

MARIN CONSERVATION LEAGUE

Climate Action Working Group: March 17, 2017

Mt. Tamalpais Conference Room, 175 N. Redwood Blvd., San Rafael

Present: Doug Wilson, Pam Reaves, Bob Miller, Judy Teichman, Ed Mainland, Pat Nelson, Tamra Peters, Kate Powers, Kevin Lunney, Belle Cole, Nona Dennis, Bill Carney, Kiki la Porta. Scheduled guest speakers: Bob Brown (Novato Community Development Director); Nancy Scolari (Marin Resource Conservation District, Marin Carbon Project) (arrival delayed); Sarah Loughran (Environmental Forum advocate: Deep Green project).

Doug called the meeting to order at 9:05.

Brief Introductions

The agenda was adopted by consensus, with correction of the time for Item 7 (reports). [Not presented due to lack of time.]

The February minutes were approved with a correction. M/S, Tamra/Belle/P.

9:10 Discussion 1: Climate Change Action in Novato (Bob Brown)

Doug made a preliminary introduction of Bob Brown. Bob followed up with a brief description of his background. He has been with the City of Novato for four years. He holds the position of Community Development Director and in that role has been managing an update of the City's General Plan, a process that is now winding down. Before that, Bob was with the City of San Rafael, also working on that City's General Plan.

Bob then described the ongoing General Plan update, with emphasis on its climate aspects. The 2035 General Plan includes GHG emission reduction goals. The City intends to implement cost-effective strategies to achieve a 15 percent reduction below 2005 emission levels by 2020, and a 40 percent reduction in 2005 emissions by 2035. The City has finished its most recent GHG inventory and projects that it will easily meet the 15 percent reduction goal. State actions are a big contributor to the ability to meet this goal. MCE is also a major contributor to Novato's ability to achieve climate goals —it makes a big difference in Marin.

The City adopted a Climate Action Plan in 2009, which is incorporated in the new General Plan. The City is investing in capital improvements such as free EV charging stations, LED lighting, solar panels on public buildings, more energy-efficient facilities and vehicles, etc. There has been less success in "moving the needle" regarding the public's GHG emissions. The City accounts for only 1-2 percent of GHG emissions. Therefore, they will need to motivate the public and "up the game" to achieve the planned 35 percent reduction by 2030. Novato needs to follow San Rafael's example and have "a person on the ground" to implement its climate goals.

The City Council has taken actions to implement climate goals, including a campaign to recruit a sustainability coordinator and voting to shift City electricity accounts to MCE's "Deep Green," which is a 100 percent renewable source and also funds the construction of local renewable energy projects. Speakers in favor of going "Deep Green" showed up in force at the City Council meeting and helped to "turn the ship." The estimated cost of the shift, \$21,000, will be in the City's draft budget.

Regarding the extension of Novato's urban growth boundary, City Council is poised to ask voters whether they want to extend the city's Urban Growth Boundary, continuing the 1997 voter-approved growth limit for another 20 years. The boundaries, which would remain in the current configuration, prohibit the city from annexing land that isn't already served by local water and sewer services.

Local groups have been surveyed on the issue. There is support for taking the matter to the voters in the November ballot, rather than effecting a renewal of the urban growth policy and boundary by a vote of the council, which would leave open the possibility of weakening or even nullifying the urban growth policy when the composition of the Council shifts. If Novato voters approve the UGB, then only a vote of the people can change the UGB during its term. Greenbelt Alliance has been particularly involved in the push to have the boundary addressed by the voters.

There will be a cost to hold the election in 2017 in view of the shift to even-year voting. The City does not control utility extensions. Under state law, LAFCO controls both annexations to the City and annexation to a consolidated utility district (dual annexation). The City is working to refine an implementing Urban Growth Boundary ordinance and tighten up loopholes. The City is also meeting with stakeholders. The City used to have a right of first refusal to prevent extensions when working with water and sewer utilities.

Questions and Comments

Kiki: You want to tie in to PG&E and not impede solar development. For example, the solar array at the Buck Institute. In addition to the local utility's approval to link into the electricity grid, there are local government regulations for approval of a solar installation.

Nona: Are there ground-based solar criteria? A. No.

Doug: The County has punted.

Nona: It's piece-by-piece, action-by-action.

Ed: This may be the optimal approach, evaluating each project on its merits. There are forces of repression working for a repressive approach via ordinances.

