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## Mark Rentz: Other Cap-and-Trade, Water Bond, Make Now the Time

Seldom have need and opportunity combined with such force. With the driest January on record behind us (even the recent rains alone will not eliminate a fourth year of drought) the world's eighth largest economy faces questions about its water supply reliability, response to increasingly severe wildfires, and commitment to the goals set in its historic *Global Warming Act of 2006*.

With this year's rainy season disappointing and fire season imminent, California must either choose to continue to sit idly by and brace for inevitable smoke plumes and mudslides, or act to restore the state's uncharacteristically dense forested watersheds.

While California may have "the most integrated policy to deal with climate change," its actions have been slow to result in actual integrated resource management. Constrained budgets, conflicting jurisdictional boundaries, and a legacy of costly lawsuits have impeded actual fieldwork.

Abundant research has shown integrated resource management can reduce wildfire severity, increase clean energy production, and create jobs while lowering firefighting costs, enhancing biodiversity, and protecting water quality. California's forested watersheds, where more than 60 percent of our water originates, have up to 10 times more trees per acre than they did during Gold Rush days, and resulting fuel accumulations have driven a steady increase in wildfire size and severity.

California became a world leader in addressing climate change by passing innovative legislation. Now, the state's cap-and-trade program stands poised to infuse millions of dollars into efforts to reduce greenhouse gas emissions.

Meanwhile, an epic water bond is about to make millions available to address drought, restore ecosystems statewide, and upgrade California's water infrastructure.

Our trend of increasing wildfire size and severity cannot be turned around in a single year. Too many state, federal and private acres stand packed with too many trees for the state's fractured forest-management infrastructure to process.

But, aligning available dollars with integrated management plans at a landscape scale can simultaneously reduce emissions (see cap-and-trade), improve water supply reliability (see Water Bond) AND give California its greatest opportunity to leverage investments. Research shows, the larger the scope of the project, the greater the measurable environmental and economic results.

Innovative management plans must address not only the dynamic nature of ecosystems, but also the integration of human-constructed systems and natural systems. When constructed and natural systems work in concert, each can function most efficiently. Managing the landscape to make entire systems resilient can also safeguard diverse wildlife and human populations.

Facing extended drought and longer, costlier fire seasons, Californians can find hope in raw numbers and proven leadership. State, federal and academic research has demonstrated integrated resource management solutions can:

- Reduce net greenhouse gas emissions by up to 65 percent
- Reduce high-severity wildfire by up to 75 percent
- Reduce acres burned by 22 percent
- Generate more than \$1 billion in power revenues
- Save millions of dollars in fire suppression costs
- Prevent thousands of cubic yards of debris from filling reservoirs

## Potentially increase water yield by up to nine percent

Water managers are being tasked with seemingly impossible challenges just as firefighters are gearing up to battle mega-fires and the Governor continues to push the envelope on clean-energy goals. The three are related. Their solution should be integrated.

California's ongoing massive accumulation of biomass fuels could become a predictable source of clean, renewable energy in an integrated management effort, or it could star in predictable videos as the media boldly reports amid horrifying smoke and communities are evacuated. Innovation could be the difference.

Implementing large-scale projects to effect long-term benefit is not without its challenges. There are diverse stakeholders, deep emotions, and decades-old perceptions to overcome – there will need to be incentives and assurances that are not in place today to encourage interested parties to support and invest in such strategies.

The devil may be in the details, but inspired leadership can prevent details from becoming insurmountable obstacles. The will and the way are there, as is the skilled labor necessary to restore California's landscapes.

Governor Brown reminded us, "California since the beginning has undertaken big tasks and entertained big ideas." Now is the time to think big and act on the landscape level. This is the time for leaders to lead.

Mark Rentz is president of Integrated Natural Resources Management, LLC. He's served on the Cal EPA Climate Action Team and Sierra Nevada Conservancy Sustainability Advisory Committee.

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