AB 1832: PROTECTING THE DEEP FROM SEABED MINING
**Greetings from the**

- Northcoast Environmental Center -

The mission of EcoNews is to inform and educate the public on environmental issues around the world, state and bioregion. Many of these issues are complex and have varying levels of support throughout the environmental community. Our goal is to provide a platform to explore, discuss and debate these topics in order to better understand their nuances. The ideas expressed in EcoNews do not necessarily reflect the positions of the NEC or its member groups. We appreciate and welcome alternative points of view.

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**Econews Distribution Volunteers Needed**

We are looking for monthly volunteers to help distribute EcoNews around Humboldt, Del Norte, and Trinity County. Are you interested in helping? Email NEC@YOURNEC.ORG

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**Bouquets**

Sincere Gratitude To:

A bouquet of Cempasuchil and Sunflowers go out to Centro del Pueblo (CdP) for their ongoing work in responding to the needs of the migrant community in Humboldt. In January 2022 CdP mobilized to get food resources to households that had been impacted by the latest COVID-19 surge.

CdP has been organizing for the empowerment of the Indigenous immigrant community in Humboldt County since 2016. During the pandemic they have continued to organize not only in response to COVID-19 but also around anti-racism, food sovereignty, gender justice and immigration reform. Thank you for all the work you do for our community. To support visit Cdpueblo.com or follow on social media: @CentrodelPueblo.

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**NEC Staff**

Executive Director & Econews Editor
Caroline Griffith, director@yournec.org

Administrative Coordinator:
Carley Arroyo, admin@yournec.org

Coastal Programs Coordinator:
Ivy Munnerlyn, ivynecmail@gmail.com

Outreach Coordinator:
Chelsea Pulliam, chelseanec1@gmail.com

Econews Journalist:
Elena Bilheimer, econewsjournalist@gmail.com

Office & Event Support Staff:
Reina Trombetta, reinanecmail@gmail.com

Proofreaders: Kris Diamond, Fhyre Phoenix, David Andrew Niedrich

Authors: Larry Glass, Caroline Griffith, Carley Arroyo, Elena Bilheimer, Tom Wheeler, Colin Fiske, Farzad Forouhar, Carol Ralph, Maggie Gainer, Dan Sealy, Elaine Weinreb, Susan Nolan, Martha Walden, Michael Pulliam, Raven E. Marshall, Sabriya Ghanizada, Ilene Mandelbaum, Felice Pace, Jen Kalt, Ivy Munnerlyn

Cover: Seabed mining can have severe effects on marine life. Image source: Pew Charitable Trusts.

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- Sierra Club, North Group, Redwood Ch. www.redwood.sierraclub.org/north/
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- Redwood Region Audubon Society www.rras.org
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**NEC Affiliate Members**

- 350 Humboldt www.350.org/humboldt
- Humboldt Baykeeper www.humboldtbaykeeper.org
- Friends of Del Norte www.fodn.org
- Zero Waste Humboldt www.zerowastehumboldt.org
- Californians for Alternatives to Toxics www.alt2ox.org
- Coalition for Responsible Transportation Priorities (CRTP) www.transportationpriorities.org
- 350 Humboldt world.350.org/humboldt
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**News From the Center**

*Larry Glass, NEC Board President  
Caroline Griffith, NEC Executive Director*

**War and Climate Destruction**

Human-caused climate change and Putin’s war on Ukraine have the same roots: fossil fuels and our complete dependence on them.

We’ll admit that fossil fuels are not the direct cause of the war that’s clearly driven by the hegemony of Vladimir Putin. The world has struggled to comprehend his motives, which analysts have suggested include expansionism, grievance toward Ukraine, a former Soviet state, and his desire to reassemble what he has described as “historical Russia.” On a deeper level this is about fossil fuel-dependent states and aggression. Whatever is driving Putin, his war machine is fueled by oil and gas and the Russian invasion of Ukraine has the potential to motivate either a dramatic shift to renewable energy sources, or an increase in oil and gas drilling in the U.S.

Russia is the 3rd largest producer of oil in the world, following the U.S. and Saudi Arabia. Vladimir Putin has been able to use his vast oil money to get rid of any domestic political constraints and to build a military and a war chest that finance these kinds of imperialistic adventures. It looks like Putin’s Russia falls into the same category of states that would include Saddam Hussein’s Iraq, and Muammar Qaddafi’s Libya.

As the U.S. put sanctions on importing oil from Russia, it seemed as if we were poised to make the right choice and support a shift to renewables, if not for the climate, then at least for national security. It’s more important than ever that we stay on top of our elected officials and make sure that we take advantage of this opportunity to curb our addiction to oil.

Locally, we desperately need to change our transportation systems and habits, as 54% of our greenhouse gas emissions in Humboldt County come from transportation. And as our friends at CRTP remind us (page 7), electric vehicles are not going to solve the problem. One solution, which our EcoNews Intern Sabriyya Ghanizada has written about (page 7) is improving public transit and shifting the way that we get around. In addition to mode shift, we’ll need to shift our thinking and get away from the American obsession with cars as a lifestyle. Infrastructure shifts and investing in alternative forms of transportation will help make that happen.

Nuclear power keeps rearing it ugly head as a fix for our fossil fuel dependent ways. The argument goes like this “we’ve made significant progress at making nuclear power safe from earthquakes and other natural disasters.” Even if you buy into that propaganda, what about the spent fuels problem? Now we need to look at their vulnerability during conflict. The attack on the Zaporizhzhia and Chernobyl nuclear power plants once again raises the questions: can these ever be made truly safe and is it even worth the risk? For more on the conflict in Ukraine, see page 16.

Speaking of climate change, we’re saddened to hear that a 100-year-old cultural heritage site called the Abbot Pass Hut, a rustic cabin located nearly 10,000 feet above sea level on the border of Alberta and British Columbia in Canada’s Rocky Mountains, will fall victim to the slow motion onslaught of a warming climate. Observations revealed that the slope supporting the hut has eroded, because snow and ice that had once permanently covered the rocky saddle was now melting in the summer. So, despite hundreds of thousands of dollars worth of work to stabilize it, engineers say the hut, which is made of stone, now poses a safety risk to hikers below and cannot feasibly be moved, so it must be dismantled.

**Direct-Action & Citizen Science to Support the NEC and Audubon**

On a different note, it’s time again for Trash-a-thon! Celebrate Earth Week with citizen science, direct-action activism, and fundraising for your favorite non-profit, the NEC! Trash-a-thon raises money for the number of pieces of trash picked up. Anyone can volunteer, either as an individual or in small teams. Leading up to the day of your cleanup, volunteers are encouraged to virtually collect pledges (donations) from their network of family, friends, and co-workers. The deadline to sign up is Friday, April 15. Visit your nec.org/trashathon2022 for more details. All Trash-a-thon participants will be entered into a raffle to win prizes.

And if you like getting out and raising money for environmental advocacy, Birdathon is another way to do that. Whether you are a seasoned birder or just getting into the game, Birdathon is a fun way to support the NEC and the Redwood Region Audubon Society, two organizations that have the community’s back when it comes to environmental threats to wildlife and their homes. Similar to Trash-a-thon, participants gather pledges of 5 cents or more per avian species identified and then get out birding. There are 3 different categories this year: the standard 24-hour outing, the 6-hour blitz and a new category for young birders which is a 2-hour outing. For more information and to sign up or donate, visit www.yournec.org/birdathon. Prizes such as new Nikon Monarch binoculars, a spotting scope and tripod, a pelagic bird watching trip, various dinners, and more will be awarded to the members of the winning teams in each category that bring in the most money.

