



Madeline Drake to speak on achieving California's 30x30 at MCL Annual Meeting, Friday, April 29, 2022

We are excited to, once again, invite members and guests to join us at MCL's in-person Annual Meeting, taking place April 29th, in the Key Room at Homeward Bound in Novato. This year, we are honored to host Madeline Drake, Biodiversity Coordinator with California's Department of Fish and Wildlife (CDFW), and to recognize our 2022 MCL Environmental Achievement Awardees.

In October 2020, Governor Newsom issued an Executive Order calling for California to conserve 30% of its lands and coastal waters by 2030 to protect biodiversity, combat climate change, and expand equitable outdoor access for all Californians. Since that time, California's Natural Resources Agency has been leading an inclusive public engagement process to produce a "Pathways to 30x30" document, developing strategies and a framework for achieving that goal. In her role at CDFW, Madeline is responsible for coordinating with state and federal agencies and

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Photo Courtesy: Marin County Parks

Between 2018 and 2020, Marin County Parks acquired a 409-acre section of the long-sought Bowman Canyon Creek watershed to extend the Mt. Burdell boundary for preservation and recreation.

Measure A: Preserving Marin's parks, open space, and sustainable farmlands – something for everyone!

by Nona Dennis

On February 15, the County Board of Supervisors unanimously approved the ¼-cent sales tax Measure A for the June ballot. If approved, the measure will renew a funding mechanism that, since 2013, has played a central role in preserving, improving, and maintaining Marin County's 17,900 acres of open space preserves and parks, in supporting local recreation priorities of every town, city and special district in the county, and in helping to sustain farmlands that define more than a third of Marin's land area. This is the measure that prompted one supervisor, on approving it for the ballot ten years ago, to observe: "There is something here for everyone!" After nine years of experience, the same could be said today.

A hawk's-eye view of Marin County's land area helps in visualizing the comprehensive "whole county" approach of Measure A. That

view reveals a mosaic of land uses roughly apportioned as 15 percent (of Marin's ~330,000 acres of land area) in urban development – cities and towns clustered between the Bay and the hills, plus scattered villages; 55 percent as a swath of public lands in the West plus dispersed County open space preserves and parks and other public open spaces; and the remainder in a patchwork of agricultural rangeland and woodlands stretching all the way to the Sonoma County border. There are no sharp edges in this view, except for the two coasts: cities and towns merge with adjacent wooded and grassy hills largely protected as public open spaces, parks, or watersheds; and federal and state parklands connect with farmlands to form a continuum of open space, albeit the latter is largely in private ownership. Marin's native wildlife tend to transcend arbitrary boundaries within this mosaic.

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President's Message: *The months ahead ...*



As we look toward the months ahead, high on Marin Conservation League's list of priorities is supporting the passage of Measure A in June. MCL will actively campaign for Measure A, which will renew funding crucial to maintaining and enhancing habitats and recreation in Marin County parks and open space, acquiring strategic natural lands vulnerable to development, supporting city and special district parks, and preserving Marin's sustainable farmlands. Like its 2012 predecessor, the renewal Measure A has "something for everyone" – including our children and grandchildren. It also has something for all types of Marin's ecosystems and native species – and their future generations. Simply put: we must renew Measure A funding to maintain the landscapes we enjoy and that are so essential to Marin's identity.

To advocate for the best possible environmental outcomes for Marin, MCL must constantly update and renew our advocacy policies. MCL's Issue Committee speakers and discussions are a vital part of the process; they not only educate participants but also help us develop informed positions on important environmental issues. MCL recently hosted:

- Barbara Kautz, a legal expert, who took us on a whirlwind tour of how new state laws and regulations impact local housing ordinances;
- Chris Choo, Marin County Planning Manager, who updated MCL on the county's progress in adaptation planning for sea level rise; and
- Four experts in serpentine ecosystems and associated rare species convened to help

inform MCL's response to planned trail improvements and strategies to avoid impacting sensitive serpentine habitats on Ring Mountain Preserve.

These and other past speaker events will soon be accessible on MCL's YouTube channel.

Don't miss out on the many informative talks and discussions to come in monthly Issue Committee meetings and our occasional After Hours events! We encourage you to learn more about the topics that interest you through our biweekly E-News. If you're not on our distribution list, email mcl@marinconservationleague.org and ask to be added.

April is a month of change for MCL. As we vote in promising new Board members, we regrettably also say goodbye to others and express our gratitude for their support of the organization in many important ways. We will miss you! Thanks to:

- Kim Baenisch, for helping strengthen our administration and strategic planning process. Kim brought to MCL her years of experience as executive director for other local not-for-profits.
- Bob Berner, a past MCL board member, for enlarging MCL's understanding of the role agriculture plays in support of MCL's mission. Bob shared his expertise on the conservation benefits of agricultural easements from his 28 years as the Executive Director of the Marin Agricultural Land Trust.
- Roger Roberts, for his enduring interest and advocacy on water supply issues, and

his help in crafting our water supply positions. We have benefited from Roger's long experience with Marin Municipal Water District, especially his eye for costs and benefits of environmental solutions, and many past years of service and leadership to MCL as both board member and as President from 2006 to 2008.

- Doug Wilson, for co-founding MCL's Climate Action Working Group, promoting collaboration with and among Marin's key climate activists, and helping to create MCL's policy on reducing greenhouse gas emissions. Doug brought his intelligence, grace, and wit to many, many meetings. This year, MCL will honor our friend Doug with our special Lifetime Achievement award—a token of appreciation for his valuable work.

Put MCL's Annual Dinner on your calendar: April 29th, in the Key Room at Homeward Bound. We're excited to host speaker Madeline Drake, of California's Fish and Wildlife Department, who is responsible for tracking Governor Newsom's 30x30 Biodiversity Initiative throughout California, and we look forward to gathering in person. Invitations will be in the mail soon. Keep an eye out for on-going updates.

Bob Robert Miller

Leave your mark on the future of MCL

Start Being Remembered Today

Do you want to make a significant donation or gift that will ensure the good work of the Marin Conservation League now and into the future?

