MARIN CONSERVATION LEAGUE

Climate Action Working Group: February 17, 2017

Muir Woods Conference Room, 175 N. Redwood Blvd., San Rafael

Present: Doug Wilson, Pam Reaves, Bob Miller, Rick Fraites, Ed Mainland, Heather Furmidge, Pat Nelson, Judy Teichman, Jill Templeton, Bill Carney, Tamra Peters, Norma Fragoso, Nona Dennis, Laura Lovett, Calvin Weeks (aide to Assemblyman Marc Levine), Kate Powers, Chris Calloway (aide to Sup. Damon Connolly), Roger Roberts, Maureen Parton (aide to Sup. Kate Sears), Bob Archer; Rebecca Johnson (Romberg Tiburon Center), Tom Flynn. Guest speakers: Chris Choo, Marin County Department of Public Works; Supervisor Damon Connolly.

Doug called the meeting to order at 9:05.

Brief Introductions

The agenda was adopted by consensus, with the comment that it might be condensed to enable us to finish on time.

The minutes January minutes were approved by consensus, with corrections.

Discussion 1: Sea Level Rise and Rollout of Results of BayWAVE Phase 1 Vulnerability Study (Chris Choo)

Doug made a preliminary introduction of Chris Choo, and stated our purposes relating to this discussion. MCL is concerned with finding a way to back up the rollout of the vulnerability study. We need to understand the framework and be ready to deal with issues that come up. We need a public discussion that enables bringing people into the fold when the facts come out. We need to deal with this as a unit, keep up to date, and get the word out.

Chris: Chris introduced herself, stating that she is a watershed planner with the County of Marin Department of Public Works. She has been managing the BayWAVE project. She will discuss the current schedule and progress being made.

The current plan is to have a public rollout of the sea-level-rise vulnerability study on April 11. Before the rollout, there is an internal process to get things coordinated. The objective of the study is to identify vulnerabilities to sea level rise, not to provide solutions. Those conducting the study have worked with many agencies. Not all of the lands evaluated are County lands; they consult with the agencies that have a management role concerning the lands. They are currently making edits, and Chris will go to planning directors, public works, the water department, MCMC, cities, etc. to update them before the final version of the study is released to the public. They are consulting with MIG, a planning firm in Berkeley. They have a website with information.

Doug: The story needs to be unified; we need to be on the same page re the facts.

Pam: Is the vetting process bringing the agencies together? A. Yes, there has been successful participation in identifying vulnerabilities and fact-checking. We are reviewing 100+ interviews, not collecting new data. There has been lots of cooperation. It's an open process.

Nona: You have laid the groundwork for coordination. People are talking, working together.

Chris: It's a challenge to scope out the next thing, move forward. There are leads from different perspectives.

Bill: This is a big opportunity to move climate to the center of the discussion. The message should not be softened to reassure people. A. The message has not been softened. We are using the best information we have, providing lots of data and tables. We are coordinating with cities, towns, agencies. The study does not address individual properties and may be less useful re private parties. We need input and buy-in. We have planned a conversation with the public at large. A handful of meetings to talk about process, play the Game of Floods, understand the challenge ahead.

Bill: This could be couched in terms of what to do about flooding; it should be addressed as a climate problem. There's an issue of how it is framed: Climate, with connective tissue re other impacts that need to be studied in detail. A. We are looking at how to connect the issues going forward, creating a coherent conversation. We need to consider "What is the ask?".

Doug: What is the next phase? A. In process are updating, budget, staffing. We don't manage the cities. We are finding ways to support. Some items are not fully defined.

Nona: Don't expect too much. Understand what the study does and what it does not do. It is datadriven, fact-based. It sets a land and water baseline.

Bob: Are there reports issued by other jurisdictions that could serve as a pattern? A. The BayWAVE study complements the C-SMART report, using a similar format. It incorporates more people and infrastructure.

Nona: We are tracking Alameda County's ART (Adapting to Rising Tides) study. A San Mateo study will be out in the fall. San Francisco's response is somewhat similar.

Pam: What about the SMART train? Who has the right-of-way? Is the North Coast Railway going to be at the table? A. North Coast is not at the table.

Doug: Are we politically ready to handle this? A. The report may not be widely read. We'll see what happens. We're coordinating at the decision-maker level. Re naysayers, climate deniers, rogue actors, it's not our goal to bring them on board. There is lots of room for coordination.

Nona: Ninety-nine percent don't have a clue. For example, look at the Ross Valley flood control situation. Democracy is not efficient. A. The goal is to communicate and engage in productive conversation, provide an opportunity to bring people in.