Kiki: Regarding the Green Point Nursery project, there was a lack of basis for the project in ordinance. The Urban Growth Boundary Ordinance will be on the ballot in August.

Kate: Will MCL have an opportunity to review? A. Yes, the City will share the ordinance with Greenbelt Alliance and MCL.

Ed: Where does Resilient Neighborhoods stand? A. There is Resilient Neighborhoods participation. The City does not currently have a staff person to put the word out, do marketing.

Ed: San Rafael has Resilient Neighborhoods as a component in their Climate Action Plan. Is it the same in Novato? A. Yes, it's in the Novato plan now.

Doug: What about funding? A. There are state grants, cap-and-trade funds. Funds for disadvantaged neighborhoods for carbon sequestration. The City is applying for sequestration/recreation funding for Novato's northwest quadrant neighborhood.

Belle: Is there a problem with opposition to the plan? A. We have not had a problem with public opposition, but there is a lack of personal action by members of the public to reduce their GHG emissions. They need to be motivated, reminded.

Nona: Inertia.

Doug: Get the word out.

Sarah: The Council's 5-0 vote was encouraging. Many people spoke up about Deep Green and MCE. Four cities are on board and 4-5 have agreed to consider this. MCE is encouraging people to go Deep Green, but the message is more effective coming from the cities.

Ed: There is Cal Fire Urban Forestry funding. For example, the citizen-led reforestation of the SMART station. This is a way to leverage citizen involvement.

Bob Brown: There are three disadvantaged neighborhoods in Marin. In Novato, it's the northwest quadrant. I believe that SMART is responsible for installing irrigation to water the plants that were planted.

Kiki: The Deep Green upcharge of \$21,000 can be offset by energy-efficiency measures. A. Energy-efficiency measures should be credited, and rolled into other sustainability projects.

Tamra: Is Novato the only city to integrate climate throughout their General Plan. A. San Rafael does that also.

Doug: In working with D.C., we need to get cities to work in coordination with the County. Where does Novato stand on that? A. Under the Marin Energy & Climate Partnership, eleven Marin cities and towns, the County, the Transportation Authority of Marin, Marin Clean Energy, and the Marin Municipal Water District are working together to reduce greenhouse gas emissions in government operations and in our communities, with a focus on joint implementation. Our Climate Action Plans are similar. We work closely with the County and other cities and use the same messaging and promotional materials. We've accepted the California Green Building Code. Novato is the only city to adopt an additional 15 percent energy

use reduction. Regarding a requirement of mandatory solar on new buildings, not every building has solar access. An alternative would be to pay into a fund.

Doug: Has there been any blowback? A. Not in the planning stage.

Kiki: More than 50 percent are not suitable for solar. One possibility is to consider community solar.

Ed: Where does Novato stand on mandatory audits and building upgrades on resale, applying the Berkeley model? A. The Board of Realtors would oppose it. This is DOA, politically. We could look at imposing requirements at the major remodeling stage. This is where decisions are made.

Ed (cont.): Where does Novato stand on green procurement? A. This was a provision in the City's Climate Action Plan, but it fell by the wayside when Novato departed from the central purchasing model. We need to recreate a provision that is functional for individual departments. This is an administrative issue, not a political one. We could do some sharing, take guidance, provide lists to departments, a "Green Book." This involves the City Manager and the Finance Department.

Kate: Information should be shared throughout the county.

Tamra: Regarding storing solar, what can be done now? A. There are no code requirements that restrict.

Sarah: We need Level 2 charging stations.

Kiki: Rapid deployment of electric vehicles is restricted by the fact that in many homes electrical panels are inadequate and dangerous for vehicle charging. Is there an opportunity for subsidies? A. I'm not sure regarding the availability of local dollars. Dana [Armanino] is a possible source of information.

Doug: Regarding sea level rise, how is Novato preparing to deal with at-risk areas? A. We are reviewing the study. Most of the land at risk is agricultural. The study is data-rich and will raise consciousness..

Kiki: Redwood Landfill will be subject to sea level rise.

9:55 Discussion 2: Report on Deep Green Campaign (Sarah Loughran)

Five cities have been persuaded to include Deep Green in their budget process. Tiburon was the only city that responded with a flat "no." We are still working on persuading the town of Ross. We plan to create a letter-writing campaign and to attend the first budget meeting in the cities and the County. We are looking for feedback.

Doug: Agreed re the value of attending the first budget meeting. We need bodies. We need a coordinated effort, a network of people to go to each meeting. It's effective to have several people saying the same thing.