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The Complications of Cannabis
Supervisors Approve Measure S Tax Cut

Elena Bilheimer, EcoNews Journalist

On February 7, 2022, Humboldt County Board of Supervisors approved an 85 percent cut of cannabis growers’ 2022 Measure S tax bills. This decision came due to pressure from local growers concerned about their ability to stay afloat amidst the various dilemmas facing small farms. These include state taxes, fees, compliance costs, labor fees, the effects of COVID-19, industry-wide overproduction, and competition with larger farms and the still thriving illicit market. While this decision provides some immediate relief for local legal farms, the overall conditions have yet to change in order to address many of the environmental and economic concerns that have arisen for small farms as a result of legalization.

Measure S, approved by 66 percent of voters in 2016, helped “establish a $1 - $3 per square foot, based upon type of grow, annual commercial marijuana cultivation tax,” as stated on the ballot measure. The amount taxed depends on whether the cannabis is grown outside ($1 per square foot), with mixed light ($2), or indoors ($3). The money collected from these taxes is put in the county General Fund that supports road maintenance, hiring of county officials, and other services deemed essential. Despite larger concerns about the county’s budget, they currently have nothing planned to make up for the $12 million loss per year that will result from the tax cut.

Deliberations over the county’s decision to approve the tax cuts were the focus of the meeting in February, with the supervisors going back and forth about the specific percentage at which to cut taxes. The motion eventually passed 3-1, with Second District Supervisor Michelle Bushnell recusing herself due to a conflict of interest. Balancing the needs of their constituents and the needs of the county is obviously complicated for the supervisors, especially when the cause of the issue is too big for the county to fix. As reported in an article exploring California’s Cannabis Crisis published in the Rolling Stone, the negative effects of Proposition 64 (which legalized cannabis in California in 2016) are largely tied to the lifting of the one-acre licensing cap which has allowed corporate businesses to bundle licenses together in order to produce mass quantities of cannabis and outcompete mom-and-pop operations. This has made it extremely difficult for small farms to become legal while utilizing environmentally safe methods of cultivation.

Although not every demand made by Humboldt County Growers Alliance (HCGA) to the Board of Supervisors was met (as articulated on their social media), the original October payment of the 2021 Measure S tax will not be due until September 15, 2022 without penalty, the Measure S taxes for 2022 will be cut by 85 percent, and a decision about the 2023 taxes will be revisited at a later date. HCGA celebrated these successes on their social media, announcing to the community “You spoke, they listened. Humboldt’s cannabis farmers secure significant relief.” However, unless there are larger efforts made to protect small and local farms trying to produce cannabis in an environmentally friendly way, local tax cuts can’t do anything to turn the tide and fight corporate cannabis. For more information on local efforts to reform the cannabis industry, visit cannabisinitiative.org.
Dear EcoNews,

I am the proud owner of an amazing dog my partner and I have rescued from the shelter many years ago. One of our favorite activities is taking him on walks throughout Humboldt. However, my partner and I have different opinions on whether or not to pick up his poop when we are in forested or more wild areas. He thinks that it is better for the poop to be able to biodegrade naturally instead of putting it in a plastic bag and sending it to a landfill, but I feel uncertain as I have heard that it can sometimes spread disease. Could you please explain whether we should be picking up our dog’s poop up in a plastic bag, and if anyone has come up with a better system so we don’t have to use so much plastic?

-Distressed Dog Owner

Hey Distressed Dog Owner!

Thanks for writing to us about the pet waste predicament. We get this question all the time from our customers. The unfortunate answer is that simply leaving our pet’s waste to naturally decompose can be harmful due to the sheer load that would be present, with many Humboldt residents owning pets. The EPA estimates that two or three days’ worth of droppings from a population of about 100 dogs would contribute enough bacteria to temporarily close a bay, and all watershed areas within 20 miles of it. Here are some additional facts about pet waste and why it’s a huge issue!

Dog waste takes about 9 weeks to break down, all while creating an environment for bacteria and mold to grow. A single gram of dog waste can contain 23 million fecal coliform bacteria. Dog waste can also carry diseases that can be passed to wildlife such as whipworms, hookworms, tapeworms, parvo, canine coronavirus, giardiasis, and salmonellosis to name a few. With dog’s scent glands being located in their butt, the smell can disturb local wildlife and overload their senses while foraging. Many of the aforementioned contaminants also can easily be carried into waterways when it rains, affecting not only local wildlife but potentially humans as well. These bio contaminants can also exacerbate algal blooms, which Humboldt waterways already struggle with seasonally.

The use of excess plastic is of course a concern of ours. Luckily there are options available. Simply reusing paper bags or plastic bags you may have lying around the house is a great option. There are plastic free options from brands like Earth Rated (industrially compostable) & Cycle Dog (biodegradable) that allow you to responsibly dispose of pet waste while avoiding plastics. We also get asked about composting dog waste, which, similarly to human waste, the resulting compost shouldn’t be used on edible crops. Parasites and bacteria can live in dog waste including E. coli and salmonella along with several types of worms like ringworm and tapeworm. They can live in the soil for years so it’s best to keep your dog’s waste away from your gardens or from where your animals can get to it. According to the EPA, dog waste is a safe soil additive for revegetation and landscaping when it is composted properly. While it may be safe to compost dog waste, it is not recommended to compost or even flush cat waste. Cat waste can carry toxoplasmosis which can greatly impact wildlife and be carried through birth for generations.

Humboldt Pet Supply hosts a monthly clean-up at the Arcata Marsh during the spring and summer months to help keep our lovely local animal sanctuary clean and poop free. Our next clean-up will be on Earth Day, April 22. We would love your help if you want to join!

Your eco-friendly pet shop,
Humboldt Pet Supply

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Recent EcoNews Reports:

**Housing is an Environmental Issue**

March 12, 2022 – Ask anyone who has tried to look for rental housing lately and they’ll tell you that housing in Humboldt is expensive. Humboldt, like California generally, suffers from a housing affordability crisis brought on chiefly by failing to build enough housing. Our housing crisis is an environmental issue and local green groups are working to support new infill housing development.

**Our Planet is On Fire, but the Supreme Court Might Throw Away the Extinguisher**

March 5, 2022 – Gang Green’s nerdy lawyers — Tom, Matt and Scott — are joined by CalPoly Humboldt’s own professor of environmental law, Jennifer Marlow, to talk about the recent oral argument in West Virginia v. Environmental Protection Agency.

**Build Broadway Better**

February 26, 2022 – Gang Green sits down with Caltrans’ Jeff Pimentel to discuss Caltrans work to improve Broadway for all road users (and not just motorists). Through fixing sidewalks, adding pedestrian crossings, and other changes to the road, we can influence individuals to make safer decisions.

**Is California’s Carbon Credit System a Failure?**

February 19, 2022 – Gary Hughes of Biofuelwatch joins the show to talk about the creative accounting of “net zero” carbon emissions. Can we “offset” emissions or is this sending us down the wrong path? Gary discusses Biofuelwatch’s new report, Carbon Capture or Captured Futures?, which examines the politics and influence of the fossil fuel industry in shaping California’s climate policy.

