



Healthy Watersheds & Healthy Economies: Multiple Benefits of Natural and Working Lands

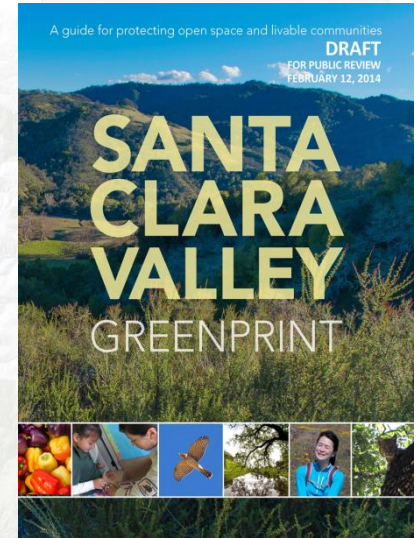
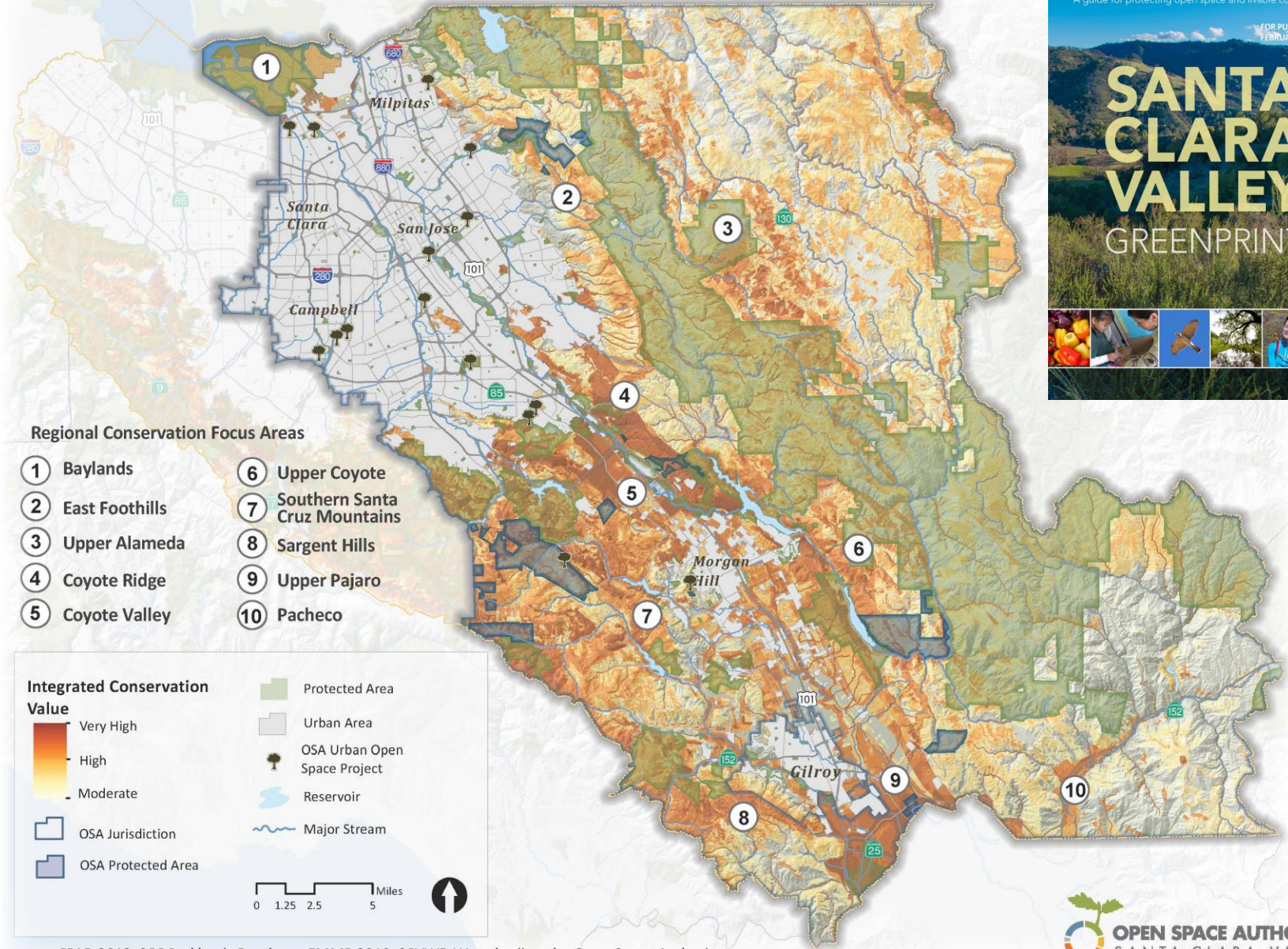
Napa County Watersheds Symposium

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Figure 13: Conservation Focus Areas



Data sources: CPAD 2013, SCC Parklands Database, FMMP 2010, SCVWD Waterbodies, the Open Space Authority.

Economy

Environment



What are Ecosystem Services ?

Ecosystem services are the benefits that people receive from natural systems

Four Categories of Ecosystem Services

- Provisioning – Raw materials made from natural capital
- Regulating – Maintaining healthy environmental conditions
- Supporting – Maintaining natural processes vital for life on earth
- Cultural – Providing humans meaningful interactions with nature



Water Supply Reliability





Rangelands Sequester Carbon





Protecting Farmland Reduces Future GHG Emissions



Why Determine Economic Value of Natural Resources ?

1. Increase Pace & Scale of Conservation
2. Secure New Sources of Funding
3. Build more integrated policy solutions and non-traditional partnerships
4. Develop replicable tools and models



HEALTHY LANDS HEALTHY ECONOMIES



DEMONSTRATING THE ECONOMIC VALUE OF
NATURAL AREAS AND WORKING LANDSCAPES

Ecosystem Service Valuation (ESV) Methods

- Map land cover types
- ID ecosystem services
- Value individual services
- Bundle ecosystem services by land cover type
- Estimate total asset value of the natural capital in Santa Clara County

Source: Earth Economics,
2014



HEALTHY LANDS & HEALTHY ECONOMIES:

NATURE'S VALUE IN
SANTA CLARA
COUNTY



Ecosystem Services



- Water Supply
- Flood Risk Reduction
- Local Food
- Tourism/Recreation/Health
- Biodiversity / Habitat
- Climate Stability
- Pollination

Value of Ecosystem Services in Santa Clara County

Ecosystem Services

\$1.6 billion to \$3.9 billion per year

Natural Capital Asset Value

\$162 and \$386 billion

Value of SC3 Counties Natural Capital

	Area (Acres)	Total Annual Ecosystem Service Flows (\$billion)		Net Present Value, Countywide 100 Yr @ 3.5% (\$billion)		Net Present Value, Countywide 100 Yr @ 0% (\$billion)	
		Low	High	Low	High	Low	High
Santa Clara	835,166	1.6	3.9	45	107	162	386
Santa Cruz	286,107	0.8	2.2	22	60	81	219
Sonoma	1,016,757	2.2	6.8	60	188	217	677

Source: Earth Economics,
2014

Leveraging Economic Valuations to Achieve Multi-Benefit Outcomes

- Supports innovative policy solutions
- Acknowledges the benefits of our working lands
- Incentivizes voluntary land stewardship
- Supports new funding sources
- Builds non-traditional partnerships



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