Pam: The Novato meeting presented an example of the effectiveness of different approaches.

Sarah: We're trying to promote the value of working together. The Larkspur meeting is on April 19. It's difficult to find the meeting dates.

Pam: The County meeting is on April 24-26: Monday, Tuesday, Wednesday. Have something in the meeting packet.

Doug: Make a phone call to City Hall re the meeting dates.

Belle: OFA would like to help. Invite them to talk. [Sarah will follow up.]

Heather: Can people who are not residents of the city attend the meetings?

Pam/Doug: Yes. Doug: In your comments, you can leave out the information re residence. Pam: You can say you represent MCL. Sarah: Say it's a countywide effort.

Belle: Tiburon is a problem. A. MCE should be working harder on PG&E v. Light Green, not Light Green v. Deep Green.

Doug: Two Mill Valley council members work for PG&E, and 3-5 are Republicans.

Sarah: We gave advance briefing re RECs. Feedback from San Rafael indicated that they wanted a shift to Deep Green to be revenue-neutral. They have cut costs by moving accounts.

Bill: Going incremental gets them moving in the right direction.

Kiki: In Novato, are you also talking about energy-efficiency offsets? A. Yes and no. We're not identifying specific energy efficiencies. Kiki: Cities need to embrace leadership and model good behavior. A. We also set examples by individual behavior.

Doug: The Mill Valley Community Action Network (Mill Valley CAN) is prioritizing Deep Green. The San Mateo CCA is encouraging subscribers to sign up for 100% renewable at the beginning. This is a great model.

Sarah: The newer CCAs have far lower opt-out rates.

Doug: Get the general public to see it. It's all about outreach.

10:07 Discussion 3: Report on Carbon Sequestration in West Marin (Bob Miller)

Bob gave a PowerPoint presentation on the economics of carbon farming on West Marin ranches. Bob reported on information gathering he conducted, with Judy Teichman, setting forth the factual bases for decision-making re the most effective places to spend money to reduce carbon in the atmosphere via sequestration on ranches.

Carbon farming is a cluster of farm practices that help to sequester carbon in soil and plants. There are 35 recognized practices, including composting and riparian restoration. Marin is a center of innovation for carbon farming. The underlying question addressed in Bob and Judy's

PowerPoint was the net cost of carbon farming—is it reasonable in relation to other measures proposed to reduce carbon in the atmosphere. Bob and Judy interviewed stakeholders. Their goals were modest due to the limited data available. They developed a metric to evaluate “bang for the buck”: Cost metric: \$/MtCO₂e (\$ per metric ton of carbon dioxide equivalent) sequestered—key for evaluating “bang for the buck.” The metric includes benefits as well as costs and excludes subsidies and grants. The objective is to determine the cost to society.

Carbon sequestration occurs slowly, with an estimated 6MT/acre after 10 years. This varies from ranch to ranch. Initial capital costs are high, up to \$1000/acre. However, this is better than some strategies the County is spending money on. The Cost/MtCO₂e may be \$25-\$100, if you amortize capital cost over 10 years and add interest and other costs. This is comparable to key alternatives, like MCE’s “Deep Green” and better than the “green commute” and “SMART shuttle.”

The price of carbon credits is low, will rise over time. Social costs of carbon farming would be offset in part by as-yet unquantified public and private benefits. Public benefits that have value include restored land, riparian/salmon habitat, and better storage of water. Private benefits include more forage, lower feed costs—but these benefits must be proven. Bob estimates that the social cost of carbon farming is <\$25 to \$100/MtCO₂e. If 15% of Marin ranchlands could be carbon farmed, 24k acres →150k MtCO₂e sequestered after 10 years. If 15% of CA ranchlands, →>20m MtCO₂e sequestered. Compost on cropland and riparian habitat restoration might be even more important.

In summary, there are no silver bullets, but a number of bullets.

Questions/Comments

Pam: Is there research on croplands? A. Yes. Jeff Creque is a source for that information.

Nona: What is the percentage figure for riparian restoration? A. Less than 1 percent for potential riparian restoration. Nona: Are you addressing the causes of degradation that create the need for restoration? A. Yes, we need to look at that.

Bob (cont.): There are a number of carbon farm plans. We need to implement them to determine the cost/benefit ratio. Marin’s role is to foster innovation and implement to provide proof of concept, leading to more widespread adoption of carbon farming. Marin accounts for only 1/100th of 1% of global greenhouse gases. We can help the planet by affecting actions by others elsewhere. Implementation and proof of concept also provide better information to policymakers. There is a standard adoption curve. Early adopters, lots of enthusiasm, leading to proof that the practice is worthwhile.

