NEWS FROM MARIN CONSERVATION LEAGUE

January — February 2019

San Rafael's Transit Center relocation begins environmental review

By Kate Powers

While many of us were focused on holiday celebrations in December, work began in downtown San Rafael to lay the foundation for the Larkspur extension of SMART's passenger rail. SMART trains are expected to roll through downtown San Rafael en route to the Larkspur Ferry Terminal by the end of 2019.

San Rafael's Bettini Transit Center (SRTC) is Marin County's major transportation hub, providing an important transfer point for bus services to an estimated 9,000 riders per day who travel throughout Marin County, and to and from other Bay Area locations. Construction of SMART's Larkspur extension will bisect the San Rafael bus terminal, eliminating platform C at Second Street, thereby reducing the operational functionality of the remaining transit hub. As a result, the SRTC requires a new, permanent location.

SRTC is owned, operated, and maintained by the Golden Gate Bridge, Highway, & Transportation District (District). The

Continued on page10

In This Issue—

President's message—page 2
Editorial: Public Lands—page 2
Ranching in the PRNS—page 4
Events—page 6
Nature note: rare frogs—page 7
Poem-Subdue and Rule-page 11

One Tam – more than a mountain

Chris Qian, 2018

Allison Titus, One Tam seasonal staff, pulls weeds from among sensitive plants on Mt. Tam.

By Nona Dennis

Mt. Tamalpais at 2,571 feet is not a tall mountain, but it looms large in Marin and beckons millions of visitors from all over the world. John Hart wrote last year in Bay Nature that "acre for acre Mount Tamalpais might just be the best-loved peak in the San Francisco Bay Area. . ." although it's not because of scale.

In just under five years, One Tam, a partnership comprising the four agencies that own and manage Mt. Tam and surrounding lands – Marin Municipal Water District (MMWD), California State Parks, Golden Gate National Recreation Area (GGNRA), and Marin County Parks – plus the non-profit Golden Gate National Parks Conservancy (Parks Conservancy), has become the "chief steward" of the well-loved Mt. Tam. In the process, it has inspired thousands more stewards. What started as MMWD's need for a non-profit "Friend" to support care of the mountain's watersheds has evolved into a collective force whose influence now extends well beyond the physical boundaries of the mountain. In short, One Tam has become more than a mountain! At the same time, the structure and functions of the collaborating agencies and their non-profit partner have evolved from a local experiment, formalized by a Memorandum of Understanding in March, 2014, into a national role model.

How did One Tam become "more than a mountain" ?

One Tam's vision for its first five years was ambitious but general in its promises to restore ecosystems, improve trail corridors, enhance visitor experiences,

Continued on page 8

A Message from the President - A legacy of protecting public lands

Welcome to MCL's 85th year! Because we are proud of MCL's history of protecting many parts of our county and committed to ongoing stewardship of public lands, and conserving more land as opportunities arise, we have devoted most of this Newsletter to the public lands that make up more than half of Marin. Their ongoing health is paramount to future generations of all life. This means managing them to meet competing goals: protecting the health of ecosystems, while encouraging people to enjoy them. The dynamic tension between these two goals is not always easy to resolve, especially as visitors from the Bay Area and beyond flock here to experience the natural beauty.

Land managers understand that educating visitors to Marin's beauty and biodiversity is the most effective way to foster their protective care. And they do this well! For example, the Marin County Park's Mission Statement, https://www.marincountyparks.org/depts/pk/about-us, seeks to engage the public in a shared commitment to steward our open space preserves as well as enjoy them. Being in nature means being in good health! Persuading the public to be good stewards of the preserves and to understand the challenges of caring for them is also well framed in One Tam's website, which identifies some of the challenges faced by public land managers, such as loss of biodiversity and habitat, climate change, and the need for community support.

Take, for example, the foothill yellow-legged frogs in Cascade Preserve, which used to be plentiful here and elsewhere in California. Now in Marin County, they are limited to small pockets of habitat in the Mt. Tamalpais watershed (Page 7). How do we celebrate these creatures and, at the same time, protect their habitat from human disturbance?

The answer means shifting from being land "users" to land visitors and stewards. From understanding and appreciating our precious ecosystems comes a deeper ecological respect for the land, its wildlife, plants, and, yes, other visitors too. A renewed commitment to a strong land ethic asks that we consider our role and our impacts on the natural world. Aldo Leopold reminds us to examine each question in terms of what is ethically and esthetically right: "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise." (From "The Land Ethic", A Sand County Almanac.)

With respect,

Linda

Linda J. Novy

Editorial

Public lands are in Marin Conservation League's DNA

As Marin Conservation League enters its 85th year, it is tempting to look backward and dwell on past accomplishments, notably the transformation of many of Marin's scenic lands into public open space and parks – a succession of promoting land acquisitions that took place over decades and might be summed up in MCL's mission: "to preserve, protect, and enhance the natural assets of Marin County for all people."

The early events are well known. Four women – Caroline Livermore, Sepha Evers, Portia Forbes, and Helen Van Pelt – who met with other members of Marin's Garden Club on November 6, 1934, became the nucleus of a "survey committee" tasked with beginning to plan to save Marin's beautiful places for the public. At that time, most of Marin was pastoral and undeveloped. The only public parklands were Muir Woods National Monument, set aside in 1908; watershed lands of the Marin Municipal Water District, formed in 1912; and Mt. Tamalpais State Park (less than one-fifth its current size), established, after years of battles, in 1928.