**What’s Next for Eel River Dams?**

February 12, 2022 – Friends of the Eel River discuss developments in the thrilling drama of Eel River dam removal. It’s a story of injustice and opportunity—a 100-year-old water diversion that takes from one watershed to give to another, and the chance to correct the harms by returning salmon and steelhead to excellent cold-water habitat locked behind the dams.
Smokey Bear: A Savior or An Agent? Fire and its Role in Indigenous Environmental Knowledge

Farzad Forouhar

Since the beginning of time, forests have had a vital role in the progress of humankind by providing precious natural resources and necessary goods, including timber, fodder, and fuelwood. Accordingly, forests obtained a significant part in creating individual and collective identities by articulating the concepts of materiality, place, and landscape; the forest is not merely a natural ecosystem of trees, fauna, and flora, but it is also constructed as a landscape of ecology, economy, custom, policies, culture, legal status, and land use. In the context of settler colonialism, Indigenous subsistence rights and customary uses of land have been disenfranchised, undermined, and eliminated through the use of fire suppression and fire exclusion policies which target the Indigenous right to subsist, cultural identity, sovereignty, and traditional knowledge.

The settler-colonial state first and foremost alienates Indigenous people from their land. The separation of land and customary uses of land have drastic impacts on understanding the environment and the construction of collective colonial and environmental subjectivities among Indigenous communities. Suppose the state needed to use overt violence to enforce land acquisition and dispossession of Indigenous communities. In that case, certain conservation interventions like fire exclusion policies help the state to exert its hegemony and secure its sovereignty over the land and resources through processes of covert and slow ecological violence. Fire suppression policies cause slow violence for the fire-dependent ecosystems and cultures, which rely on forests as a resource for their livelihood. The dominant narrative regards the perils of forest fire, while an alternative narrative considers fire as a vital part of the political ecology of fire-dependent cultures and ecosystems.

Fire suppression is a relatively new phenomenon in the United States. Indigenous people utilized fire as a means of resource management for thousands of years and developed sophisticated ecological knowledge for using fire. Early European settlers learned the use of fire from Indigenous people and applied it not just as a tool to manage resources but also to alter the land and create agricultural land from the forest. By establishing permanent settlements, fire became a hazard to their resources, and settlers began to suppress the fire. As the Progressive Conservation movement gained prominence in the late 1800s as a response to intensifying public concerns over mishandling public domain lands and resource scarcity, an idea of suppressing any kind of fire was initiated. Fire suppression was considered as a method of management for the conservation of natural resources. Western science provided an objective understanding of nature, which disregarded the traditional ecological knowledge of Indigenous people. The Federal government used such discursive and objective knowledge to control vast areas of public domain lands and established the United States Forest Service (USFS) in 1905 to administer those lands.

A series of fires in Idaho, Montana, and California in 1910 resulted in the government enacting new legislation for fire suppression. The Weeks Act of 1911 was the first of these legislations, which expanded fire protection on public and private lands. The Clarke-McNary Act of 1924 extended the cooperative fire protection programs, which provided significant funding to the states for fire protection, overseen by the USFS. In 1935 the state and federal governments initiated a paramilitary-like program to eliminate wildfires through the rapid mobilization of firefighters, equipment, and technology. During World War II, the Forest Service launched cooperative agreements with the Office of Civil Defense and the Department of Defense, and wildfire became entangled with national defense rhetoric. The USFS military connections helped the institution gain access to military surplus and machinery after the war, which helped it militarize fire suppression and extend its geographical reach. The post-war period was the pinnacle for developing equipment and scientific research, during which the USFS, its private contractors, and state foresters were also able to triple the appropriation for Clarke-McNary funds, which helped to initiate and infuse the cooperative programs. During this period, the USFS launched its most successful ad campaigns, creating its icon, Smokey Bear.

The original Forest Service posters were quite scary in nature. They had the face of a Japanese soldier with a lighted match and a menacing grin and a slogan that said “Careless Matches Aid the Axis.” After the war ended, the Forest Service needed something strong to protect the forests, but something animated to appeal to children and families. And that is why the first Smokey is a sweet-looking bear that wears a pair of jeans while holding a bucket of water that he is pouring over the campfire. Gradually, Smokey wore a forest ranger hat and then held a shovel, and over time his classic image was shaped. The campaign was deemed successful as the number of forest fires declined since the inception of the Smokey campaign. But in recent years, fires have become more extensive and destructive, which scientists have called the Smokey Bear effect, because this campaign emphasizes that all fires are destructive. Such narratives exclude fire from a landscape that is fire-dependent and adapted to fire. Accordingly, when fire is removed from the landscape and is suppressed, more fuel (dead leaves and trees, shrubs, and dried grassland) has built up. That, in combination with the impacts of climate change and the influx of population in areas that used to be wilderness areas, has led to more intense and devastating fires, such as the one that destroyed the town of Paradise, CA in November 2018.

A few generations of Americans have grown up under Smokey’s accusing gaze. He tells us that our carelessness starts forest fires. His sole interest is to ensure our ecological rectitude by complying with his rules. He needs only his ranger hat to remind us of his police duties and his practical blue-collar association with security and productivity. Smokey is the ultimate administrative mouthpiece - not an actual servant of the public who owns the forest but the embodied threat of punishments and governmental disapproval of those who would endanger what will become logs to build more houses and paper and pencils that sketch development plans threatening the bear and his habitat more than any fire does. However, Smokey Bear might seem like an innocuous symbol of fire prevention that helps the environment, but is, in fact, a symbol of fire suppression and fire exclusion policies that have an opposite impact on the fire-dependent ecosystems and causes slow violence for the fire-dependent cultures of Indigenous people that rely on forests and controlled burnings as a resource for their livelihood. Smokey Bear is an excellent example of an institutionalized, power-laden environmental management regime that combines the power of the USFS and the state to create a dominant discourse. Smokey Bear is an example of apolitical ecology that masks the relationships it describes and masquerades as a natural or neutral or normal course of events. Smokey Bear conceals the settler-colonial violence imposed by current institutionalized, power-laden environmental management regimes and instead blames “You” because the carelessness of “You” can cause wildfire and “Only you can prevent forest fire!” (For a longer version of this article, visit yourne.org/econews/apr2022)
What is the Role of Rest in the Revolution?

Elena Bilheimer, EcoNews Journalist

Amidst the various crises playing out on the global stage, the desire to create and implement change has never felt so urgent or necessary. For many people, the feelings of alarm they are experiencing as a result of these crises is coupled with a pull to action and the need to get involved in as many efforts to combat injustice as possible. There is constant messaging about the need to “fight” climate change or to “solve” various social justice issues, all of which are very important and pressing. While each of these issues deserve time and energy, incorporating rest as part of the revolution can help reframe many of the paradigms that capitalism and grind culture have so successfully universalized.