Roger: Down the road, we'll need big bucks spent: eminent domain, state funding. Take a leadership role in engaging the state, securing a bond issue statewide. A. We are proud of the process: the cooperation, the people at the table. We have compiled lots of data which has taken us to a unique position. We're ahead of other entities. The process is the biggest piece of the

project, not the report. Funding sources include Measure AA, Coastal Conservancy funding. We will need lots of funding.

Doug: We can help to get the word out. Lots of groups are represented here. It's a big task. A. As we look at scoping, we respond to requests for information. We'll allow people to do things on their own and consider how to make good use of staff. MCL is a good forum.

Pam: Given the enormity of the situation and the small staff, who decides on budget allocations for different projects? A. It's complicated. Pam: A dance.

Discussion 2: Structuring a committee of stakeholders to deal with implementing Marin's Climate Action Plan (Sup. Damon Connolly)

Damon: The discussion will address issues tied up with how to implement the plan, which is in turn coordinated with BayWAVE and C-SMART. Supervisors Damon Connolly and Kate Sears serve on both the Climate Action Committee and the BayWAVE Steering Committee. There is also a Climate Action Plan committee comprised of Damon and Kate. The idea is to merge the Climate Action Committee and the Climate Action Plan Committee.

The key issue is to make sure that departments and agencies within the county coordinate and work together. Regarding who decides the budget allocations, this is an integrated process in which they work with the County Administrator and Board of Supervisors. A series of discussions is coming up in which they will consider where to cut and where to increase funding. The budget will be approved in June.

Regarding the political will to implement climate action, Damon stated that he is optimistic. He cited the BayWAVE work, his discussions with conservative Republicans in Tiburon who recognize that there is a problem, and the well-attended Jared Huffman Town Meeting in December (900+ people). Marin residents are concerned and fired up. How do we tap into this energy: With programs like Resilient Neighborhoods, avenues for practical action. On a larger level, Damon is going to Washington D.C. to bring back legislative priorities. How do we translate our concerns to an administration that disavows climate change? Call it "natural infrastructure" instead?

Nona: Change the terms.

Judy: Carbon sequestration is "healthy soils."

Damon (cont.): We are pushing for state and federal funding. There is a possible substantial state grant for McInnis Marsh restoration. The \$800 million needed for the construction phase will require federal funding.

Pam: Does the funding cover purchase of the St. Vincent's/Silveira property? A. No.

Damon (cont.): Kate and Damon will do a Marin Voice piece. The County of Marin Climate Action Plan (CAP) implementation subcommittee has developed a Mission Statement. Damon has had meetings with the subcommittee and the working group, the officials directly involved in implementing elements of the CAP, including DPW, Community Development, Finance, Parks, the County Administrator.

Pam: Is the Health Department included? A. They are not the main folks.

Tamra: The head of the Health Department has said climate is really important.

Pam: The Health Department in Contra Costa County worked closely with those implementing the County's Climate Action Plan, to increase public awareness of the health impacts related to climate change. A. Damon will follow up on this.

Chris: We have applied for grants together.

Damon (cont): The CAP requires both municipal and community implementation strategies. The municipal (unincorporated Marin) element will coordinate with the cities. The municipal piece is on track to reach the near-term goal of reducing GHG emissions to a level 15% below 1990 emissions by 2020, and if fully implemented, to reduce GHG emissions to a level of 30% below 1990 emissions. Increasing Deep Green participation is an element of the CAP. The cost of going Deep Green at the Civic Center is estimated at \$60,000/yr.; the cost of going Deep Green for all accounts is estimated at \$160,000/yr. Doing this would enable the County to more than meet its goals.

Doug: There are Deep Green efforts before the cities.

Roger: It's on the agenda for Larkspur.

Chris: Deep Green is a huge step. There are assumptions re the Green Commute.

Damon: One-half of the Deep Green revenues go toward developing local sources of renewable energy. Damon gave a shout-out to Bob Miller for his work on developing a metric to track the annual cost of GHG savings over 20 years—to quantify the costs v. savings for budget purposes. This is on the right track—will be refined before showing it to us.

Roger: A cost-benefit analysis.

Damon: It includes the net reduced cost. The Green Commute saves GHG emissions but does not reduce cost.

Doug: Get people thinking about the model.

Damon: The model fits in with the budget. It depends on the state of the state and federal economies, which are projected to run deficits in the next couple of years. We affirm Deep Green, GHG reduction.

Nona: How is the Deep Green impact quantified? Is there an equivalent number of fossil fuel electrons put out of service? In an era of excess energy, what forms of fossil fuel are put out of service? A. Natural gas.

Roger: The older, more obsolete facilities.