You can do it today – with a donation or a gift to the LEGACY OF THE LAND ENDOWMENT.

Interested?

Contact us or visit our website for more information.
<https://www.marinconservationleague.org/ways-to-give/trusts-and-wills/>

Richard Jensen, Treasurer
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MARIN CONSERVATION LEAGUE

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other partners to preserve, manage, and restore critical ecosystems throughout California, and she is leading the team that is developing the "Pathways to 30x30" plan. We look forward to gathering with Madeline, and each other, as we learn the guiding principles, process, as well as the opportunities to contribute to California's 30x30 effort.

MCL 2022 Environmental Achievement Awards

This year we will celebrate anew the achievements of Marin individuals and groups that best exemplify MCL's mission to preserve and protect the County's natural assets in a changing environment. The Achievement Awards fall into seven categories.

We will present this year's **Peter Behr Award for Lifetime Achievement** to our colleague, **Doug Wilson**. The Peter Behr Award is presented to a person whose lifetime achievements reflect exemplary standards for preservation and protection of Marin's natural assets. The award is named for Peter Behr, city councilmember, county supervisor and state senator, in honor of his legacy of service. It is with deep appreciation that we honor Doug for his decades of commitment to public service, advancing civic engagement, and the protection and preservation of Marin's natural assets. Doug's leadership in convening many organizations and climate leaders who are focused on solutions has played a key role in shaping climate advocacy and education in Marin County. Doug's commitment was unwavering and his dedication selfless, as he told us all – his privilege was "being one of us".

This year's **Marin Green Award for Environmental Leadership** will be presented to the inimitable **Sharon Farrell**. The Marin Green Award is awarded annually to recognize an individual or organization for outstanding contribution toward preserving and protecting the natural assets of Marin County. During her twenty-year tenure at the Golden Gate Parks Conservancy, Sharon was instrumental in the Conservancy's work with Marin Municipal Water District (now Marin Water) and the federal, state and County public agencies who hold responsibility for caring for the parks, open spaces and lands that make up Mt. Tamalpais. This award recognizes Sharon's outstanding leadership in fostering collaboration across jurisdictional boundaries and the sharing of

resources and expertise to benefit the ecology of the mountain and in creating the One Tam Initiative. Her legacy with the Conservancy and One Tam partnership are the programs that have attracted hundreds of "citizen scientists" who are managing natural resources and training the next generation in their successive role as stewards.

MCL's **Ted Wellman Water Award** is presented to an awardee who maintains Ted Wellman's high standards for protecting and preserving water resources in Marin and the state. This year we recognize **Marin Water's Lagunitas Creek Fisheries Program** and the fisheries biologists responsible for its success, since its inception and into the future: **Greg Andrew, Eric Ettlinger, and Jonathan Koehler**. This award is in appreciation of Marin Water's 25-year program to create highly effective improvements and continued stewardship of Lagunitas Creek's fisheries and other aquatic resources. The biologists' role in creating a collaborative partnership among other responsible agencies has fostered a common interest in stewarding the unique public and natural resources of the Lagunitas Creek watershed.

The **Youth Award for Environmental Leadership** recognizes Marin high school or college students who have made significant contributions to the community by seeking innovative solutions to environmental problems and issues. This year's award honors **Marta Tobar** for her leadership as president of the College of Marin's (COM) Environmental Action Club. In that role, Marta has worked with COM management to find solutions to COM's recycling challenges; she met with COM's Superintendent/President to advance student advocacy that COM divest from fossil fuels; and she has promoted positive change-by-action with her peers. Her goals include advanced education to impact climate policies at a legislative level.

This year's **John M. McPhail, Jr. Green Business Award** will be awarded to **Conservation Corps North Bay (CCNB)** in appreciation for their forty years of empowering youth, conserving natural resources, and building community. The John M. McPhail, Jr. Award is awarded to a business in Marin which exemplifies environmental sensitivity in business, and which has supported and improved communication between the business and environmental communities. Conservation Corps North Bay

operates as a nonprofit business assisting government agencies, non-profit partners and private landowners in meeting land management goals while educating youth in habitat restoration, invasive plant and wildfire fuel removal, trail construction and maintenance, and forestry. Thousands of young people have had the opportunity to seek future careers while learning by working at the CCNB.

The **Marin Conservation League Volunteer Award** honors one or more volunteers who have generously shared their time and talent to help MCL realize its mission. This year's volunteer awardee will be announced at the Annual Meeting.

The six awards listed above are distributed annually. On occasion, MCL selects an individual or group whose accomplishments fall outside the annual award categories and this year has selected the **Chileno Valley Newt Brigade** led by **Sally Gale** and **Gail Seymour** for a **Special Award for Environmental Achievement**. The Special Award recognizes the Brigade's leadership in protecting local newts that migrate across Chileno Valley Road in order to breed in nearby Laguna Lake. The very slow-moving newts have migrated to Laguna Lake for thousands of years, long before the road made them vulnerable to premature demise by fast moving vehicles. The Brigade has organized volunteers and scientists to document the annual migration and collect data, prior to transporting the newts across the road and setting them down facing their direction of travel. The long-term goal of the effort is to create a science-based built solution to reestablish safe migration.

Election of Board of Directors

MCL's Annual Meeting is also a business meeting. Nominations for election of MCL's 2022-23 Officers and Directors are listed on the back page of this newsletter. Invitations with meeting details will be mailed shortly. This is an event not to be missed. We look forward to seeing you soon! 🌱



MCL'S 2022 ENVIRONMENTAL
ACHIEVEMENT AWARD WINNERS
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Measure A: Preserving Marin's parks, open space, and sustainable farmlands *from p. 1*

From this view, one can see why the provisions of Measure A can benefit the environment of the entire county.

Within these areas, however, are jurisdictions with innumerable specific needs and priorities. How will the "Something for Everyone" pledge continue to play out in the real world of compelling public and environmental interests? A renewed Measure A would allocate funds from revenues estimated at about \$16 million annually similarly to the three original programs: 65 percent to County Parks

diverse public. Dedicating another 25 percent of MCP's portion of Measure A funds to reduce wildfire risk would expand the current budget of about 20 percent that is spent annually on projects to manage vegetation in open space preserves, in close coordination with city, town, and county fire districts and agencies; and 10 percent would go towards acquiring and leveraging, in easement or in-fee, long-sought unprotected natural lands for permanent preservation, including capital investment to ensure safe public use, pending later improvements.



