate change



Policies for Reducing GHG Emissions

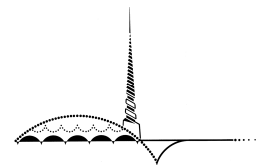


- Increase Renewable Energy
- Conserve Electricity
- Change Commuting & Driving Patterns
- Divert Solid Waste
- Increase Biocapacity of Open Space & Agriculture
- Increase Local Food & Sustainable Agriculture



Other Policies for Reducing GHG Emissions

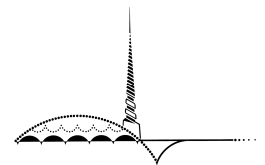
- Evaluate Carbon Neutral Building Incentives
- Encourage Zero, Partial Zero & Low-Emission Vehicle Use
- Consider the Economic Impacts of Climate Change
- Promote Climate Change Education



Set Target to Reduce Emissions

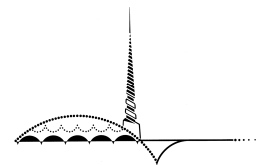


Indicator	Benchmark	Targets
Amount of GHG Emissions Countywide	2,634,000 tons CO2 in 1990	Reduce 15-20% by 2020.



Built Environment: Key Ideas

- Transfer development potential away from environmentally sensitive lands and focus intelligent infill closer to transit, jobs, and services
- Support vehicle trip reduction measures
- Require Green Building

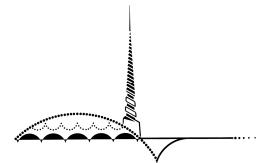


Marinwood Shopping Center

Before:



After:



San Quentin Vision Plan

Land Use Plan



Utilize European design approaches



Amphitheater park



Boulevard



Affordable housing



Pedestrian-only optional area



Ridge open space



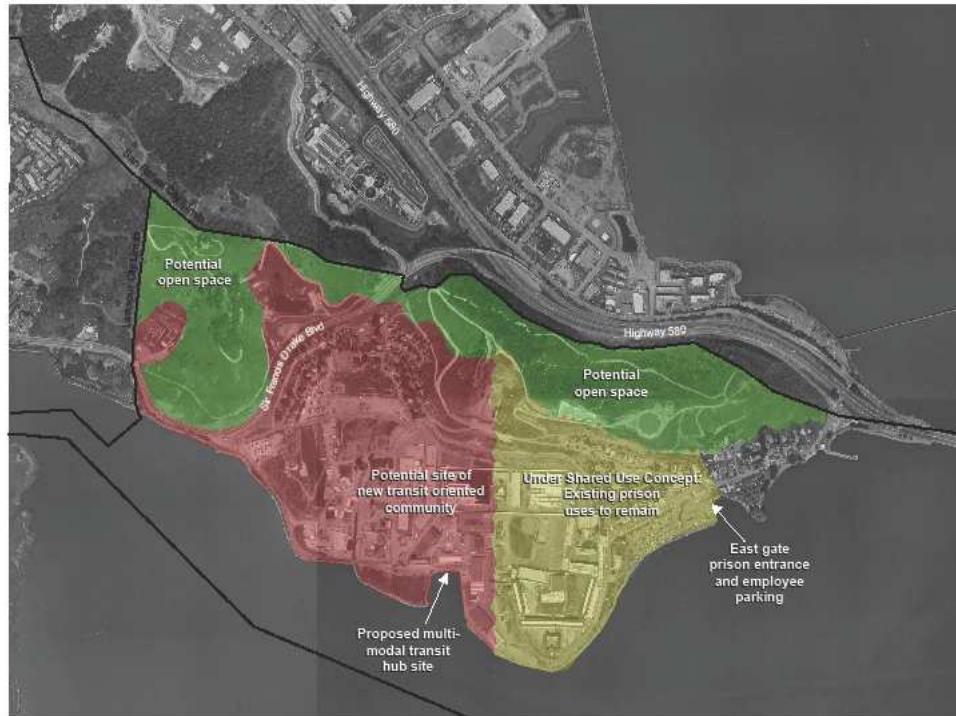
School / Ballfields



World-class cultural arts facility



Central plaza



Waterfront park



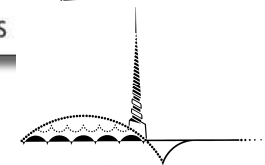
Road along waterfront



Historic park

March 10, 2005

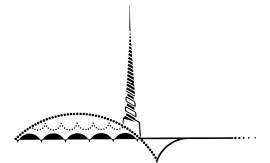
Map 3-36
San Quentin Re-use Concepts



Transportation Programs



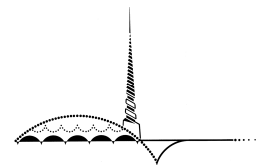
- Promote Transportation Alternatives
- Reduce Single Occupancy Trips
- Create Car Share Program
- Encourage Bicycling & Walking
- Ensure Safe Routes to Schools
- Support Green Fuels



Socioeconomic Element



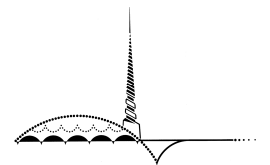
Indicator	Benchmark	Targets
Number of certified “green” businesses	0 in 2000	Increase to 250 by 2010, and 400 by 2015



Can the Plan Reduce Marin's GHG Emissions and Ecological Footprint?