The Golden Gate Bridge would open in less than three years. The vision of what might happen to Marin when the Golden Gate Bridge opened – "Los Angeles-style billboards and hotdog stands," according to Caroline Livermore, and the realization that Marin did not have a plan for its future growth and development – spurred them into action.

The women wasted no time. Before the end of 1934, the committee had expanded into the "Greater Marin Planning Survey Committee" and selected noted planner Hugh Pomeroy to lead the effort. They secured a grant to hire Depression-unemployed draftsmen to do the work, gained approval from the Board of Supervisors, and were well on their way by early 1935. At the end of that year, they presented the "Pomeroy Plan" to the Board of Supervisors for adoption. Sepha Evers captured the occasion in her minutes: "The survey was presented to the Board, and they approved the zoning ordinance . . .Then we started the intensive work of saving some of our beauty spots and beaches."

The Pomeroy Plan has been described by subsequent planning directors as being "continuously appropriate to the needs of the county from the time it was written

Continued on page 3

Editorial

Public Lands *from page 2*

on into the future." In its capacity to anticipate opportunities, it served more than 30 years to identify the areas needed for preservation and public ownership and to channel MCL's efforts in that pursuit.

The first attempt to acquire land was recalled decades later by Bill Evers, at that time the 7-year-old son of Sepha Evers, who asked, as they walked through a gate and down to Drakes Beach on a typical gray, foggy day in 1937: "Who will want to come here?" She replied: "Someday thousands of people will be able to come here!" That 52-acre farm was the first acquisition of the four founders, and it eventually became a part of the Point Reyes National Seashore. That same year, they looked at what boggy Willow Camp might become, and eventually did become – Stinson Beach, first as a county park, then a state park, and now part of Golden Gate National Recreation Area. And the list of lands acquired for the public goes on from there. . .

Archive photo from Anne T. Kent California History Room, Marin County Library

Fifty-two acres at Drakes Beach for a county park was MCL's first success in acquiring land for the public. It later became part of Point Reyes National Seashore.

Looking ahead, not back

But that's only part of MCL's story! What emerges from that backward glance is an apparent contradiction. Over eight-plus decades, MCL's achievements have, in fact, been directed forward, not backward. In some cases that meant anticipating the destructive nature of human developments and thwarting "bad" projects, like a nuclear power plant on Bodega Head and the San Andreas Fault, drilling for oil off the California coast, or constructing a Peripheral Canal. It has also meant recognizing opportunities to conserve resources, for example, by instigating county-wide recycling. These days, MCL is promoting reduction of greenhouse gas emissions as we begin to experience the effects of climate change. As for public lands, even as MCL's direct involvement in land acquisition has waned, the organization has anticipated and responded to changing conditions on already-acquired public land.

There is a common misconception that once land is set aside and protected, the future is one of merely maintaining the status quo – the challenge is over, the job is done! In reality, as public land managers know, the only constant in managing land is change! For one thing, knowledge advances. In 1934, concepts like "ecology" were relatively new; the term "ecosystem" was not coined until 1935 and didn't enter textbooks until the late 1950s. Concepts like "biodiversity" and "sustainability" were decades away, along with their practical applications in managing natural resources on protected lands. Massive growth in the public's appetite for outdoor recreation was just beginning. Still in the distance were threats like sudden oak death, the effects of climate change, and the need to manage for resilience.

As land managers have been challenged by advancing knowledge, new ecological stressors on the resources they manage and a shifting scene of human demands, so MCL continues to look ahead to how we can understand and support their efforts. We all enjoy Marin's public lands at our leisure (195,000 acres at latest count, or roughly 56 percent of Marin's land area). MCL also engages with land managers by volunteering, advising, and advocating for practices that will ensure the continued viability of a thousand species of plants and wildlife that the founders of MCL knew little about when they began to conserve the land for the enjoyment of future generations.

The term "stewardship" has come to stand for an amalgam of conservation programs, strategies, and techniques. Just plain caring for the land is not enough. To continue to be effective stewards means engaging the next generation in active stewardship that anticipates threats and brings knowledge and passion to maintain the integrity of public ecosystems, as MCL looks beyond its 85 years.

Nona Dennis, Editor

The future of ranching on Point Reyes National Seashore

By Nona Dennis

Point Reyes National Seashore (PRNS, park or Seashore) is unique among national parks in its diversity of offerings within 71,000 acres. It comprises a rare comingling of coastal panoramas and beaches; biological diversity and rare species; wilderness; millennia-old cultural heritage; historic working landscape of cattle ranches and dairies; tule elk; and 150 miles of trails! More than two million visitors come to enjoy these natural, cultural, and recreational resources every year.

As 2018 ended, the National Park Service (NPS) had taken another step toward determining the future of at least two pieces of that mix – the historic and cultural working landscape of cattle ranches and dairies that make up approximately 25 percent of the Seashore; and the free-roaming tule elk, the progeny of 10 individuals introduced to a wilderness area in 1978 that now conflict with ranching operations.