In both activist circles and in everyday life, productivity and the ability to get things done are seen as the ultimate accomplishment and assertion of worth. Tricia Hersey, founder of The Nap Ministry and creator of the ‘Rest is Resistance’ and ‘Rest as Reparations’ frameworks, challenges this notion through Collective Napping Experiences, immersive workshops, performance art installations, and her Resurrect Rest School. As part of her framework, rest is a racial and social justice issue, as sleep deprivation and the treatment of certain bodies as disposable was central to colonization and slavery. This has carried over into capitalism, as marginalized communities often bear the brunt of a system that relies on continuous output and invisibilized labor. “When you talk about grind culture, grind culture is simply white supremacist work culture. White supremacist work culture is an extractive culture. It’s hustle culture. It’s seeing productivity as a function of your worth. Whatever white supremacy is doing on a global scale to us and has done, white supremacy has been using the body as a tool for destruction since the beginning of time,” said Hersey in an interview on For the Wild podcast.

In addition to Hersey’s work, author and scholar Bayo Akomolafe is well known for his writing and speaking on the importance of slowness and reframing the different crises facing the world. He focuses on the importance of challenging binaries, as rest versus non-rest are not opposite states of being that cannot coexist together. “The time is very urgent – we must slow down,” wrote Akomolafe in an article on his website. Slowing down has benefits not only for people and movements, but also for the earth, as the earth and the resources it provides are the basis for how fast paced production can occur. Activist and author adrienne maree brown furthers this idea as she writes on her blog that “there is such urgency in the multitude of crises we face, it can make it hard to remember that in fact it is urgency thinking (urgent constant unsustainable growth) that got us to this point, and that our potential success lies in doing deep, slow, intentional work.”

The work of Akomolafe, Hersey, and brown have inspired Laura Johnson, a Geography and Environmental Studies lecturer at Cal Poly Humboldt, to open A Restful Space, a small business which features in-person ‘restful healing sessions’ in Eureka while also offering a self-paced online course entitled Yoga for Ecological Grief. Her focus is on using restorative yoga and other complementary healing modalities with a justice lens in order to restore nervous system balance and incorporate rest as a fundamental tenet of societal change. “When we’re reacting from a place of urgency, we’re reacting from the sympathetic nervous system, a state of fight-or-flight. This is a place of fear-based scarcity thinking, of ‘efficiency’ and ‘productivity’ thinking...all of this is what drives capitalism and all of this is what needs to be upended – we need to pause and rest and breathe, we need to balance our nervous systems and tap into our innate compassion, we need to feel and process the heavy emotions, we need to connect to ourselves and each other, and we need to access a place of gratitude and abundance, understanding that in fact there is enough, that scarcity and urgency is an illusion and a means of control.”

It is important to note that rest isn’t an excuse to do nothing, but rather a chance to reflect and ground so as to engage in the issues with more creativity and flexibility. Rest can take many forms, and can manifest differently depending on identity, culture, or circumstance. It doesn’t need to look like a spa getaway or an hour of meditation everyday, and in Hersey’s work she invites people to challenge the notion that rest is a privilege accessible only to those with disposable income and abundant time. Making rest accessible is important to Johnson, who offers her sessions and online course at a sliding scale, allowing people to “consider not only their current access to funds but also their structurally determined access to rest, breath, and self-care.” While rest is a human right and is necessary for everyone, there are times when those in positions of power need to not rest and instead leverage their privilege so as to make space for those experiencing oppression to get the rest they need.

“It’s really vital that all healing and regenerative work have a decolonial lens, justice framework, and post-capitalist context. And these practices have to not only be accessible to all bodies, they have to be particularly accessible to those who have been denied access to rest and to the time, space, and resources for processing grief and trauma,” said Johnson.

Resources
- A Restful Space (arestfulspace.com)
- Yoga for Ecological Grief (www.a-restful-space.teachable.com/p/yoga-for-ecological-grief)
- Bayo Akomolafe’s website and writings (bayoakomolafe.net)
- The Nap Ministry (thenapministry.wordpress.com)
- adrienne maree brown (adriennemareebrown.net)
- Francis Weller (francisweller.net)
- For the Wild Podcast Episodes:
  • (forthewild.world/listen/bayo-akomolafe-on-slowing-down-in-urgent-times-155)
  • (forthewild.world/listen/tricia-hersey-on-rest-as-resistance-185)
- Where Do We Go From Here: Chaos or Community? By Martin Luther King, Jr.
- How to do Nothing by Jenny Odell

Elena Bilheimer graduated in winter of 2021 with a degree in environmental studies and a minor in journalism from Cal Poly Humboldt. In her studies she mainly focused on the importance of incorporating social justice with environmental activism to work towards creating a more sustainable world. Some of her passions include being outside, reading, and cooking.
New EaRTH Center Approved for Old Town Eureka

Sabriyya Ghanizada, EcoNews Intern

The City of Eureka has voted to approve the EaRTH Center, an intermodal living space proposed on the parking lots of 3rd and H Streets in Old Town Eureka. Connie Stewart, the Executive Director of Initiatives at Cal Poly Humboldt, spoke in support of the center at a special city council meeting on Wednesday, February 9. “It’s a multi-modal transit center,” said Stewart during a Zoom interview. “Similar to what a lot of other communities have built long ago, which is creating a space for efficient transportation for folks that use alternative transportation, combining it with housing and shopping and other amenities.”

The current space is a parking lot for businesses such as Lost Coast Brewery and Redwood Retro. Rick Littlefield, a property owner across from the proposed site, was one of many Eureka business owners who attended the meeting to express their opinions about the project.

“There are so many things I like about the project, I like the sustainability of it, the infill. I like the way that transportation would be reorganized somewhat,” said Littlefield. “But I have some problems with this to be honest, to take out the primary parking lot in the heart of downtown, the old town area, is very concerning. So I do like this project, but I don’t like it here.”

Servitas, a woman-owned property management company contracted to help build the EaRTH Center, surveyed the nearby lots but excluded the proposed lot during their presentation at the council meeting. City Manager Miles Slattery addressed the parking mitigation during the special meeting. “I know there’s some concern for not showing the lots... the reason for that was to demonstrate that out of the 78 spaces that are gonna be gone, there’s more than ample room to make up for that and the mitigation for that was the shuttle.” An electronic shuttle is proposed to travel before 8:00 am and after 5:30 pm on a Monday through Friday basis.

The center will feature several modes of transportation and rideshare, including fuel cell electric buses (FCEBs) which are being built specifically for the project courtesy of New Flyer. Writing the proposal for the grant began roughly four years ago by Greg Pratt from the Humboldt Transit Authority (HTA) and Peter Lehman of Schatz Energy Reserach Center at Cal Poly Humboldt. The grant is a part of a larger project to make sure Humboldt County complies with the Innovative Clean Transit (ICT) regulation mandated by the California Air Resources Board (CARB).

Schatz has been a pioneer in alternative energy, such as hydrogen fuel, for the last thirty years. Hydrogen fuel is non-toxic, carbon free and if made with wind or solar energy, 100% renewable. The hydrogen-fueled buses by New Flyer are particularly favored over battery-operated buses which can handle shorter city routes but not the new proposed routes that will connect Humboldt County transit riders to Ukiah, the Smart Train and the Bay Area via the proposed Redwood Coast Express (RCX).

“If I could step back for a minute and say that we’re trying to save the earth here,” said Lehman when answering questions regarding the grant. “Probably the hardest part of addressing our emission of carbon dioxide is transportation and getting people out of their cars. I mean making power renewables... we’ll figure that out, but getting people to stop driving their own personal cars that’s going to be... real tough... and this project is an effort to do that, to get people out of their cars, reduce vehicle miles traveled and provide a way for people to get from Humboldt County to the Bay Area is one thing that we’re going to do and we’re doing it with zero emission fuel-powered buses.”