Meeting just the energy and transportation targets would:

- Reduce Marin's footprint by nearly one million global acres per year, equal to a 15% reduction
- Reduce GHG Emissions by 15-20%
- Still not be equal to Italy's footprint, but would help reduce the over-consumption of Earth's biological capacity and serve as a model for other affluent areas.



Implementing programs that link people, the economy and the environment

The Community Development Agency offers a broad array of programs to help move Marin towards a more sustainable future including:

- **Solar Incentives**
- **Climate Protection**
- **Energy Efficiency**
- **Sustainable County Operations**
- **Sustainability in the Countywide Plan**
- **Green Business**
- **Green Building**
- **Waste Tire Education**

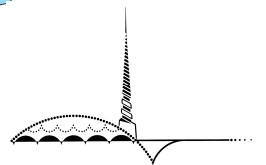


**COMMUNITY
DEVELOPMENT
AGENCY**
ALEX HINDS, DIRECTOR

For more info. contact the Marin County
Community Development Agency
at one of the numbers below, or visit:
www.sustainablemarin.org

Dawn Weisz	<i>Sustainability Team Coordinator</i>	507-2706
Dana Armanino	<i>Green Business & Energy Coordinator</i>	499-3292
Alec Hoffmann	<i>Green Building Program Coordinator</i>	507-2659
Omar Peña	<i>Sustainability Aide</i>	507-2797

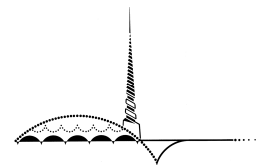
Solar map



Results – Snapshot in Time

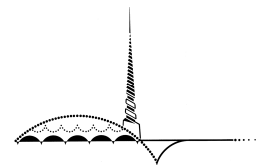


- County has awarded in \$50,000 in solar rebates
- Annual solar installations countywide grew from **8** in the year **2000** to **138** in the year **2005**
- Currently there are over **800** systems countywide
- And these are reducing GHG emissions by **2,465** tons annually



Promoting Green Building

- Woodstove rebate program
- Free technical assistance on Green Building
- Residential Energy Ordinance which reduces the energy use in new large homes
- Construction & Demolition Waste Ordinance
- Green points checklist which has been integrated into our permitting process
- Education: trainings, events, and informational materials like the display pictured here



Fireside Project Requirements

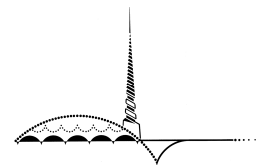
- Affordable Rents
- Solar PV Systems
- Daylighting
- Energy Efficiency
- Durable Construction Materials
- Green Materials
- Low VOC finishes
- Stormwater Protection
- Construction Waste Recycling



Results – Snapshot in Time



- Remodels exceeded State energy standards by an average of 10%
- New homes exceeded standards by 20%
- **75,000** tons of diverted waste reduced GHG emissions by **150,000** tons

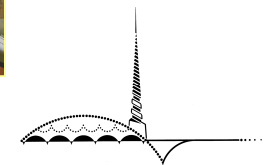


Promoting Green Businesses

Since April 2002:



- Certified 245 green businesses
- Certified 8 businesses as sustainable partners

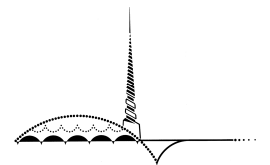


Promoting Climate Protection



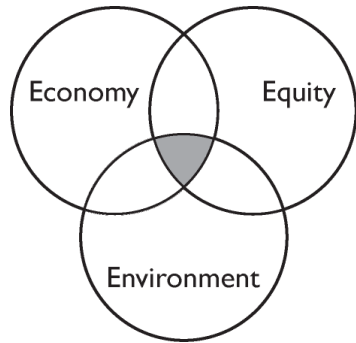
Joined ICLEI's five step program in 2002:

- ✓ 1. Assessed Marin's greenhouse gas (GHG) emissions
- ✓ 2. Set target to reduce emissions
- ✓ 3. Developed implementation plan to meet the target
- 4. Implement GHG reduction plan
- 5. Reassess GHG emissions

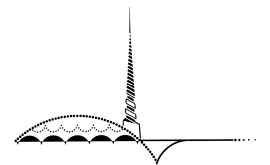


--- County Operations Report---

Measuring Progress Toward Sustainability



- Which highlights successful initiatives from all County departments and divisions
- Identifies potential areas for further progress, and soon will include
- Indicators & targets to track progress



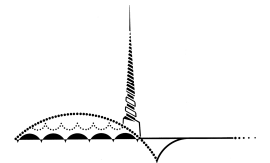
Other programs

Marin Public Facilities

Energy Management Team



- The *MarinEMT program* helps local govts and schools with energy audits and upgrades - and soon into the residential sector.
- The Urban Environmental Accords were adopted by Board of Supervisors
- Community Choice Aggregation Study



For more information contact the Marin
County Community Development Agency.

www.marinsustainability.org

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