In July 2017, a settlement agreement determined that the NPS must amend the Seashore's 1980 General Management Plan (GMPA) and prepare an Environmental Impact Statement (EIS), as required by the National Environmental Policy Act (NEPA). It also set a completion deadline of July 14, 2021. That clock started ticking in early November with the NPS' first formal step: solicitation of the public's comments on the "scope" of analysis the EIS would cover. Comments were submitted by November 30. (See MCL's letter)

Alternatives envision different outcomes

At a basic level, the purpose of the EIS is to analyze the environmental impacts of six alternatives for the future of ranching within a planning area that includes a total of 24 ranches on 18,000 acres in the Seashore's pastoral zone and 10,000 acres in the Northern District of Golden Gate National Recreation Area in the Olema Valley. In addition to analyzing the required "No Action" (Alternative A), the EIS will consider two alternatives that would continue dairies and cattle ranching under minimum 20-year leases. The two alternatives differ primarily in how free-roaming elk would be managed. Alternative B (NPS's Proposed Action) would ***minimize*** conflicts (emphasis added) between elk and ranch operations by limiting elk herds to set population thresholds and preventing further elk herds from establishing in the planning area. Alternative C would ***eliminate*** conflicts by separating the free roaming Drakes Beach herd from impacted ranch lands and evaluating future needs to manage the Limantour free roaming herd.

kqedquest, flickr creative commons

Historic Pierce Point Ranch on Tomales Point is emblematic of the cultural heritage of ranching that the Point Reyes National Seashore embraces.

The last three alternatives being analyzed in the EIS are required by the settlement agreement. Under Alternative D, ranching operations would cease on approximately 7,500 acres in the planning area, continuing only on ranches with residential units. Alternative E would eliminate six active dairy operations, with the option to convert dairy to beef cattle grazing over a 5-year period. Finally, Alternative F would eliminate all ranching from the park. Under the latter three alternatives, tule elk herds would be limited only as required to support other resource protection and park goals. Under all six alternatives, a herd of tule elk would continue to inhabit the 2,600-acre Pierce Point enclosed wilderness.

MCL supports continued ranching

Since the Seashore began planning for long-term management of its ranch lands, pursuant to Secretary of the Interior Ken Salazar's directive in 2012 to offer 20-year leases, MCL has supported the position that ranches and dairies should continue to occupy those portions of the Seashore where they have been for generations. The park was authorized by Congress and signed into law by President Kennedy in 1962. The statutes allowed preexisting ranching operations to continue within a designated pastoral zone. Although a vision of Point Reyes Peninsula as a national park had persisted for several decades, it is unlikely that the park could have been established at all if the ranching families who had owned and occupied the Peninsula since the 19th century had not been willing to sell their lands to the federal government and lease them back to operate. The promise of continued ranching was reinforced by Secretary Salazar, who, in his 2012 directive, stated that ". . .the values of multigenerational ranching and farming at Point Reyes should be fully considered in future planning efforts."

Continued on page 5

Ranching *from page 4*

MCL also supported Congressman Jared Huffman's recent bill H.R. 6687, whose purpose was to reaffirm and clarify the legislative intent of continuing the ranches in the Seashore without weakening environmental standards or circumventing NEPA. H.R. 6687 was approved by the House in 2018. As this Newsletter went to press, the bill was pending before the Senate. The current NEPA review for the GMPA will proceed with or without the passing of Huffman's bill.

MCL's support of ranching on the Seashore is also consistent with its mission since 1934 to preserve, protect, and enhance Marin's natural assets, including both national park and working land assets. It also furthers MCL's Agricultural Policy adopted in 2015, which supports Marin agriculture's role in maintaining open space, protecting wildlife corridors and environmental quality, managing carbon, preserving a valuable cultural heritage, and contributing to food security and the local economy.

Can tule elk and cattle coexist?

Cattle vis-a-vis free roaming tule elk is not the only issue to be resolved in the amended GMPA, but it has become the "flashpoint," prompting unfounded predictions of eliminating all elk from the Seashore. At a minimum, elk will remain in the wilderness under any alternative. The extent to which free roaming tule elk and cattle can coexist, and how balancing viable herd size with available resources might work in areas of conflict, will be a key analysis in the EIS. California Department of Fish and Wildlife (CDFW), which has jurisdiction over conservation, protection, and management of all elk herds and their habitats in California, will continue to work closely with NPS on elk management issues, guided in part by a 2017 Draft Elk Conservation and Management Plan for California ("Elk Plan").

Tule elk had disappeared from the Point Reyes area by the middle 1800s as logging, hunting and agriculture took their toll. In the rest of California, the elk population had dwindled to a few individuals in 1870. Their rebound to the present 5,700 animals is nothing short of miraculous. In 1976, federal legislation encouraged public lands within the elks' former range to receive animals from overstocked herds. As a consequence, ten individuals were introduced to a 2,600-acre enclosed wilderness at Tomales (Pierce) Point in 1978. The confined herd grew slowly at first and has fluctuated over the years. Twenty-eight elk were relocated to the Limantour wilderness area in 1998 to form a free-ranging herd. Subsequently, individuals found their way onto Drakes Beach area ranchlands, marking the beginning of a free roaming herd. By the end of 2017, the Limantour herd was estimated at 145 and the Drakes Beach herd, at 112, while the Pierce Point herd population stood at slighltly below 300.

Mark Gunn, Flickr Creative Commons

In most locations where rebounding tule elk have been established in California, conflicts with neighboring agriculture require management .