The EaRTH Center is proposed to have a total of 31 apartment units dedicated to students, workforce members, traveling doctors and nurses. If the grant is approved, the units may provide up to 90 Cal Poly Humboldt and College of the Redwoods students with secure housing. A slight but welcome respite as Cal Poly Humboldt’s polytechnic proposition includes doubling its size to 12,000 students by the end of the decade. Twelve of the units are proposed for workforce housing and four for doctors and nurses. In order to secure the housing, there will need to be buy-in from the University, local hospitals and businesses to make sure the space is dedicated to the proposed residents.

“There’s two ways that it helps,” said Stewart. “The Cal Poly model is learning by doing, so part of it is, as a University with expertise in alternative energy, being of service to the region by providing the region with assistance to build projects that are part of the emerging industry, technology and environmental solutions. Then there’s the piece about student housing: the opportunity to start putting housing in other places that are just dedicated for students.”

A way to get people out of their cars is to make sure that transportation options are better than their personal cars. Having the convenience of using transportation made available where they live can give students time to study or relax before their classes while not having to worry about finding parking.

Housing insecurity is an emerging issue around America and Humboldt County is no exception to the crisis. The proposed 31 units were supported by Eureka residents with some even asking for the possibility of providing more units by creating a taller building.

Currently, the City of Eureka has no central transit center. Despite having a Regional Transportation Plan in place for over 20 years that would require one. If the grant is approved in June, the EaRTH Center, including the 11 New Flyer FCEBs that will be stationed and fueled at the center, will be a demonstration of cutting edge technology that could set the tone for sustainable public transportation all across America.

“That’s the real goal, to reduce the vehicle miles traveled in Humboldt County and in California,” said Lehman. “It’s the right thing to do. It’s the right way to do it for the Earth.”

Sabriyya Ghanizada is an Intern with EcoNews for the spring. A Journalism News major at Cal Poly Humboldt, Sabriyya has written published pieces for each of the student-run publications: The Lumberjack, El Lenador and Osprey Magazine. Currently, she is the Editor-In-Chief of Osprey running a humble nine-person team. Sabriyya currently has her eyes set for graduation in the spring 2022.
Se aprueba un nuevo Centro EaRTH para Old Town Eureka

Sabriyya Ghanizada, EcoNews Intern

La ciudad de Eureka votó para aprobar el centro regional de tránsito y vivienda en Eureka (EaRTH centro, un espacio habitable intermodal propuesto en los estacionamientos de las calles 3 y H en Old Town Eureka. Connie Stewart, directora ejecutiva de iniciativas de Cal Poly Humboldt, habló a favor del centro en una reunión especial del consejo de la ciudad el miércoles 9 de febrero. “Es un centro de tránsito multimodal”, dijo Stewart durante una entrevista de Zoom. “Similar a lo que muchas otras comunidades han construido hace mucho tiempo, que está creando un espacio para el transporte eficiente para las personas que usan transporte alternativo, combinándolo con viviendas, tiendas y otras comodidades”.

El espacio actual es un estacionamiento para empresas como Lost Coast Brewery y Redwood Retro. Rick Littlefield, dueño de una propiedad frente al sitio propuesto, fue uno de los muchos dueños de negocios de Eureka que asistieron a la reunión para expresar sus opiniones sobre el proyecto.

“Hay tantas cosas que me gustan del proyecto, me gusta su sostenibilidad, el lleno. Me gusta la forma en que se reorganizaría un poco el transporte”, dijo Littlefield. “Pero, para ser honesto, tengo algunos problemas con esto, sacar el estacionamiento principal en el corazón del centro de la ciudad, el área del casco antiguo, es muy preocupante. Así que me gusta este proyecto, pero no me gusta aquí”.

Servitas, una empresa de administración de propiedades dirigida por una mujer contratada para ayudar a construir el Centro EaRTH, inspeccionó los lotes cercanos pero excluyó el lote propuesto durante su presentación en la reunión del consejo. El administrador de la ciudad, Miles Slattery, abordó la mitigación del estacionamiento durante la reunión especial. “Sé que existe cierta preocupación por no mostrar los lotes... la razón de eso fue demostrar que de los 78 espacios que se van a ir, hay espacio más que amplo para compensar eso y la mitigación de eso fue el autobús de enlace. ” Se propone un servicio de autobús de enlace electrónico para viajar antes de las 8:00 am y después de las 5:30 pm de lunes a viernes.

El centro contará con varios modos de transporte y viajes compartidos, incluidos los autobuses eléctricos de pilas combustible (FCEB) que se están construyendo específicamente para el proyecto por cortesía de New Flyer. La redacción de la propuesta para la subvención comenzó hace aproximadamente cuatro años por Greg Pratt de la Autoridad de Tránsito de Humboldt (HTA) y Peter Lehman del Centro de Energía Schatz en Cal Poly Humboldt. La subvención es parte de un proyecto más grande para asegurarse de que el condado de Humboldt cumpla con la regulación Innovativa de tránsito limpio (ICT) ordenada por la Junta de Recursos del Aire de California (CARB).

Durante los últimos treinta años, Schatz ha sido pionero en energía alternativa como el combustible de hidrógeno. El combustible de hidrógeno no es tóxico, no contiene carbono y, si se fabrica con energía eólica o solar, es 100 % renovable. Los autobuses que funcionan con hidrógeno de New Flyer son particularmente preferidos sobre los autobuses que funcionan con baterías que pueden manejar rutas más cortas en la ciudad, pero no las nuevas rutas propuestas que conectarán a los pasajeros del transporte público del condado de Humboldt con Ukiah, el Smart Train y el Área de la Bahía a través de la propuesta Redwood Coast Express (RCX).

“Si pudiera dar un paso atrás por un minuto y decir que estamos tratando de salvar la tierra”, dijo Lehman al responder preguntas sobre la subvención. “Probablemente la parte más difícil de abordar nuestra emisión de dióxido de carbono es el transporte y sacar a las personas de sus automóviles. Me refiero a producir energías renovables... ya lo resolveremos, pero conseguir que la gente deje de conducir sus propios coches personales va a ser... muy difícil... y este proyecto es un esfuerzo por hacer eso, sacar a la gente de sus coches, reducir las millas recorridas por vehículos y proporcionar una manera para que las personas lleguen del condado de Humboldt al Área de la Bahía es algo que vamos a hacer y lo haremos con autobuses que funcionan con combustible de cero emisiones”.

Se propone que el Centro EaRTH tenga un total de 31 unidades de apartamentos dedicados a estudiantes, trabajadores, médicos y enfermeras itinerantes. Si se aprueba la subvención, las unidades pueden proporcionar alojamiento seguro a hasta 90 estudiantes de Cal Poly Humboldt y College of the Redwoods. Un respiro leve pero bienvenido ya que la propuesta politécnica de Cal Poly Humboldt incluye duplicar su tamaño a 12,000 estudiantes para fines de la década. Doce de las unidades se proponen viviendas para trabajadores y cuatro para médicos y enfermeras. Para asegurar la vivienda, será necesario que la universidad, los hospitales locales y las empresas se comprometan a garantizar que el espacio esté dedicado a los residentes propuestos.