We need to use obstacles as a spur. Public agencies can then be seen as doing something worthwhile. There is a limited amount of feedstock for compost. Farmers are risk-averse because their profit margins are thin. They want a quick return and proven benefits, not promises. These obstacles create a need for grant-seeking and promotion of public awareness—for example, Monsanto has its best plots near highways.

Marin has an innovative group of farmers. Carbon farming plans are being developed and applications are being submitted. The Marin Resource Conservation District (RCD) and Nancy Scolari are ready to support. Key decisions are being made regarding the allocation of scarce resources. Creative financing is available to minimize risk and create incentives.

What we can do:

- 1) Support RCD's application for funding. Take this from the Climate Action Working Group to the MCL board.
- 2) Advocate to the County that its funding to meet climate goals should include carbon farming.

Nona: What is the monetary benefit to the rancher? A. (Kevin Lunney) There are recognized benefits of soil management, including increased forage and a longer growing season, better water storage, sustainability. These help to counter the large initial capital cost and slow benefit.

Bob: Carbon credits are a slow gain. Now carbon prices are low. They will rise as we get serious. Gain-sharing may be necessary to incentivize.

Kiki: Who bears the verification cost? A. Costs are high to measure benefits. This may discourage action, but it's still early days. There are possible economies of scale and technology development.

Judy: There is also CEQA mitigation. Water stored/banked, an offsite offset of environmental impacts.

Heather: There is \$7 ½ million in California Department of Food and Agriculture funding to be allocated California-wide. Brown's Healthy Soils Initiative. Federal funding is in doubt.

Judy: It's a benefit to be shovel-ready when grants are available.

Pam read a letter of support composed by Nancy Scolari. This was a template for a letter to the Coastal Conservancy regarding RCD's application concerning 5-10 projects on coastal farms. Nancy is also seeking support for sequestration in the County budget.

Nona: Are you seeking funds under Measure A? An additional match? A. (Judy) RCD has not applied for a County match. They intend to apply.

Pam: How much investment do you contemplate by the County? A. (Bob) The research is embedded. The intent is for a few hundred thousand. The County found funding for a Climate Action Plan. Half of their climate funding goes to the Green Commute. Why not spend on actions that provide more benefit?

Bill: Projects should be scored on cost-benefit action by action before going countywide.

Kiki: Measure A? Nona: For acquisition of easements.

Pam: We need to clarify and quantify.

Nancy Scolari: There is a proposal before the Coastal Conservancy to implement carbon farm plans, the first in the state. Implementation serves the conservation goal of coastal resiliency. There is a Coastal Conservancy Board meeting on April 27 in Redwood City, at which the board will consider and possibly authorize the disbursal of up to \$200,000 to RCD to plan and implement carbon farming projects that improve soil productivity, water sustainability and greenhouse gas sequestration for agriculture and watershed resiliency on ranches in western Marin County, and adopt findings under CEQA.

RCD is seeking County matching funds, Measure A funds, MALT stewardship easements, and also wants to apply for non-easement property.

Nona: Given Measure A, the County is reluctant to look for additional funds.

Nancy: They are now doing a good job to support easement properties. We are at a disadvantage concerning other properties.

Nona: They are looking at the municipal side. There is also a community side of the balance sheet—use this kind of project.

Doug: There is additional funding under the Climate Action Plan.

Nancy: We can't tap into the funds without a match. The California Dept. of Food & Agriculture Healthy Soils Initiative requires a match. We have to make sure that producer plans are ready and we have the match needed.

Bill: What is the source of the compost? The kitchen scraps in our green carts go to the Central Valley. Is there a way to keep this in Marin at a reduced rate or are there local offset funds for a local nonprofit or government fund to return this compost to our own soil?

Pam: How should our support for climate action funding in the County budget be worded?

Nona: Conservation the first item.

Nancy: One obstacle is planning, tallying up impacts. We would like to present it to the County and have funding for 12 plans. There are 30 applications. The goal is to complete 20 plans and quantify the work.

Action Item: Support the RCD carbon farming implementation proposal before the Coastal Conservancy

M/S/P Judy/Nona/Passed unanimously.

Next meeting: 4/21/2017.

Meeting adjourned 11:10.

Minutes: PN.