Photo: Marin County Parks

Pile burning is one method used by County crews to dispose of vegetation removed to reduce wildfire risk.

and Open Space, 20 percent to Sustainable Agriculture (formerly Farmland Preservation), and 15 percent to City and Town Parks. Under each program, funds would be sub-allocated as follows:

County parks and open space: Of the 65 percent of Measure A funds allocated to Marin County Parks Department (MCP), 65 percent of that amount (or about 42 percent of the total revenues) would be used as in the past nine years – for many different projects to care for natural lands, protect habitats and sensitive species, and to maintain and improve recreational facilities on 16,000 acres of open space preserves; for staff with essential expertise and seasonal aides to manage these resources; to enable refurbishing 2,900 acres of destination parks and smaller parks, public pathways, and fishing and boating facilities; and to continue to offer interpretive and volunteer services that engage a huge and

natural resources, such as habitat enhancement through riparian fencing and restoration and other plantings; and encourage community gardens. Twenty percent of Sustainable Agriculture funds would go to the Marin Resource Conservation District, whose collaboration with farmers since 1983 has brought in grants of over \$25 million for projects ranging from erosion control, drainage and road repair, to riparian fencing and restoration, and, recently, carbon farming; and 50 percent of the agriculture funds (or 10 percent of Measure A's total revenues) would be matched by equivalent donor funds to support agricultural easement programs that, since 1980, have offered the only way to assure long-term preservation of the large, small, and mini-farms that make up Marin's agricultural legacy.

City, town, and special district park program: This widely popular program would use 15 percent of the total Measure A funds to

Sustainable agriculture: Of the 20 percent of funds allocated to Sustainable Agriculture, 30 percent would provide matching grants for a range of projects to expand climate-beneficial farming practices, such as compost and mulch application, no-till and other regenerative practices that improve soil health, carbon sequestration and water retention; improvements to nat-



Photos courtesy Marin County Parks

MCP crews use technique, persistence, and sometimes a fence to effectively decommission an unsustainable social trail and restore grassland habitat.

provide grants to Marin's municipalities and special districts to support their own recreational, park, and natural resource projects – to restore and renovate park and recreation facilities, manage local open space, including wildfire abatement and invasive weed control, and maintain myriad recreation programs.

The renewed Measure A would be administered by the County Parks Department, and its finances would be overseen by a Citizens' Oversight Committee composed of seven county residents. Over the past nine years, the committee has met regularly with an independent auditor to monitor how the money is being spent.

Questions raised in 2022

A decade has elapsed since Measure A was approved by a wide margin on the 2012 ballot. Public interests and priorities shift over time, and the County's recent public survey revealed new concerns and raised new questions: Given the devastation of recent wildfires, is County Parks doing enough to manage the risk in its own preserves? Does the County need to acquire more open space lands? And, why is private agriculture included in a measure to protect and maintain public open space and parks? The responses below address these questions.

Managing for wildfire risk

Marin has not directly experienced the catastrophic destruction of recent wildfires, but

Measure A



Photo: Jeff Stump

Destined to become luxury estates, the 846-acre Millerton Creek Ranch was rescued by MALT by matching Measure A funds in a "Buy-Protect-Sell" deal; new ranch owners are engaged in a multi-year carbon farm and restoration plan.

it appears only a matter of time until it could. MCP's 16,000 acres of vegetated open space directly touch the backyards of more than 3,000 households, so the concern for fire risk is well founded! Most of the concerned public, however, is unaware of the extent of vegetation work, funded by Measure A, that is already being implemented in the open space preserves, strategically focused on the vulnerable edges where wildland meets built-up communities. MCP is closely coordinating with Marin cities, towns, and county fire districts and agencies, and with the recently formed Marin Wildfire Prevention Authority, funded by \$19 million in annual property assessments to carry out wide-ranging protective projects on private lands. The other 90 percent of public lands in Marin, administered by federal, state, and water district agencies, are also participating in countywide wildfire risk reduction. The renewed Measure A allocates 25 percent of the County Parks' share of Measure A funds to expand on current programs.

Why more open space?

Some 15,000 acres of Marin hills and ridges remain in private ownership. If acquired, they could create connectivity with other open space lands – for recreation as well as wildlife. This has been the case with both Sky Ranch and Bowman Canyon properties, whose acquisitions were made possible with Measure A funds. Land can take years to become available, and years

to negotiate its acquisition. Only with funds on hand is it possible to leverage outside funds, grants, and private donations. The proposed Measure A reduces the allocation of MCP's share for land acquisition from 20 percent to 10 percent. While the reduction is regrettable, the current balance of \$8 million in reserve will carry over, to be augmented by an anticipated \$9 million revenue over the next nine years.

What about Marin's private farmlands?

In 2012, when the original Measure A was under discussion, family farms and ranches were seen as fundamental to the county's environment, as well as its economy, cultural history, and quality of life – imbuing Marin with a sense of place that makes the county unique in the Bay Area. Regardless of public perception, that hasn't changed in the ensuing ten years. Nor has the vulnerability of Marin's farmlands to development and fragmentation changed, located as they are on the edge of the growing metropolitan Bay Area. In fact, the recent passage of state housing laws limiting the authority of local zoning has only exacerbated that vulnerability. Neither county policy nor zoning alone can be counted on to permanently protect Marin's working lands from threat of high land values or zoning override.

A renewed Measure A would again allocate 20 percent of total funds to the Sustainable Agriculture program. Half of that, matched by

local outside funds, would continue the easement program that enables Marin farmers to continue operating in difficult times, institute environmentally beneficial practices, pass farms on to younger generations, and preserve Marin's sustainable agriculture in perpetuity.