“Hay dos maneras en que ayudar”, dijo Stewart. “El modelo de Cal Poly es aprender haciendo, por lo que parte de esto es, como universidad con experiencia en energía alternativa, estar al servicio de la región al brindar asistencia para construir proyectos que son parte de la industria emergente, tecnología y soluciones ambientales. Luego está la parte sobre viviendas para estudiantes: la oportunidad de comenzar a colocar viviendas en otros lugares que solo están dedicados a los estudiantes”.

Una forma de sacar a la gente de sus autos es asegurarse de que las opciones de transporte sean mejores que sus autos personales. Tener la comodidad de usar el transporte disponible donde viven puede darles a los estudiantes tiempo para estudiar o relajarse antes de sus clases sin tener que preocuparse por encontrar estacionamiento.

El condado de Humboldt no es excepción a la crisis de la inseguridad de vivienda que es un problema emergente en los Estados Unidos y. Las 31 unidades propuestas fueron apoyadas por los residentes de Eureka y algunos incluso pidieron la posibilidad de proporcionar más unidades mediante la creación de un edificio más alto.

Actualmente, la Ciudad de Eureka no tiene un centro de tránsito central a pesar de tener un Plan de Transporte Regional vigente por más de 20 años que requeriría uno. Si la subvención se aprueba en junio, el Centro EaRTH, incluidos los 11 New Flyer FCEB que estarán estacionados y alimentados en el centro, será una demostración de tecnología de punta que podría marcar el tono para el transporte público sostenible en todo Estados Unidos.

“Ese es el verdadero objetivo, reducir las millas recorridas por vehículos en el condado de Humboldt y en California”, dijo Lehman. “Es la cosa justa que hacer. Es la forma correcta de hacerlo por la Tierra”.

As more and more Americans make the transition away from fossil fuels and towards electric appliances and vehicles, we start to hear familiar questions about how sustainable these technologies really are. Scarce metals like nickel, cobalt, gold, and manganese are critical ingredients in the batteries and processors that power our smartphones and electric cars. But where do they come from? Most of the time, they're mined in countries like Chile, Argentina, and the Democratic Republic of Congo. Human rights abuses and environmental destruction have brought increased scrutiny on the impact of these mines on humans and the environment, so many companies have begun to explore mineral deposits on the deep sea floor. Mining the seabed can be just as destructive as conventional mining, but the remote location and less obvious environmental impact have helped shield the practice from scrutiny. Fortunately, environmental groups like Surfrider and the Monterey Bay Aquarium have been sounding the alarm for years—and their hard work has already paid off. Oregon and Washington have banned the practice, in 1991 and 2021 respectively. A bill currently making its way through the state legislature would add California to that list.

The problems with seabed mining are numerous and severe. Pew Charitable Trusts, an organization that advocates against the practice, claims that it can have wide-ranging effects on almost every aspect of marine life. Seabed mining usually involves a processing ship with an attached vacuum-like apparatus that rolls along the seafloor, sucking up everything in its path. Mining techniques vary by depth—for shallower waters, extraction looks a lot like dredging. In deep waters, giant machines scrape up the entire top 12 inches of seafloor. Needless to say, any creatures living on the seafloor get scraped up too. In many ways, seabed mining is like underwater clearcutting. And just like on land, it has disastrous consequences for biodiversity. According to the article "Shedding Light on Deep-Sea Biodiversity—A Highly Vulnerable Habitat in the Face of Anthropogenic Change" by Eva Paulus, over 90% of the deep sea remains unexplored, and could potentially contain more biodiversity than terrestrial rainforests. Corals, sponges, and deep sea fish and invertebrates contribute to thriving ecosystems that store carbon and support the marine food web.

Beyond its direct harm to deep sea life, seabed mining can also have far-reaching effects on the marine environment as a whole and the human economies that depend on it. The mining process kicks up huge plumes of silt that can travel for miles, obscuring clear waters and smothering sea life with toxic heavy metals. There's also evidence that these plumes disrupt the marine food web by inhibiting plankton reproduction, which has a direct impact on California fisheries. Plankton are microscopic critters that make up the bottom of the marine food chain, so changes in their population have a big impact. And if that damage isn't enough, seabed mining machinery creates a level of noise pollution that could drown out whale calls and other underwater communication.

This destructive practice can be overwhelming to take in. We are already hypervigilant towards logging, salmon runs, water levels, pollutants, and much more. How much energy do we have to spare for the deep sea? Fortunately, we are already well on our way to a complete ban on seabed mining within three miles of the entire West coast of the US. Thanks to efforts from organizations like Surfrider, the Monterey Bay Aquarium, and Pew Charitable Trusts, California is poised to join Oregon and Washington in banning the practice in state waters. A bill introduced by Assemblymember Luz Rivas (D-La Habra) would prohibit the State Lands Commission from selling any mineral extraction leases on submerged land within three miles of the coast. The bill, AB-1832, is intentionally designed to leave out some minerals like nickel and cobalt, which are used in batteries and could inspire pushback from the mining industry. The bill's authors think that the market for these minerals is disappearing fast as battery technologies change. Of more concern are the deposits of gold and titanium off California's north coast, as well as phosphorus off the Southern coast, both of which the bill covers.

AB-1832 would deal a significant blow to the seabed mining industry, and leaves room for more restrictions in the future. For example, California could ban the handling, storage, and transportation of deep sea minerals in our ports and waters. We could also target the extraction of sand, gravel, and rocks - an industry with similar environmental impacts. And while we wait for the government to act, we can make a difference by looking for used options when buying electronics. As with most issues of resource exploitation, the best way to reduce harm is to reduce consumption.
Dioxin Hot-Spot in Arcata Marsh To Be Assessed

Jen Kalt, Humboldt Baykeeper Director

On March 7, Humboldt Baykeeper, the City of Arcata, and the U.S. Environmental Protection Agency’s Brownfields Program staff met for a tour of a contaminated site at the Arcata Marsh and Wildlife Sanctuary. This site has been on our radar since 2015, when a dioxin hotspot was identified in nearby Humboldt Bay sediments during a study of areas proposed for wetland restoration.

The field tour was the kickoff for an EPA-funded effort to identify the extent of contamination on the site. The funding was awarded for a proposal developed over the past year by Baykeeper and City staff. US EPA consultants will research the history of the site to develop sampling plans. They will then sample soil and groundwater, and will use the results to develop a cleanup plan.

The site was once used as a lumber mill—one of many that lined the banks of Butcher Slough, the tidal stretch of Jolly Giant Creek. After the mill closed, the City dug a new channel in the late 1980s to restore the slough to its original location, before the tidal wetlands were filled. Many of the lumber mills that operated from the 1940s to the 1980s used a wood preservative called pentachlorophenol (“penta”), which contained dioxins and furans. These extremely toxic, very long-lasting chemicals are known to cause reproductive damage and cancer. The use of penta for treating lumber was banned in 1987 due to its toxicity, but contaminated soil and groundwater persist at many of these mill sites.