Managing tule elk populations

The rebound of tule elk in California, including at Point Reyes, has been celebrated but also comes at a price, notably conflict with adjacent land uses, resulting in destruction of fences and other properties, competition with domestic animals over resources, and public health and safety costs. With limited areas to grow and few natural predators, populations are managed for both the animals' benefit and to minimize conflict using a variety of methods, as detailed in the Elk Plan. Temporary controls include fencing, herding, and hazing; longer-term population controls include regulated hunting as the primary method, followed by contraception, sterilization, lethal means, and/or capture and translocation of surplus animals when regulated hunting is not practicable, as on Point Reyes. According to the Elk Plan, no single method alone can resolve chronic issues.

The possibility of translocating elk from the Seashore to Tribal lands in California does exist, although available land is limited. Elk currently exist on Tribal lands within the historic range of the elk, and Tribes have indicated their interest in taking elk as a source of subsistence and in support of tribal culture.

EIS will cover wide range of issues

Tule elk is just one of many issues that will be addressed in the EIS. Other topics include visitor access, conservation practices to better protect natural and cultural resources, water and soil quality, and management of coastal rangeland, terms of lease/special use permits, and family succession, among others. The EIS will help both ranchers and NPS to better understand and evaluate possible mitigation and management measures that could improve environmental quality of the ranches and dairies, and update land management policies and decisions between park staff and ranchers. Release of the draft EIS is anticipated in the Summer of 2019 – another step in the process that will provide the public further opportunity to comment.

Events

Business - Environment Breakfast

State Senator
Mike McGuire

Friday, January 11, 2019
7:30 am - 9:00 am

McInnis Park Club Restaurant
350 Smith Ranch Rd.
San Rafael

State Senator Mike McGuire will kick off the 2019 Business-Environment Breakfast series on Friday, January 11. Senator McGuire will update the audience on hot topics in the legislature with his signature rapid pace and enthusiastic style. You won't want to miss this! Bring a pen and paper along with your questions.

Register: 415-485-6257
mclmcguire.eventbrite.com

$15 MCL members, $20 general public; ticket includes breakfast buffet.

MCL members and friends jingled and mingled into the holiday season

Photos by Roger Harris

Thank you to everyone who came to share the spirit of the season with us on December 7. For a look at all photos, visit MCL's Facebook page: facebook.com/marinconservationleague

Clockwise from top left: Anna Pletcher and San Rafael Council member Kate Colin with MCL Director Sarah Loughran. David Schreck and Sharie Shute with friend. Jana Haehl and MCL Agricultural Land Use Committee Co-Chair Sally Gale. MCL Director Nancy Benjamin with David Kunhardt.

Marin's State Parks perspectives discussed at Business-Environment Breakfast

Kirsten Nolan

An interested audience at MCL's November 15 Business-Environment Breakfast at McInnis Park Clubhouse heard Maria Mowrey, incoming Superintendent of California State Parks' Bay District (which includes Marin County), Steve Deering, President of Friends of China Camp, Rachel Norton, Executive Director of California State Parks Foundation, and Larry Perkins, retired State Parks Ranger from China Camp State Park's early days discuss Marin's State Parks "yesterday, today, and tomorrow." At left is Nona Dennis, Moderator.

Nature Note

Rare frogs and frog docents in Marin's watersheds

There's a "new" frog population in Marin! The recent discovery by a teenager of a foothill yellow-legged frog (*Rana boylii,* or FYLF) in Cascade Canyon Open Space Preserve makes an exciting addition to the county's rare fauna. Before its discovery, only two breeding sites of the FYLF were known in Marin: one at the popular hiking destination Little Carson Falls, and the other at more remote Big Carson Creek, both in the Pine Mountain region of the Marin Municipal Water District (MMWD) watershed.

A small group, including MCL members, hiked into the Cascade Canyon Preserve in late October, led by Jon Campo and Lisa Michl, Marin County Parks' Senior Resource Planner and Wildlife Biologist, respectively, and Lisette Arellano, the One Tam Community Science Program Manager, to view the recently discovered breeding habitat.

Why so rare?

Once abundant in California's perennial streams and rivers at low to moderate elevations in Pacific Coast drainages and western the Sierra Nevada, the FYLF has now disappeared from coastal streams south of San Luis Obispo County and is nearing extinction in the southern Sierra, south coast, central coast and San Francisco Bay Area regions. The frog inhabits clear-moving streams, so lasting impacts have been inflicted by water diversions, fluctuating flows and water temperatures due to dam operations, logging, marijuana cultivation, recreation, and a variety of pollutant sources, including agricultural runoff and airborne pesticides. Aggressive non-native species like bullfrogs prey on FYLF eggs and tadpoles.

The decline of FYLF populations throughout its range prompted federal and California agencies to list the frog as a Species of Special Concern. The Center for Biological Diversity petitioned in June 2017 to have the FYLF advanced as a "candidate species" under the California Endangered Species Act (CESA). That decision is still pending, but it appears likely that the species will be granted official "threatened" status in the near future.

Marin's other rare frog: California red-legged frog

We have known for some years that another rare frog inhabits Marin, preferring slow-moving streams and ponds. The California red-legged frog (*Rana draytonii,* or CRLF) also was once abundant in California and has lost habitat throughout 70 percent of its former range. For starters, some 80,000 individuals were harvested in the late 1800s to be served as frogs legs.

Nona Dennis

MMWD Frog Docents track life stages of rare foothill yellow-legged frog with spotting scopes at Little Carson Falls.