The other half of Measure A farmland expenditures would be available to all farmers in the county, and to the MRCD to assist them in the wide range of enhancements described above, to steward soil, productivity, and other natural resources, and be part of the climate solution rather than the problem – in brief, to reap public benefits by supporting climate resilience, ecosystem services and food security for the county. Wendell Berry, farmer and conservationist, in writing about the commonwealth responsibilities of landowners and land users, suggests that if we want land to be cared for, then we must have people living on and from the land who are able and willing to care for it. In his observation from a lifetime as farmer/land steward, Berry provides a bridge between private farmland and public good that Measure A appears to recognize.

What If Measure A is not approved?

In 1972, when the first Measure A established the Marin County Open Space District, the ballot argument promised "... a predictable, long-term source of funds to bring the most threatened open space lands into public ownership so that they may be enjoyed in perpetuity by all the citizens of Marin County."

The legacy of Proposition 13 in 1978 is well known. Funds for the six-year-old open space district were cut in half. Later, budget shortfalls across many county services seriously hampered both park and open space programs for years until dramatic rescue by Measure A in 2012. Now 10 years later, it is difficult to forecast the future without Measure A, which has enabled the County to assemble a professional staff of resource experts, technicians, and seasonal staff to truly care for precious natural resources and support high quality recreation. In March, the existing measure sunsets. The potential loss in caring for Marin's environmental resources, including agriculture and recreation, if the measure were not renewed, would be staggering.



SERPENTINE PRAIRIE ON RING MOUNTAIN

by Terri Thomas and Nona Dennis

Ring Mountain is scarcely a mountain. At 602 feet, the higher of its two crests is not even one of Marin's more prominent hills. The lower crest to the northwest is about 540 feet. From either crest, one has unimpeded 360-degree views of San Francisco Bay and the surrounding hills. In addition to the views, one is hard pressed to find another site with such unique and diverse geological, botanical, and cultural riches packed into a relatively small landform (367 acres).

The mountain's distinctive geologic features have earned worldwide attention. Masses of weather-resistant metamorphic rocks of blue schist—some dark green, others reddish orange from large patches of lichen—are scattered over the slopes ranging in size from a baseball to a house. They reveal a 150- to 165-million-year geologic history. Of a like age, large sheets of metamorphic serpentinite rock (serpentinite) cap the two crests of the mountain. It is the serpentinite that accounts for the rare and interesting plants on Ring Mountain. Cultural artifacts dispersed across Ring Mountain reveal human habitation stretching back thousands of years.

It is almost impossible to imagine that 60-some years ago, when decades of cattle grazing finally ceased on Ring Mountain, plans were afoot to develop up to 2,100 homes and apartments on this precious site, with the most stable building sites across the top! When informal concept plans were transformed into formal plans in the mid-1970s, citizens were galvanized into action. 1970 also marked a turning point in the recognition of environmental values. Eventually a negotiated settlement was reached, conserving the majority of the site for open space and allowing clustered development around the base of the mountain.

County inherits a "Legacy Zone" and a challenge

The Marin County Open Space District (now subsumed under Marin County Parks [MCP]) has managed the Ring Mountain Open Space Preserve since 1995. At that time, they took over from The Nature Conservancy (TNC), who had assumed management of the conserved land in 1983. The County continues to work with TNC in most management decisions.

Now, the door is open and one may walk through a diverse flora that includes many rare species that reflect the geologic complexity of Ring Mountain and microhabitats of wet and dry serpentine prairie, perennial grasslands, rocky

crag, oak-bay woodlands, and riparian habitats. In spring, the grasslands become a carpet of yellows, whites, blues, and lavenders, as wildflowers make their appearance through the season.

Sarah Swope, a Mills college researcher who focuses on the rare plants on Ring Mountain, states: "Ring Mountain is the epitome of a 'legacy zone'—a natural resource sanctuary that could be permanently lost from Marin, California, and the world." The endemic Tiburon mariposa lily (*Calochortus tiburonensis*) "makes Ring Mountain, by itself, a valuable ecological site. In addition, serpentine grasslands composed primarily of native species are becoming increasingly rare in California."

Given the immense popularity of Ring Mountain and its abundance of rare resources—indeed a main reason for its attraction—substantial human impact is now revealed. Random foot traffic is evident in a spider web of social trails, and heavily used main trails are deeply eroded. MCP faces the dual challenges of how to allow passive recreational access while protecting sensitive plant populations, and how to manage these populations in the face of other stressors such as climate change.

MCP has identified the need for more disciplined access and has engaged in that pursuit for the past several years. Recent studies have focused on how to provide more appropriate access for visitors to relish the mountain's attractions, but to do so in a mode of stewardship; that is, to both ensure protection of resources and enable public enjoyment. Under provisions of the 2013 Road and Trail Management Plan, a process is now underway to designate trail routes through Ring Mountain and Old Saint Hillary's, also a refugium of serpentine-sensitive flora, that address this challenge.

A meeting of minds on serpentine habitat

Similar histories of threat and rescue distinguish other serpentine sites in the Bay Area. In January, MCL's Parks & Open Space Committee hosted a mini-summit of specialists in serpentine ecology from around the Bay Area to discuss various ways to protect rare serpentine habitats, notably serpentine prairie, while encouraging passive recreation. The panel included: Dr. Sarah Swope (Associate Professor,



Mills College), Stu Weiss (Chief Scientist) and Christal Niederer (Senior Biologist, Creekside Science), Michele Hammond, (Botanist, East Bay Regional Park District, [EBRPD]), Lech Naumovich (Executive Director of Golden Hour Restoration Institute), Hannah Ormshaw (Assistant Parks Director, San Mateo County Parks), and Bill Korbholz (Director of Friends of Edgewood Natural Preserve).

The protection of serpentine prairie on Reinhardt Redwood Regional Park (EBRPD) was driven by the local California Native Plant Society's desire to protect the population of the federally listed Presidio clarkia (*Clarkia franciscana*). Off-leash dogs had severely damaged a site and laid barren a large area of serpentine prairie. A split-rail sheep fence with large metal mesh was built in 2010, and the trail realigned outside the fence. Park managers did not attempt to remediate social trails, allowing them to restore passively over time. Good interpretive signage was especially important. Initially, the public was angry, but with personal outreach from contractor and staff, nature hikes, signage, and other education activities, the public now has a positive perspective, and the restoration is a success.

