

MODELING DOMESTIC HOT WATER USE IN MULTIFAMILY HOUSING

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REDWOOD ENERGY**



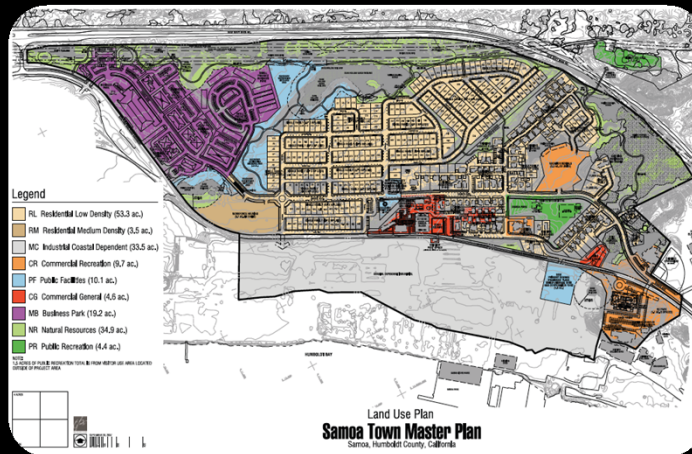
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PROJECT MANAGER/BUILDING SCIENTIST SEAN ARMSTRONG



- 1995-present: Volunteer/Staff/Co-Director of an off-grid demonstration home at Humboldt State University with solar thermal, solar electric and wind power complemented with homemade biodiesel and pedal power generators.
- B.S. in Natural Resources Conservation (2000), high school science teacher (2002-2005)
- Project Manager with large for-profit market rate and affordable housing developers, pioneered Zero Net Energy affordable housing: 2005-2011.
- Founded Redwood Energy in 2011 to design ZNE affordable housing. 4000 solarized affordable housing residences built, 6000 designed



RENEWABLE ENERGY ENGINEER MICHAEL WINKLER



- Mayor of the City of Arcata in 2015, 8 years on the Planning Commission, twice elected to City Council
- B.S. in Environmental Resources Engineering and Physics, Phi Beta Kappa
- Technical Lead for the world's first cell phone system by Motorola
- Telecommunication software engineer 1980s-1995
- Hydrogen Fuel Cell Engineer 1999-2009
- Redwood Energy: Renewable Energy Engineer, Certified Energy Analyst, HERS Rater and LEED Green Rater