Doug: They are no longer seeking new fossil fuel sources, but the CCAs are being charged through the PCIA (Power Charge Indifference Adjustment).

Cal (Calvin Weeks): There is California legislation to prohibit coal energy.

Ed: A footnote for Nona: One-half of Deep Green revenues fund the effort to bring local renewables onstream.

Damon: This is a big portion of funding for local projects.

Tamra: According to Tesla, energy storage is the next wave.

Damon (cont.): CCAs are changing the game. Storage is the next frontier. Marin pushed for this early on. As we get more municipalities using Deep Green, this is a move to the good. We need people to show up regarding the budget. On the community side, we are considering how to leverage our limited staff with community groups, to promote the ambitious goal of a 30% reduction below 1990 levels by 2020. The initial community meetings will take place right after the budget process in June. There will be two large meetings, may at least two more with core groups. The objective is not just to inform the community, but to solicit ideas. Some meetings could take place in West Marin.

Nona: The suite of actions to take could differ widely by area.

Damon (cont.): We're also considering "green stretch" assignments for County employees, whereby employees can take on assignments to improve actions regarding climate. We're working on an outreach plan. We're working on collaborating with other municipalities, expanding what we're doing now with San Rafael and Cory Bytoff.

Bob: The Municipal sector/Unincorporated Marin [as defined in the CAP] accounts for 3% of county emissions. The Community sector accounts for 97%. There is an issue re how to make allocations of funds commensurate with impacts—making allocations to maximize impacts. A. There is more low-hanging fruit when working on things that the County controls, and using those to gain leverage with the community.

Chris: With municipal actions, you can more easily understand and project the impacts. These are more difficult to evaluate for community actions.

Bill: Include and welcome the whole county. The unincorporated plan only covers one-fifth of the population. The municipal committee has an opportunity to induce attendance by cities.

Damon: In the community meetings, we will highlight best practices.

Ed: On March 7, at 6:30 the Novato City Council will consider the city Climate Action Plan. We will be making a pitch for taking all of Novato's city accounts to Deep Green. This is a pitch for attendance at the meeting.

Discussion 3: Carbon Sequestration Efforts in West Marin (Bob and Judy)

Bob: There is a lot of interest in carbon sequestration in the working group. We are reviewing the literature, working on a presentation. We have conducted nine interviews with stakeholders, and engaged in talks with the Marin Carbon Project. We are in the latter stages of the budget cycle, which provides an opportunity to make recommendations.

Carbon sequestration is a series of farm practices that result in storing carbon in the soil. Composting the soil with organic material creates additional benefits beyond carbon sequestration. These benefits include increased water retention resulting in water conservation, healthier soil, better grazing, riparian restoration.

Carbon sequestration has gained a lot of momentum in Marin. There has been a decade of experiment and collaboration. Three ranches have implemented carbon sequestration, and an additional 20 ranchers are in various stages of planning to do so. There have been publications on the impact of carbon farming.

What we know: As many as six metric tons of carbon are cumulatively sequestered after ten years. The bad news is that upfront costs are high, approximately 1,000/acre for an average of three metric tons of carbon sequestered. This can be amortized over ten years, resulting in a cost of 35 - 100/metric ton. The sale of carbon credits would build only slowly. The good news is that revenues would build over time and that there are unmeasured public and private benefits such as increased forage. The investment calculations of the big oil companies, which have done extensive research, are projecting $40 - 80/metric ton of CO_2$.

The question is whether it's worthwhile for the County to invest in carbon sequestration. We think the answer is "yes." The social cost is within the reasonable range. Therefore, it's worth discussing. It's at least as cost-effective as Deep Green. There's a lot of acreage in Marin, about 161,000 acres of rangeland, some percentage of which is a good candidate for carbon sequestration.

Nona: It's half of the Marin land base.

Bob (cont.): There's a role for social policy. It does not pencil out for farmers right now, but there is momentum and farmer interest. Farmers are small businesses without an adequate support infrastructure for this undertaking. There's Nancy Scolari, and the Resource Conservation District. A partnership might be possible there and lead to a support infrastructure for farmers. Carbon farming can help to maintain and advance biodiversity.

Nona: This is scaling up over California. The National Park Service becomes alarmed about biodiversity.

Bob: It would be useful to fund a half-time to full-time position for the Resource Conservation District and also acquire a pool of funding to issue an RFP for carbon sequestration. This could be combined with funding from other sources.

Heather: Does this factor in the transportation cost for compost? A. Yes. There's a range.

Laura: Would this change pesticide use? A. Doubtful. Q. A huge portion of our water bills goes for watershed restoration. Could we tap into these funds for parcels within the watershed? A. The USGS is beginning to look at benefits.