Raising environmental awareness through providing education and volunteer opportunities has also been successful at Edgewood Park and Natural Preserve, a San Mateo County Park. This preserve supports the federally listed San Mateo thornmint (*Acanthomintha duttonii*) and 11 other rare plant species. A strong outreach

Serpentine Prairie cont p 10

... A Flush of Rare Flowers

Found on the Tiburon peninsula, these rare species are endemic [native and restricted] to landscapes with serpentine substrates, including rock outcrops and grasslands. Of these, **(1)** the iconic Tiburon mariposa lily (*Calochortus tiburonensis*) is endemic to Ring Mountain. It grows nowhere else in the world. **(2)** Tiburon paintbrush (*Castilleja affinis* ssp. *neglecta*) and **(3)** Oakland star tulip (*Calochortus umbellatus*), are additional rare perennials found on Ring Mountain.

The federally listed endangered **(4)** Tiburon jewelflower (*Streptanthus glandulosus* ssp. *niger*) is found in two areas south of Ring Mountain, on Tiburon's Middle Ridge Preserve

and Marin County's Old St. Hilary's Preserve. Seedlings of the jewelflower were transplanted to Ring Mountain years ago in hopes of protecting the species from the brink of extinction—that research is still underway.

Unlike the perennials, **(5)** Marin dwarf flax (*Hesperolinon congestum*) and **(6)** Tiburon buckwheat (*Eriogonum luteolum* var. *caninum*) are annual species and, as such, are more threatened by drought. Of the species pictured, the mariposa lily, paintbrush, jewelflower, and flax are federally and state-listed under the Endangered Species Act. All are listed as rare and endangered by the California Native Plant Society (CNPS). To learn more about rare and native species on the Tiburon Peninsula, check out the resources at Marin Chapter CNPS [website](#).



- 1** Tiburon mariposa lily (*Calochortus tiburonensis*)
- 2** Tiburon paintbrush (*Castilleja affinis* ssp. *neglecta*)
- 3** Oakland star tulip (*Calochortus umbellatus*)
- 4** Tiburon jewelflower (*Streptanthus glandulosus* ssp. *niger*)
- 5** Marin dwarf flax (*Hesperolinon congestum*)
- 6** Tiburon buckwheat (*Eriogonum luteolum* var. *caninum*)

Photo credits, with great appreciation:
Tiburon mariposa lily - Sarah Swope
All other wildflowers - Vernon Smith

Rooftop Solar, Net Energy Metering (NEM), and NEM Regulation Restructuring

by Ken Strong

As the US transitions toward clean power to reduce greenhouse gas emissions and slow climate change, California has been a leader in setting climate change policy to achieve the goal of reaching 100% clean energy by 2045. Residential rooftop solar plays a key role in accomplishing that.

Rooftop solar is an example of distributed energy resources (DER) which are small-scale electricity generation or storage units connected to the electric grid. DERs are often smaller than big power plants or solar arrays located far away. Battery storage is another DER example.

This article focuses on recent issues and considerations surrounding the California Public Utilities Commission's (CPUC) revisions to current Net Energy Metering (NEM) regulations that subsidize rooftop solar.

Background

In 1996, the California legislature passed SB 656 to remove an obstacle to residential rooftop solar installations by lowering utility customers' (then) very high cost of installing solar panels. It ruled residential customers with solar could sell their excess energy to the utility and be credited on their bills for that energy at the full retail rate. The value of the excess energy sold to the grid was subtracted from the cost of the electricity used from the grid. (NEM 1.0)

In 2016, the CPUC created NEM 2.0, under which new customers continued to sell their excess energy at the full retail rate but had to pay a one-time connection fee and certain charges on the amount of electricity they consumed from the grid. Under both NEM 1.0 and NEM 2.0 tariffs, customers were to receive credit at the full retail rate for excess energy for 20 years after their system installation.

Over time, the cost of installing rooftop solar dropped substantially, as residential solar expanded. Solar energy (both from rooftop and utility scale solar farms) has become so abundant in California that not all solar energy generated can be used at certain times of the day. During those same times, the wholesale market rate for solar energy may be zero or even run negative, yet current NEM program

customers still receive the retail rate for all excess energy they export to the grid. While the subsidy for rooftop solar promotes the state's greenhouse gas emission reduction goals, it financially impacts other utility customers.



The impact on customer rates of the Net Energy Metering programs

Your electric bill is a combination of the following charges:

- 1) Generation charges - for the cost of the energy consumed from the grid;
- 2) Transmission and distribution charges - that pay for the costs for building and maintaining the poles, wires and transformers that deliver electricity; and
- 3) Other charges - that pay for a wildfire response fund to pay for damages from wildfires ignited from the energy grid that are not a result of utility negligence, subsidies paid to low-income customers (CARE), energy efficiency programs, electric vehicle charging infrastructure programs, Diablo Canyon nuclear power plant decommissioning, and other costs, including NEM.

When solar customers are paid more for the excess solar energy exported to the grid than that energy is worth, the subsidy is spread amongst everyone's utility bills, including those without solar. This is an equity issue because low- and moderate-income residences install only a modest amount of roof top solar compared to higher-income residences, and renters generally don't benefit from solar installations on multifamily apartment buildings.