Accidental spills and carelessness caused contamination around penta dip tanks, spray booths, and conical burners used to dispose of wood waste. In many instances, the contamination has never been cleaned up, and it continues to impact our environment. Humboldt Bay’s sediment, fish and shellfish contain varying levels of these toxic compounds. Dioxins become more and more concentrated as they move up the food chain (known as “bioaccumulation”). Fish-eating birds such as eagles and osprey are at risk, along with marine mammals and people.

In 2018, Baykeeper sampled sediment from several parts of Butcher Slough and found high dioxin levels just downstream from the historic site of a conical burner, one potential source of the dioxins. These large, cone-shaped metal structures were used to burn wood waste from lumber mills. Burning treated mill waste resulted in high concentrations of dioxins. But dioxin contamination is often found in other areas of mill sites, such as the “green chain” where fresh-cut lumber was dipped or sprayed with penta to prevent fungi from ruining the wood.

Dioxins are also produced from other types of combustion, including firewood in woodstoves, forest fires, and industrial processes. Even car exhaust generates some dioxins, which are then deposited in the atmosphere and in soil. But these processes typically result in much lower dioxin levels and a different chemical signature than are found at lumber mills that treated wood with penta.

Dozens of lumber mills once operated around Humboldt Bay, lining many tributaries like Jolly Giant Creek and Janes Creek in Arcata. The Little Lake Industries mill on South I Street was one of many mills that once operated along Butcher Slough.

In 2020, the City received a US EPA Brownfield Assessment grant for testing at Little Lake Industries to determine the extent of contamination and develop cleanup plans. In January, the US EPA also approved funding to assess several other contaminated sites in Arcata, including the Arcata Volunteer Fire Department property between Janes Creek and M Street.

Threatened and Impaired Designation

In 2006, Humboldt Baykeeper requested a formal designation of Humboldt Bay as Threatened and Impaired by dioxins. The State Water Resources Control Board agreed and scheduled a recovery plan for 2019. That plan was unfortunately delayed until 2025, but the Threatened and Impaired designation has enabled us to successfully advocate for dioxin sampling before dredging, redeveloping former industrial sites, and other projects where ground disturbance has the potential to remobilize contamination and pollute waterways. Several major sites have been partially cleaned up, including a former boat yard on Tuluwat Island, the former Simpson Plywood Mill in Eureka, and the former Sierra Pacific Industries Mill in Manila.

Rising Sea Level and Groundwater

As sea level rises, groundwater beneath these sites will also rise, potentially mobilizing contamination into the bay, nearby stream channels, or groundwater aquifers. Cleaning up these sites before that happens is critical to the health of the bay ecosystem and the people who rely on it.

According to the California Ocean Protection Council’s 2018 projections, sea level in the Humboldt Bay area is expected to rise 1 foot by 2030, 2 feet by 2050, and 3 feet by 2060. But these projections may be outdated: in December, scientists at the American Geophysical Union Fall meeting reported that Antarctica’s Thwaites Glacier is likely to collapse within 5 to 10 years, which could result in an additional 2 to 10.8 feet in sea level rise.

The primary impacts from sea level rise are increased flooding and erosion. Sea level rise will expand the area vulnerable to flooding during major storms, as well as in the rare but catastrophic event of a major tsunami. Sea level rise will also push groundwater closer to the surface, compound flooding and impede drainage, pollute wells with saltwater, and mobilize contaminated groundwater in low-lying areas.

People, infrastructure, and property are already located in areas vulnerable to flooding. Sea level rise will cause more frequent—and more damaging—floods to those already at risk and will increase the size of the coastal floodplain, making new areas vulnerable to flooding.

As sea levels and groundwater rise, flooding will become more and more of a nuisance, impacting road access, sewer and water lines, and other major infrastructure. We need to start planning now for what we know we’ll be facing in the coming decades. We can debate the precise year Highway 101 will be flooded on a monthly basis, or we can plan for the inevitable before it becomes an emergency. We have the choice of planning relocation or waiting for a catastrophe that puts people, property, and the environment at risk. For more information, visit www.humboldtbaykeeper.org

WHAT IS A BROWNFIELD?

Brownfields are contaminated properties that must be cleaned up before they can be redeveloped or restored. In many communities, vacant lots contaminated by past industries sit unused for years because the current owners lack the resources to clean them up to meet current standards. Buying property without investigating past uses and the potential for contamination can leave new owners liable, regardless of who is actually the responsible party. Private and public entities are eligible for Brownfield Assessment grants. Government agencies, tribes, and non-profit organizations are eligible for cleanup grants. Private landowners are eligible for low-interest loans for cleanup of contamination. For information about the US EPA Targeted Brownfield Program, visit www.epa.gov/brownfields.
Big Irrigators Under Scrutiny for Fish-Killing Practices in Shasta River

Tom Wheeler, EPIC Executive Director

EPIC is joining forces with Friends of the Shasta River in challenging fish-killing permits for large ranchers along the Shasta River. In a letter sent on February 24, the Western Environmental Law Center notified the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS) of the group's intent to challenge its flawed Shasta River safe harbor program in federal court. The NMFS safe harbor program provides legal immunity for harming or killing endangered species in exchange for habitat improvements — at least, that's how it is supposed to work. On the Shasta River, large, rich landowners have committed to minor improvements in practice, insufficient to improve conditions in the river to actually enable recovery. In return, NMFS has provided them cover against enforcement of the law.

The Shasta River was once one of the most important tributaries to the Klamath River, however mismanagement of the river through diversions and alterations have resulted in the near-extinction of its salmon. The damage wrought is both historic and from long-standing structural changes to the river, such as Dwinnell Dam operated by the Montague Water Conservation District, but a significant portion of the damage is from routine and ongoing practices, such as water diversion and irrigation practices. In sum, the river is too hot and polluted to support salmon.

“We are disappointed that the federal government has given a free pass to billionaire ‘ranchers’ at the expense of the Shasta River and its threatened coho salmon,” said Tom Wheeler, executive director of EPIC. “At a time when we are investing hundreds of millions of dollars in the Klamath system, including removing four dams, endorsing practices that leave the Shasta River inhospitable to wild fish is unconscionable.”

NMFS' Shasta River safe harbor agreements are purportedly intended to address the rapid decline in coho salmon in the Shasta. While these agreements with 14 water diverters are intended to provide a “net conservation benefit,” they let diverters off the hook for the damage they cause to the river. The cumulative benefit of all 14 agreements, even if they were all successfully implemented, would not be nearly enough to halt the spiraling decline in coho numbers, much less assure recovery of the species.

“We are taking this step with considerable reluctance,” said Andrew Marx, former board president of Friends of the Shasta River. “During the safe harbor planning process, a coalition of Tribal and conservation groups provided detailed comments outlining substantive concerns over the proposed Shasta River safe harbor agreement. But those comments were mostly ignored. Over the last year, our group expressed our concerns with the safe harbor agreement through briefings and dialogue with agency staff. Unfortunately, our concerns were again ignored. The agency has been unwilling to alter the program in any substantive way, forcing us into the courtroom.”

“The Shasta River safe harbor agreements represent a fundamental misuse of the Endangered Species Act and its permit provisions,” said Sangye Ince-Johannsen, attorney at the Western Environmental Law Center. “We intend to challenge a number of legal deficiencies underlying NMFS’s decision to enter the agreements and grant the permits to the landowners. At bottom, it just doesn’t pass the straight-face test to say that permits that allow landowners to continue to harm and kill threatened salmon somehow ‘enhance the survival’ of the species or provide a ‘net conservation benefit.’”