Natalie McNear, Flickr Creative Commons

Foothill yellow-legged frogs are threatened by habitat destruction.

As populations continued to decline due to a host of human activities, the frog was listed in 1995 as Threatened under the Federal Endangered Species Act (ESA). It is a Species of Special Concern under California law, and in 2014 was named California's official State Amphibian.

In spite of greatly reduced populations elsewhere in the state, healthy populations continue to thrive in their favored habitat in Point Reyes National Seashore and in Golden Gate National Recreation Area's Redwood Creek watershed near Muir Beach, where their habitat has been restored. Other populations inhabit the Olema Creek area, Lawsons' Landing on north Tomales Bay, and Mt. Burdell.

MMWD and the "Frog Docents"

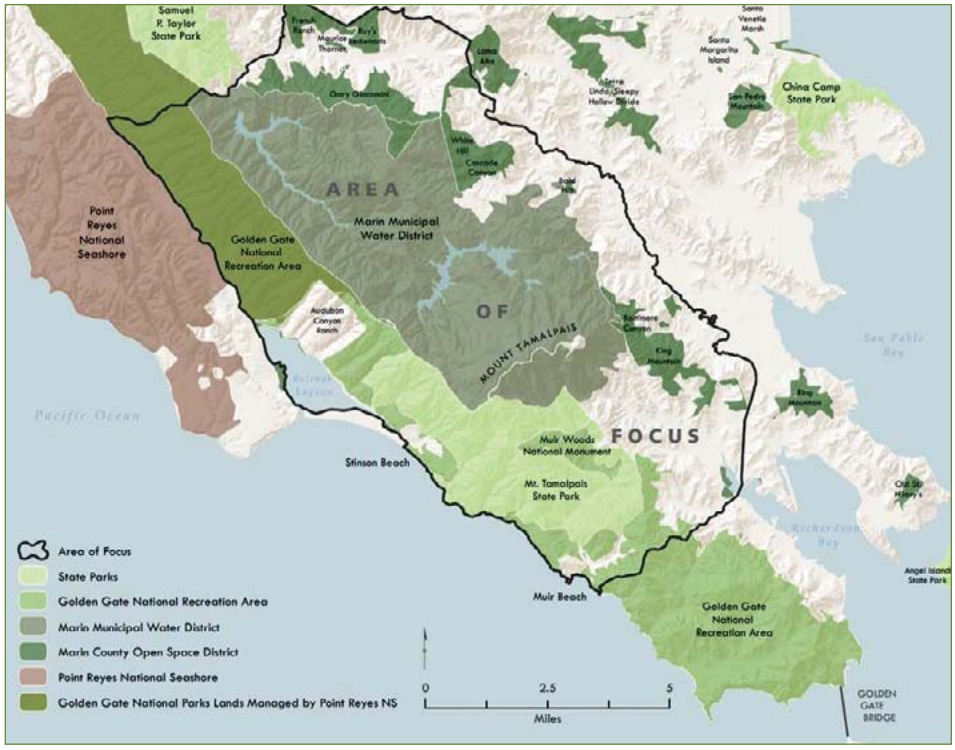
Although the foothill yellow-legged frog's habitat requirements differ from those of the CRLF, populations have followed a similar trajectory of habitat loss. The FYLF's favored clear-running stream habitats have been threatened for years throughout its range. Where MMWD watershed offers these breeding conditions, the FYLF has received close attention. Recognizing the need to protect breeding sites from increasing numbers of visitors to Little Carson Falls, District staff initiated a "Frog Docent Program" in 2005.

As described on the MMWD website, the primary purpose of the program is to raise visitor awareness. Volunteer docents train in February and begin to monitor the falls between March and June each year, when the eggs and tadpoles are most vulnerable. Docents use a spotting scope to observe various life stages – egg masses, tadpoles, adult frogs – and they record potential causes of habitat disturbance. Sediment damages breeding sites, but most often it is off-leash dogs that disturb stream habitat. The docents

Continued on page 11

One Tam *from page 1*

expand education and stewardship on Mt. Tam, and inspire community support through volunteerism and philanthropy. At the outset, the task of building trust and awareness, not only within the cooperating agencies themselves but also among stakeholders and the community, was formidable! Defining its geographic boundary broadly, with Mt. Tam at the center, would enable the partnership to work at a landscape level. The initial territory has been adjusted over four years to become the approximate 52,175 acres shown here. The scope of One Tam's work and its impact, however, have gone far beyond that boundary, as noted below.



map courtesy of One Tam

Ongoing projects and new conservation programs

The partnership began with a backlog of agency-initiated projects to consider for support by One Tam and its Parks Conservancy partner. These included MMWD's Log Cabin rehabilitation and the restoration of West Peak. Numerous projects were pending in Redwood Creek watershed, advanced by State Parks and/or Muir Woods (GGNRA), already in partnership with Parks Conservancy. County Parks was working with other partners on a project to improve transportation and hydrology at the north end of Bolinas Lagoon, and another to address flooding, sea level rise and habitat restoration at Bothin Marsh. The County was also anticipating improvements at Roys Redwoods preserve. These projects continue in various stages of progress, bolstered by One Tam and the Parks Conservancy.