In addition, the CPUC designed rates to pay for many of the grid maintenance costs,

01/14/2022 – 02/14/2022	Your Tier Usage	1	2
Tier 1 Allowance	336.00 kWh	(32 days x 10.5 kWh/day)	
Tier 1 Usage			
Part Peak	55.4000 kWh	@ \$0.27106	\$15.02
Off Peak	280.6000 kWh	@ \$0.25423	71.34
Tier 2 Usage			
Part Peak	77.0966 kWh	@ \$0.35312	27.22
Off Peak	390.4595 kWh	@ \$0.33629	131.31
Energy Commission Tax			0.24
Total Electric Charges			\$245.13
Your Electric Charges Breakdown			
Conservation Incentive			\$24.17
Generation			\$107.89
Transmission			\$49.65
Distribution			\$32.96
Electric Public Purpose Programs			\$21.68
Nuclear Decommissioning			-\$0.14
Wildfire Fund Charge			\$6.99
Wildfire Hardening Charge			\$1.51
Competition Transition Charges (CTC)			\$0.04
Energy Cost Recovery Amount			\$0.09
Taxes and Other			\$0.24
Total Electric Charges			\$245.13

charges and subsidies in a way that varies with the volume (amount) of electricity consumed from the grid (see electric bill above). As a result, many solar customers that produce their own energy don't pay much towards the "other charges". The Investor-Owned Utilities (IOUs) and others argue that because most solar customers still depend on the grid for all of their energy needs when the sun doesn't shine, they are not paying their fair share of these volume-based costs and charges, and so are receiving a second subsidy. Non-rooftop solar customers end up paying for both NEM subsidies through higher energy rates.

Rooftop Solar next page

NEM 3.0 Proposed Decision raises controversy

Over the past two years, the CPUC has explored revising the current NEM 2.0 program. In December 2021, the Public Utility Commission issued a Proposed Decision (PD) revising the NEM program for new rooftop solar customers. It did so under a mandate from the legislature (AB 327, 2013) that requires NEM to:

- 1) Ensure equity amongst customers, and
- 2) Allow for the sustainable growth of residential electricity generation, such as solar.

The PD addressed the cost shift from NEM customers to non-NEM customers. First, to end the cost shift associated with paying NEM customers more than their excess electricity is worth on the market, the PD reduced the amount paid for excess energy from the retail rate to an Avoided Cost Rate. The Avoided Cost Rate is a calculation based on both the wholesale rate of solar energy at the time of sale, and on the value of the other benefits from rooftop solar, including the cost avoided by not building additional power plants to generate the amount of energy sent to the grid by solar customers. While there is widespread agreement that solar customers are paid more than the value of the solar energy sent to the grid, there is considerable disagreement as to whether the Avoided Cost Rate captures all of the distributed rooftop solar benefits.

Secondly, the PD attempted to address the perceived cost shift resulting from solar customers' reduced use of the grid by proposing a Grid Benefits Charge, amounting to \$48–\$56 per month for the average new solar installation—by far the highest such charge anywhere in the nation. In determining the Grid Benefits Charge amount, the CPUC looked at how long it would take most new customers to pay for the cost of their solar installations after receiving NEM subsidies. The CPUC calculated a 10-year payback period based on an average solar installation cost of \$2.34 per watt.

In contrast, the solar industry contended that average installation costs of \$3.80 per watt are more realistic. The energy research and consulting firm, Wood Mackenzie, estimated

The NEM Proceeding raises questions about how we pay for the energy transition:

What costs should be part of electricity rates and what costs should be paid for from the State Budget?

that PD revisions would increase the payback period to 14–15 years and asserts that the combination of the reduced rate for excess energy sent to the grid plus the Grid Benefit Charge would make rooftop solar uneconomic for most new customers. This is likely a conservative estimate given recent supply chain and inflationary issues that are likely not to be fully mitigated over time. Additionally, some argue the Grid Benefit Charge unfairly singles out solar customers by requiring them to pay volume-associated charges for electricity they do not use from the grid, while customers who install energy efficiency improvements do not pay those charges for the electricity they no longer use.

Thirdly, the PD reduced the 20-year guaranteed rate for excess energy sold to the grid that was given to existing NEM 1.0 and NEM 2.0 customers—from 20 to 15 years. Solar advocates argue that this would impact customers who counted on that 20-year duration to pay for their installation costs when making the decision to install solar, particularly customers who financed their installations. It also raises questions about whether customers could count on any new tariff when making future decisions to install roof top solar.

Finally, the PD includes provisions that provide incentives for installing batteries paired with solar especially aimed at helping moderate income customers. While the intent is to encourage that all new residential rooftop solar be paired with batteries, the financial incentives may be insufficient at this time for batteries to be widely affordable. Typically, it involves replacing existing electrical panels with a 200-ampere panel, which adds significantly to the cost.

How do we pay for the energy transition?

After a firestorm of criticism led by rooftop solar firms, builders, and many (not all) environmental groups and advocates, in January, the CPUC postponed voting on its Proposed Decision. The CPUC appears to be reconsidering its position.

One fact raised by both sides of the NEM restructuring argument is the high cost of electricity in California that burdens many customers and will become a larger burden as we transition to greater use of both electric vehicles and appliances. One reason for the high rates is that they include the subsidies that are only marginally related to the cost of providing electricity to customers. Wildfire mitigation is a key category that falls in this discussion.

Paying for these programs through electricity rates is seen as politically easier than asking the legislature to include these programs in annual state budgets and it provides greater long-term funding certainty which lowers the cost of many programs. However, many rate-subsidized programs address broader societal goals, including paying for wildfire damage or reducing greenhouse gas emissions. California must consider paying for these programs through the state budget, which is a more equitable and much less regressive way than paying for them through higher electricity rates.

Some change to the current NEM 2.0 framework, including how to pay for subsidies, is necessary to reduce or end the inequity between those with, and without, rooftop solar while expanding rooftop and community solar installations. The goal is to achieve a more distributed, clean energy system and clean energy future in an equitable way. The NEM 3.0 PD failed to meet this mark. How this will be done remains to be seen. 🌱

Ken Strong is a member of MCL's Climate Action Working Group and Renewable Energy Ad Hoc Committee.

Peter Schwartz, an energy and utility industries expert, provided editorial support. Peter is also a member of MCL's Renewable Energy Ad Hoc Committee.

SERPENTINE PRAIRIE from p. 6

program including interpretative events, docent programs, wildflower hikes, a visitor center, citizen science events like bio-blitzes, volunteerism, and a beautiful and informative website help to preserve and protect the rare species. These programs are carried out in partnership with the non-profit Friends of Edgewood Natural Preserve (Friends).