Action Item: Form a subcommittee to develop a Solar Array Installation Policy and report back to CAWG next month.

Doug made a brief request for members interested in working on this project to step up. Ed and Nona will be on the subcommittee, in partnership with the Land Use Committee. Pam has a

question out to Max Perrey. Nona commented that the County is not pursuing this. The models are all over the map, and it is addressed on a case-by-case basis.

Reports

Climate Change Symposium in Sacto (Doug and Bob)

Bob and Doug attended. There were ~800 people in attendance, exhibiting a spirit of excitement and unity in resistance, united by a common enemy. The symposium was an appraisal of where the state stands and also addressed the balance of science and policy. Policies should be sciencebased. Scientists were encouraged to reach beyond the scientific sphere when presenting results, using language that nonscientists, including Trump supporters, can understand. Bob commented on the excellent quality of the presentations, noting in particular a presentation on aquaculture that set forth a range of creative ideas. Doug noted a great presentation by Point Blue. Presentations are up on the website.

CPUC Workshop on CCAs, Move Toward Locally Controlled Power Sourcing (Doug)

Doug's Intro: In a couple of years, 60 percent of the population of California will be served by CCAs. The utilities oppose the interests of CCAs and are political players, funding campaigns, including the Governor's. The Governor calls the shots.

There were ~1200 people at this workshop, the largest attendance in CPUC history. This is the writing on the wall. As a result of the move toward CCAs, long-term contracts with suppliers of dirty energy are being sold at lower prices. The losses incurred by utilities are reflected in the PCIA charges on our bill. CCAs are trying to get these charges to sunset, but the utilities are not sharing information on how they calculate the charges. There is a push for transparency, but the new CPUC commissioners are likely to toe the line set by the utilities and the Governor.

Ed: Clean Power Exchange (CPX) is a good source of information on this meeting. See http://cleanpowerexchange.org/

Push to Buy Clean – Sierra Club's Legislative Efforts (Ed)

Referencing the push to persuade the City of Novato to go Deep Green, Ed asked for MCL members to show up at the March 7 City Council meeting to give cover to Council members in favor of this action. He stated that he believes there are three votes, possibly four.

Ed also announced that Assembly members Rob Bonta and Susan Eggman will be introducing AB 262, the Buy Clean legislation. This legislation is an outgrowth of efforts by the Sierra Club and its partner at Blue Green Alliance. The legislation seeks to harness the state's buying power to support clean manufacturing of low-carbon materials used in construction, such as asphalt, steel and glass. Ed is seeking MCL support for this legislation. Further information is available at buycleancalifornia.org. A piece that ran in the L.A. Times is available at http://www.latimes.com/politics/essential/la-pol-ca-essential-politics-updates-rob-bonta-climate-1485816218-htmhistory.html.

Ed also warned us to keep an eye on AB 655 (O'Donnell) and AB 649 (Dahle), placeholder bills that might mutate into stealth attacks on CCAs. The real substance of these bills might not be apparent until late in the legislative session.

Resilient Neighborhoods (Bill, for Tamra)

The number of teams is picking up and, with the increase, the need for funding. The recent Lead On Climate event pointed out the need to consider how to move forward following the initiation of a federal effort to destroy progress made on climate change. We need to look toward the U.N. and the state, without D.C.

On March 15, 7:00 in the San Rafael City Hall, Sustainable San Rafael will present an event, Climate Apocalypse Now. Tamra will share her experiences at that event.

Announcements

On March 23, there will be an ocean acidification event at the Romberg Center.

On April 28, Cory Bytoff will be discussing Marin's climate goals and where we stand with Christine O'Rourke.

There will be a Climate March in Washington D.C. on April 29. Bill and Tamra will be participating, along with a range of national organization. There will be marches throughout the country on the same date.

Fran Pavley will be the speaker at MCL's Annual Dinner on April 28.

The Deep Green project presented last month by Environmental Forum students is ongoing. They spoke at the Larkspur City Council meeting, which Roger attended. Roger spoke up in support at the meeting, noting that budget impact calculations for switching to Deep Green should include energy efficiency. Doug will attend the Mill Valley council meeting. Pam will attend the council meeting in San Rafael. Maureen stated that people who wish to comment on budget impacts should submit their comments well in advance to get them in the meeting packet. People watching a webcast can submit comments and questions online. Judy noted that March is the last opportunity to submit comments affecting carbon farming.

Next month, Bob and Judy will present on carbon farming because March is the last opportunity to affect decision-making. Sup. Damon Connolly will present to us in April.

Meeting adjourned 11:05.

Minutes: PN.