By the end of 2015, One Tam was making progress in gathering knowledge, restoring ecosystems, and building stewardship programs. The Wildlife Picture Index Project was launched by installing 128 cameras in the Lagunitas Creek watershed, thus initiating a three-year research program of capturing motion-activated images of wildlife. More cameras were installed in the Redwood Creek watershed in 2016. Volunteers were recruited to manage the cameras in the field and to record thousands of images on computers. By the close of 2018, more than four million images had been captured by 180 cameras and recorded by almost a thousand volunteers. Analysis of the data was well underway, with the aim of expanding knowledge of a host of wildlife species, their population trends and activity on Mt. Tam, to inform management decisions. Ultimately, data from this project will become part of a global data base. Like so many of One Tam's endeavors, no one agency could have done this work alone or without the help of volunteers!

Also initiated early on was a systematic program to combat invasive weeds on Mt. Tam, a plague suffered by all of the agencies. The Early Detection and Rapid Response (ED/RR) team began its mile-by-mile inventory of every fire road and trail across the mountain, identifying individuals or new populations of 65 target species, and eradicating them while still in an embryonic stage. By the end of 2018, every road and trail had been inventoried, and more than 400 priority weed patches had been treated manually. The team was turning its attention to rare plants on serpentine barrens and native grasslands. One team member reported, ". . . being able to share protocols and reporting metrics has helped me understand my work (for my own agency) and put it in a larger context."

Science summits and the health of the mountain

The "jewels in the crown" of One Tam accomplishments have been three annual conferences devoted to the science of Mt. Tam. Researchers and the lay public have convened to present and hear about the status of ecological factors – the plants, the wildlife – that together can represent the "health" of the mountain. The proceedings of the first two-day science summit in 2016 were compiled in "Measuring the Health of a Mountain: A Report on Mount Tamalpais Natural Resources." In addition to gauging the conditions of species, the report identified important knowledge gaps, such as bees and other pollinators, bats, and the seeps and springs that lace the mountain. All have been the subject of research with various partners. In a partnership with

Continued on page 9

One Tam from page 8

USGS, the One Tam team will continue bat research on Mt. Burdell as well as Mt. Tam, for another two years. A remarkable thirteen species have been identified.

Subsequent "science summits" in 2017 and 2018 delved into topics as wide-ranging as the life history of the dusky-footed wood rat, favored prey of the threatened northern spotted owl, and the critical role in nutrient exchange played by mycorrhizae (the underground part of mushrooms) in forests and woodlands on the mountain.

A recent initiative of the partnership jumps from Mt. Tam to the entire Marin County. Under the aegis of One Tam, funded by multiple sources, vegetation across the county is being mapped using high quality aerial LiDAR technology (LiDAR 8) to record not only vegetation but the underlying hardscape. The technology has already been used to map vegetation in Sonoma County. The Marin project kicked off last summer with aerial imagery. After staff and volunteers collect extensive ground data, complete a vegetation classification system, and further analyze data, a draft map is expected in early 2020. The map will have enormous utility in many applications, including management of wildfire fuel, and eventually hydrology and other land use planning.

Community and the next generation

The hallmark of One Tam from the beginning has been community awareness and engagement in active stewardship of Mt. Tam. Since 2015, One Tam staff have reached thousands of people in the surrounding community and offered numerous pathways to connect them to the mountain. One such pathway is community science ("citizen science"). Participants can monitor wildlife or assist in resource conservation and restoration projects. In so doing, they become lifelong stewards of Mt. Tam.

Finally, One Tam is engaging youth from high school through post-college in on the ground stewardship, with Mt. Tam as the "field lab." College students, recent graduates, and other young adults from across the country have come to Marin as interns to gain practical knowledge and job skills, such as in restoring habitats or improving trails. Teenagers can enroll in an immersive six-week summer school called LINC (Linking Individuals to their Natural Community), offered each year to groups of 18 or so. These opportunities all can lead to new careers or advancements in jobs in conservation and park management. At a minimum they teach the importance of public lands, develop leadership skills, and create lasting connections to nature.

Central role of Parks Conservancy and the future

Seasoned observers acknowledge that the Parks Conservancy has been key to the One Tam collaborative's success, serving from the outset as "backbone organization," convener/ facilitator to the four agencies, and the community connector. Parks Conservancy can lend extra support to the collaboration, drawing on its decades-long experience in raising funds, hosting volunteer educational and community activities, and offering technical support and project management expertise to the public agencies of One Tam.

Together, the partners are refreshing their vision for the next five years, identifying new priorities, and tailoring their existing programs to continue building lasting stewardship for Mt. Tam.

For previous articles about One Tam, see MCL Newsletters March-April 2014, May-June 2016, September-October 2016, January-February 2017, and November-December 2018 www.conservationleague.org/resources/newsletter-archive.html

Marin County Parks acquires a 167-acre addition to Mt. Burdell Open Space Preserve

Nona Dennis

Marin County Parks' Senior Natural Resource Specialist, Jon Campo, explains details on a map of recently acquired property in Bowman Canyon during a recent field trip. Participants represent a coalition of environmental organizations convened by County Parks staff as an "Environmental Roundtable" to review the environmental features and sensitivities of proposed project sites and planning areas. The 167-acre Bowman Canyon Land will become an addition to Mt. Burdell Open Space Preserve. Planning for its future management has just begun.