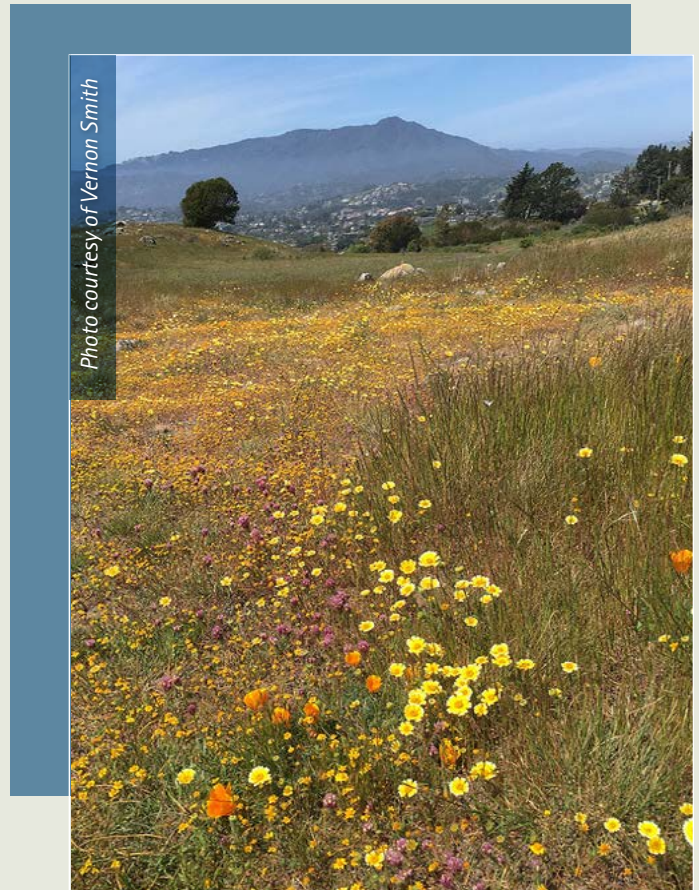
The Friends recently observed an increasing number of social trails, and initiated a project to survey, evaluate, and mitigate the impacts of social trails. They developed their own process for assessing trails and set up a database—identifying 100 social trails, producing 950 photographs and 300 survey reports, and compiling a data sheet for each trail. The project created a visual record to assess impact and recovery of social trails and is now being used to automatically generate status reports. Successful protection efforts also included erecting protective barriers, uninstalling signage, controlling invasive species, and enforcing regulations.

Each of the panelists shared observations and experiences and agreed that managing serpentine grasslands requires knowing the ecological processes and disturbance regimes that have shaped the habitat. Locating rare plant populations and determining abundance annually gives insight into the conditions that impact or benefit the various rare species. Macro-plots that are measured over successive years reveal how annual populations vary. For example, Presidio Clarkia data in Reinhardt Redwood Regional Park demonstrated the critical importance of fluctuating dry or wet conditions, with more plants appearing in dry years. For Marin dwarf flax (*Hesperolinon congestum*), an annual species growing on Ring Mountain, dry years can be devastating. In contrast, the Tiburon mariposa lily, a perennial bulb, is far more resilient to yearly fluctuations. Given this high variability, balancing management tools to fit ecological processes in this era of climate change is critical.

What can we do to conserve serpentine prairie on Ring Mountain?

MCL encourages members to support the District's efforts to conserve serpentine prairie on Ring Mountain by:

- advocating for continued monitoring and research into:
 - the demographics of rare plant species over time,
 - the possibility of maintaining a seedbank, which can behave differently year to year,
 - the distinct site conditions and how they affect individual species management, especially as they may shift with climate change;



Serpentine prairie on Tiburon Ridge near Gilmartin Drive.

- participating as MCL explores burning, mowing, and grazing as tools for managing and restoring grasslands; and
- advocating for increased interpretation and education on the sensitivity of Ring Mountain serpentine habitats, including citizen science workshops during peak blooming periods, interpretive signage and website information, and guided tours to increase public appreciation and awareness of wildflower habitats. Education should be supported by effective enforcement.



EDITOR'S NOTE: Regrettably, we've made mistakes! Corrections have been made in online newsletters where possible. Our apologies.

Jan-Feb 2022, page 4, photo credit correction:

The photo of the Chinook salmon was taken by none other than Friends of Corte Madera Creek Watershed board member, **Morgan Cantrell**. The watery fellow was seen hanging out above the mouth of Carey Camp Creek, in a very upstream section of San Anselmo Creek.

Nov-Dec 2021, page 6, name in caption correction:

The caption next to MCL's speaker at our October China Camp Walk into Conservation History should read "**Louise Kanter Lipsey** displays her call to action." In 1972 Louise and friends organized "Save the San Pedro Peninsula". Four years later, Governor Jerry Brown signed a bill establishing China Camp State Park.

Sept-Oct 2021, page 8, title in caption correction:

Not only is MCL Board nominee, **Belle Cole**, leading the Marin Wildfire Prevention Authority's Ecologically Sound Practices Partnership, but she is also Chair of Organizing for Action (OFA) Marin.

MCL 2022 ENVIRONMENTAL ACHIEVEMENT AWARD WINNERS



Peter Behr Lifetime Achievement Award

DOUG WILSON

Marin Green Award for
Environmental Leadership

SHARON FARRELL

Ted Wellman Water Award
MARIN WATER LAGUNITAS CREEK

FISHERIES PROGRAM:

GREG ANDREW, ERIC ETLINGER, and

JONATHAN KOEHLER

Youth Award for
Environmental Leadership

MARTA TOBAR

John M. McPhail, Jr.
Green Business Award

CONSERVATION CORPS NORTH BAY

MCL Volunteer Award
TO BE ANNOUNCED

MCL Special Award for
Environmental Achievement
CHILENO VALLEY NEWT BRIGADE:
SALLY GALE and GAIL SEYMOUR

STAFF PROFILES

Interviews by MCL Vice President, Mike Swezy



Katie Rogers

Communications and Outreach Manager

Katie, our most recent hire, holds a Masters degree in Sustainability Planning & Management from University of Colorado, Boulder. She has dual Bachelor degrees in Communications and Anthropology, and a minor in Art History, from University of California, Santa Barbara.

Prior to joining MCL, Katie led communications for a sustainability education and workforce development nonprofit; certified B Corps (companies committed to achieving the triple bottom line of People, Planet, and Profit); created marketing campaigns for ad agencies in California, New York City, and Seattle; and was lab director for an archaeological project in the Atacama Desert in northern Chile.

A Bay Area native, Katie has made Marin her home. "I feel totally alive in the lush nature of Marin. Being part of MCL allows me to help protect and preserve the place I love so much. Since being part of the organization, I've learned that almost all of my favorite places in Marin wouldn't still be the natural wonders they are today without MCL's advocacy - Angel Island, Samuel P. Taylor State Park, Point Reyes National Seashore, and many more."

Katie is inspired by the work of Robin Wall Kimmerer the author of *Braiding Sweet Grass*, "she weaves indigenous wisdom with scientific knowledge to inspire us to live in 'restorative reciprocity' with nature." She also deeply admires Nemonte Nenquimo, an Indigenous leader from the Ecuadorian Amazon, who led a historic legal victory against the Ecuadorian government, protecting half a million acres of rainforest from drilling and setting a crucial precedent for Indigenous rights.

Katie's great aunt is Anne Brigman, a famous photographer from the turn of the century, who created stunning images of women and nature, capturing the divine power and beauty of both. Katie remarks, "I feel a bit of her running through me, inspiring me to make art and bring beauty into the world."



Martha Richter Smith

Office Administrator

Hailing from New England, Martha moved to the Bay Area in the mid-nineties to work in the entertainment sector, but in recent years has transitioned to the non-profit arena. Most recently, she worked at The Life You Can Save where she contributed her project management skills to assisting in the research and publication of the 10-year Anniversary edition of *The Life You Can Save*, authored by Peter Singer.

Martha tells us "I must admit that I had never heard of Marin Conservation League until I walked through the doors. And it has been an education in what a few determined environmentalists can accomplish, and continue to accomplish today". She says listening in on the Issue Committee meetings has been instructive, "I have learned more about the intersection of politics and environmentalism than I ever thought possible, and my hat's off to the Chairs and Leaders who find compelling speakers on a consistent basis."

Asked who are her environmental heroes Martha said "The easy ones are Ansel Adams and John Muir. Having said that, I have a new found respect for Caroline Livermore, Sepha Evers, Helen van Pelt and Portia Forbes!"

Her connection to nature comes from early camping experiences with her family. Martha tells us that "One summer we spent six weeks on our Vermont land. A State Park Naturalist came to the ten acres we were camping on and walked through it with us. He explained animal foot prints, plants, trees, how to make a flute, and what trees would eventually forest the land. On another summer trip the family spent six weeks tent camping from Massachusetts all the way to Alaska. Martha says, "It was an amazing adventure: walking on glaciers, seeing bald eagles and experiencing salmon and sourdough for the first time."

Martha is a self-described home body who enjoys hiking the hills near her San Anselmo home, cooking, and entertaining. Here favorite activities are gardening, checking out the produce at the Thursday Farmers' Market, and planning her next culinary adventure.

**MARIN CONSERVATION LEAGUE
BOARD OF DIRECTORS**

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Board of Directors meetings are held at 6:00 PM on the 3rd Tuesday of the month.

Staff

Martha Richter Smith, San Anselmo
Office Administrator
Katie Rogers, San Geronimo
Communications and Outreach Manager

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San Rafael CA 94903 | 415.485.6257
marinconservationleague.org
mcl@marinconservationleague.org

Issue Committee Meeting Schedule

(subject to change—check website)

Land Use and Transportation:

1st Wed. of the month, 10:00 AM—12:00 PM

Parks and Open Space:

2nd Thurs. of the month, 3:00 PM—5:00 PM

Fire and Environment Working Group:

2nd Mon. of the month, 3:00 PM—5:00 PM

Climate Action Working Group:

3rd Fri. of the month, 9:00 AM—11:00 AM

Agricultural Land Use:

Meets quarterly, 4th Fri. of the month,
9:30—11:30 AM

North Marin Unit: Check website for times

Marin Conservation League was founded in 1934 to preserve, protect and enhance Marin County's natural assets. MCL is a non-profit 501(c)3 organization. All contributions and memberships are tax-deductible to the extent allowed by law.

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Marin Conservation League's Annual Meeting & Election - April 29, 2022
PROPOSED SLATE OF OFFICERS AND DIRECTORS 2022-2023

The Marin Conservation League's Nominating Committee, chaired by Jeff Stump, has nominated the following persons for election as MCL Officers and Directors at the 2022 Annual Meeting and Election. All MCL members are eligible to vote.

NOMINATED FOR ELECTION AS OFFICERS FOR 2022-2023:

President	Bob Miller, San Rafael
First Vice-President	Madeline Kellner, Novato
Second Vice-President	Terri Thomas, Sausalito
Treasurer	Richard Jensen, Corte Madera
Secretary	David Lewis, Novato

NOMINATED FOR ELECTION AS DIRECTORS NEW TO THE MCL BOARD:

Term ending 2025
Belle Cole, San Rafael
Nancy Hughes, Novato
Georgia McIntosh, Mill Valley

NOMINATED FOR RE-ELECTION TO THE MCL BOARD:

Term ending 2025
Ken Drexler, Fairfax
Pam Reaves, San Rafael

NOMINATED FOR ELECTION TO THE MCL BOARD:

<i>Term ending 2023</i> Susan Stompe, Novato	<i>Term ending 2024</i> Mike Swezy, Fairfax
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THESE DIRECTORS WILL CONTINUE TO SERVE EXISTING TERMS:

<i>Term ending 2023</i> Nona Dennis, Mill Valley Larry Minikes, San Rafael Linda Novy, Fairfax Jeff Stump, Inverness	<i>Term ending 2024</i> Roger Harris, Corte Madera Paul Jensen, San Rafael Larry Kennings, Mill Valley Kate Powers, San Rafael Greg Zitney, Novato
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