Transit Center *from page 1*

District, its consultant, and partner agencies have embarked on a multi-year process to identify a new transit center site and configuration in downtown San Rafael. The District, as a special purpose district, is the lead agency for permitting and certifying an Environmental Impact Report (EIR) for the project. As the owner, the District is responsible for identifying site alternatives, preparing environmental review, producing preliminary engineering design for SRTC's permanent relocation, and financing the project. Preliminary stages are being funded ($1,250,000) by a One Bay Area Grant (OBAG2).

Kate Powers

San Rafael's Bettini Transit Center must be relocated to accommodate the extension of SMART to Larkspur, now under construction.

City of San Rafael as key stakeholder

According to a Memorandum of Understanding with the District, the San Rafael City Council must approve the selected relocation site. The congested streets surrounding the existing SRTC are among the busiest in San Rafael and the County; smooth and efficient traffic flow is a top concern. Also, efficient and effective transit service is an essential pillar of the city's Downtown Vision of sustainability and growth of businesses, employment and housing. San Rafael will serve as "Responsible Agency" for the EIR. Partner agencies on the project also include Marin Transit, Transportation Authority of Marin, and SMART.

Since last March, the District has held three public meetings to introduce its planning process, timeline, and preliminary alternatives; gather input from public agencies and the community; and present its Notice of Preparation (NOP) of the Draft EIR and solicit scoping comments. Scoping comments were due November 19, 2018. At the time of the NOP release, the District had identified five project concept alternatives within a limited planning area bounded by 2nd Street (south), Lincoln Ave (west), 5th Avenue (north) and Irwin Street (east) in San Rafael. No preferred location or configuration had been identified.

Project concepts

Features of all concepts include 17 bus bays, pick up and drop off areas, bicycle parking, bus operator restrooms, space for security and customer service, and parking for operations staff. The five concepts proposed are:

- **Two-Story Concept** – located east of the rail tracks between 2nd and 4th Streets with the second story bridging over the 3rd Street intersection.
- **Across the Freeway Concept** – has bus bays between 3rd and 4th Streets on both the East Tamalpais block and across Hetherton Street, under the freeway.
- **4th Street Gateway Concept** – is located on the East Tamalpais blocks between 3rd Street and 5th Avenue and includes 3 bus bays on Hetherton Street.
- **Whistlestop Block Concept** – has bus bays located between 3rd and 4th Streets on the East Tamalpais block, 4 bus bays along the Whistlestop building on Tamalpais, and 3 bus bays along Third Street, between Tamalpais and Lincoln.
- **North of 4th Street Concept** – fills the entire block under the freeway between Hetherton and Irwin Streets and between 4th and 5th Streets.

(Further description and maps of the five concepts can be found in the District's Notice of Preparation, pages 5-10. http://goldengate.org/SRTC/documents/notice-of-preparation-draft-eir.pdf)

Review of the various concept alternatives is expected to continue during preparation of the Draft EIR, which will likely be completed by the end of 2019. The Final EIR and preliminary design are anticipated to be completed in 2020. Project costs, through construction, are projected in the vicinity of $40 million. A significant portion of the design and construction funding will come from Regional Measure 3 (bridge toll increases), passed by voters in June 2018.

MCL's scoping comments

MCL requested that the EIR analyze cumulative impacts of the new transit center with those of SMART's new extension since daily rail service to Larkspur Landing is expected to be operational before completion of the new SRTC. MCL expressed particular need for analysis of traffic and transportation impacts, flooding, water quality and the effects of sealevel rise, impacts on nearby riparian and wetland communities and their biological resources, and protection of urban wildlife. MCL's comments concluded with the hope that the relocated Transit Center would achieve the goals articulated during early panel discussions led by the Federation of San

Continued on page 11

Transit Center *from page 10*

Rafael Neighborhoods: Ensure efficient flow of traffic from Highway 101 and on city streets; safe pathways for pedestrians and cyclists travelling all directions; an appealing, aesthetic, and welcoming townscape; and respect for San Rafael's natural, cultural and architectural history and resources. (See MCL website: www.conservationleague.org/images/stories/pdfs/advocacy/ADV_lut_ScopingComments_SanRafaelTransitCenterReplacementProject_DraftEIR_2018.11.19.pdf) MCL will continue to track progress of the SRTC relocation and the environmental review.

Interim operation of the transit center

In the meantime, SMART, the District, and Marin Transit will be operating phased plans to maintain the ability for buses to continue serving passengers within the existing transit center while the Larkspur extension is under construction. Each phase will significantly change where buses can drop off and pick up passengers. Signage is planned to help passengers find their way.

Although construction of SMART's Larkspur extension is expected to be completed by the end of 2019, the SRTC will be operating in an interim way until a permanent replacement transit center is constructed.

Save The Date!
April 5, 2019

MCL's Annual Dinner
Celebrating 85 years

Watch your mailboxes and the MCL website in February for additional details.

Frog *from page 7*

educate visitors on the sensitivity of the habitat and advise them to leash their dogs in keeping with District regulations. Since 2005, docents have volunteered over 2,900 hours and informed more than 7,700 visitors about the vulnerability of frogs and their habitat at the falls. Most visitors with dogs cooperate by leashing their pets.

Opportunity and challenge for the Open Space District

Like MMWD's watershed, Cascade Canyon Preserve is a popular recreational destination. It also harbors an unusual number of sensitive species. The challenge for County staff is to protect sensitive habitats from impacts associated with trails and trail users. Dog walkers, hikers, runners, bicyclists, and horseback riders can alter hydrology and water quality by crushing and trampling vegetation and compacting soils, damaging stream habitat, slowing infiltration rates, and increasing soil pH. Because of the preserve's sensitivity, dogs are restricted to six-foot leashes, a rule that is frequently ignored. As a consequence, the most likely disturbance to the frog habitat will come from off-leash dogs.

Lisa Michl outlined the Open Space District's evolving plans to educate the local community on the sensitivity of the species and its habitat and protect the frog's habitat. "We are still in the process of understanding more about this population," she said, "so we are taking an adaptive management approach. First we will focus on protecting the currently known breeding area, as this is the most sensitive area of the frog's life cycle. As we learn more in the coming years, this may change. We have contracted with a local expert to conduct surveys in San Anselmo Creek, Cascade Creek, and Carey Camp Creek to determine the extent of the population." Protective options may include separating trails by split-rail fencing from habitat areas, particularly breeding and tadpole habitat. The job of staff and volunteers will be to help the community become proud stewards of the frog and their own preserve.

SUBDUE AND RULE[1]

They have no souls, we're told,
Automata with feathers, fur, or scales,
So they're disposable,
Of no account to their Creator,
Without reason, which brings dignity,
Not blessed with the capacity for evil,
Or the constant inclination to it.

In Eden, the first clothes were skins—
An early consequence of reason—
Trapped or hunted, I wonder?
Could sport have been involved?
Later, the Ark was just for groceries,
And future subjects for research.

Infinite love must have some limit,
Be realistic, practical:
How could Heaven hold them all?
And so (being reasonable),
Humane as circumstances will allow,
We swagger to judgment,
Then take our places in the choir—
Birds not having membership—
Not often having felt the need
To wonder what dominion means.

Jim Kerbaugh
(1953-2018)

Yellow-headed Blackbird. *Credit: Roger Harris*

1 The poem "Subdue and Rule" was contributed by MCL Board member and poet Pat Nelson, and Marin nature writer and poet John Hart. It appeared recently in the *Blue Unicorn*, a thrice yearly poetry journal in its fifth decade, which is co-edited by John Hart and published in Marin. The author, Jim Kerbaugh, Ph.D. was a 30-year professor of English at Illinois College, Jacksonville, Illinois, until his death earlier this year. He specialized in medieval and classical literature and was a well-respected poet, whose poems have appeared in literary magazines and journals throughout the country. He was also known for his life-long love of animals.

MARIN CONSERVATION LEAGUE BOARD OF DIRECTORS

Officers
Linda Novy, Fairfax, President
Susan Stompe, Novato, 1st Vice President
Doug Wilson, Mill Valley, 2nd Vice President
Bob Miller, San Rafael, Secretary
Kenneth Drexler, Fairfax, Treasurer

Directors
Nancy Benjamin, Tiburon
Nona Dennis, Mill Valley
Sally Gale, Petaluma
Roger Harris, Corte Madera
Larry Kennings, Mill Valley
David Lewis, Novato
Sarah Loughran, San Rafael
Larry Minikes, San Rafael
Pat Nelson, San Rafael
Vicki Nichols, Sausalito
Kate Powers, San Rafael
Pamela Reaves, San Rafael
Jeff Stump, Inverness
Ann Thomas, Corte Madera
Arlin Weinberger, San Rafael
Greg Zitney, Novato

Board of Directors meetings are held at 7:00 PM on the 3rd Tuesday of the month at the MCL office and are open to the public.

Staff
Holly Smith, Richmond
Office Manager
Kirsten Nolan, San Rafael
Communications Coordinator

Contact Information
175 N. Redwood Dr., Ste. 135
San Rafael CA 94903 | 415.485.6257
www.marinconservationleague.org
mcl@marinconservationleague.org

Issue Committee Meeting Schedule (subject to change—check website)

Land Use and Transportation:
1st Wed. of the month, 1:00 PM—3:00 PM

Parks and Open Space:
2nd Thurs. of the month, 3:00—5:00 PM

Climate Action Working Group: 3rd Fri. of the month, 9:00 AM—11:00 AM

Agricultural Land Use: meets quarterly; Water and Watersheds, North Marin Unit:
Check website for times and locations

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.

Editor: Nona Dennis
Design and Production: Kirsten Nolan.
Printed in San Rafael on recycled paper.

Please share and recycle.

EarthShare California

NEWS FROM MARIN CONSERVATION LEAGUE

Non-Profit Organization
U.S. POSTAGE PAID
Permit No. 151
San Rafael, CA

January - February 2019

175 N. Redwood Dr., Ste. 135
San Rafael, CA 94903

RETURN SERVICE REQUESTED

It's that time of the year again!

MCL memberships are calendar year—
Renew for 2019 now!

Name

Address

City/State/ZIP

Phone Email

SIGN ME UP AS A:

**Join at the $250 level or above and you will be invited to MCL's Fall Leaders Circle Event!*

❒ $35 Steward ❒ $100 Baylands ❒ $500 Redwoods
❒ $50 Creeks ❒ $250 Woodlands* ❒ $1,000 Peter Behr
❒ My check, payable to MCL, is enclosed ❒ I will renew via credit card

Card Number Exp. Date

Name on Card sec. code

Signature

Mail to MCL, 175 N. Redwood Dr. Ste. 135, San Rafael, CA 94903

Save paper and join online at marinconservationleague.org

All contributions and dues are tax deductible to the extent allowed by law. MCL memberships are calendar-year based.