“We are seeking a restructuring of how much-needed federal and state assistance for Shasta River restoration is conceived and implemented,” said Bill Chesney, retired California Department of Fish and Wildlife fisheries biologist and Friends of the Shasta River board member. “Agencies first need to recommend and implement science-based flow and temperature standards sufficient for coho recovery in the Shasta River. That needs to come first — not just as an afterthought once the safe harbor participants have already been given immunity for their destructive practices.”

The Shasta River was once the most important salmon-producing tributary of the Klamath River. Its fish have been an essential component of traditional Tribal livelihoods and culture. However, the river’s productivity has greatly diminished due to excessive diversions — which in 2021 virtually dewatered the river on occasions.

Parks Creek is the Shasta’s most potentially productive and agriculturally compromised tributary within safe harbor lands. Photo credit: Credit: Andrew Marx

Shasta River salmon habitat at Big Springs. It was once known as Puru-Hey-Ee by the Native Shasta people. Photo Credit: Andrew Marx
RRAS Photo Contest Results!

By Ann Constantino

Redwood Region Audubon Society would like to thank the 25 entrants to RRAS’ photo contest. These moments of interaction with birds were collected in photographic form, creating a true celebration of our avian friends, and our connection to them. Contestants submitted work in several categories including specific species or combinations of mixed species, species whose native language names were submitted, and even the tricky task of finding all local members of the nuthatch family!

The judging process demonstrated what a deep appreciation of birds and nature is held by local residents. All photos, regardless of technical quality, difficulty of shot, or artistic merit, beautifully displayed moments of human to bird connection, conveyed in a frozen frame of time through which that sense of connection radiates. We see this as a celebration rather than a competition and realize there were several great shots who are not official “winners.” So, keep it up, and remember you can submit a photo or image, along with a couple of contextual paragraphs, to the editor of The Sandpiper, at any time throughout the year. See some of the photographs submitted throughout these pages, and all photos may be viewed on our website.

Above: “Top Four” winner; Wood Duck duckling, by Mary Ann Machi.

(See more contest results on page 3 of The Sandpiper)

RRAS Field Trips in APRIL

Sat. April 2nd – 9-11am. Join trip leader Janelle Chojnacki for this month’s Women and Girls Birding Walk at the King Salmon waterfront. We’ll hope to see a good variety of shorebirds, ducks, grebes, and hopefully some loons, as well as grassland sparrows and raptors. This walk will be a slow birding adventure on some beach sand and well-trodden trails. *For reservations and meeting location contact our Field Trip Coordinator, Janelle Chojnacki (see below).

Sat. April 2nd – 8:30-11am. Arcata Marsh, led by Ken Burton.

Sat. April 9th – 8:30-11am. Arcata Marsh, led by Jude Power.

Sun. April 10th – 9-11am. Ralph Bucher will lead a walk at the Humboldt Bay Nat. Wildlife Refuge.

Sat. April 16th – 8:30-11am. Arcata Marsh, led by Carol Wilson.

Sun. April 17th – 9-11am. Ralph Bucher will lead a walk on the Eureka Waterfront. This trail is paved and is wheelchair accessible.

Sat. April 23rd – 8:30-11am. Arcata Marsh, led by Kathryn Wendel.

Sat. April 23rd – 9-11am. Wigi Wetlands Volunteer Workday. Help create bird-friendly native habitat and restore a section of the bay trail behind the Bayshore Mall. We will provide tools and packaged snacks. Please bring your own water, gloves, and face mask. Please contact Jeremy Cashen at jeremy.cashen@yahoo.com or 214-605-7368.

Sun. April 24th – 8:30-11am. Bring your bicycles and binoculars to join Cal Poly Humboldt ornithology lecturer, Sean Mahoney for BIRDING AND BIKING the Arcata bottoms! This trip will require a bicycle to navigate the flat bottoms, but frequent stops will be made to check out the grassland species that call the bottoms home, including blackbirds, egrets, herons, and often raptors like kites and hawks. Email Sean at sean.mahoney@humboldt.edu to sign up for this trip and get the meet up location.

Sat. April 30th – 8:30-11am. Arcata Marsh, led by Drew Meyer.

*Contact Ralph at thebook@reninet.com for any walks he leads and all Arcata Marsh walks.

*Contact Field Trip Chair, Janelle Chojnacki at janelle.choj@gmail.com for all other walks.

See our website for COVID protocols.

Please join us for the RRAS monthly virtual program on:

Friday, April 8th, at 7pm, with Matt Johnson, Professor, Wildlife Habitat Ecology, Cal Poly Humboldt

Barn Owls and Winegrape Vineyard Relations

Can Barn Owls and farmers mutually benefit each other? Matt Johnson will speak about the research he and his graduate students; Laura Eschávez, Samantha Chávez, and Jaime Carlino, have been conducting with Barn Owls on winegrape vineyards in California, tracing the lab’s work to better understand a reciprocal relationship between farmers and owls. Specifically, he’ll summarize how farmers can use nest boxes to attract owls to their land, how many rodents the owls kill and where they hunt, and how this relationship may also be good for owls.

Matt is a professor of Wildlife Habitat Ecology at Cal Poly Humboldt, where he has taught since 1999. Before coming to Humboldt, Matt grew up in the Central Valley of California, earned a BS in Wildlife at UC Davis and PhD in Ecology from Tulane University. His dissertation research took him to the tropics, which sparked an interest in research on how birds and people can mutually benefit each other. He is especially interested in agricultural areas, and after many years of research on insect-eating birds and pests in tropical coffee farms, he is turning his attention to birds in California agriculture. He leads several graduate students, along with undergraduate assistants, on a study of Barn Owls in winegrape vineyards. His goal as an educator is to help students not only learn the skills necessary to become accomplished biologists, but also to foster an appreciation for how good land management practices can benefit both people and nature. As a researcher, his goal is to answer ecological questions that offer practical information for farmers interested in helping Barn Owls, that can also help farmers.

(Check our website for the Zoom link to our programs.)

Above: Clockwise from top:
“The Crew;” Laura, Sam, and Jaime, by Laura Eschávez; adult Barn Owl, by Allison Huysman; Matt in vineyard, self-portrait.
Cats at the Arcata Marsh

By Jude Power

Some of you may be aware that Redwood Region Audubon Society (RRAS) has been advocating recently for the containment of free-roaming domestic cats in Humboldt County. This focus became a priority as an emerging containment of free-roaming domestic cats in Humboldt County. This focus became a priority as an emerging

The Cat & Bird Safety Committee (AKA “Catbirds”), formed in 2019 and immediately began considering different approaches to address domestic cat predation on birds in our region, as well as ways that we might advocate for humane and responsible cat ownership.

One pathway for action seemed clear and direct: ask the City of Arcata to enforce its own ordinance titled “Regulations for the Use of the Arcata Marsh and Wildlife Sanctuary,” in which Section 10656 states; “The City Council finds that the presence of non-native animals in the AMWS disrupts the native ecology of that environment,” and, “The Director of Environmental Services, or his/her designee, is authorized to impound and remove all non-native animals found in the Arcata Marsh and Wildlife Sanctuary.”


In February I heard the local crow flock making a huge racket outside the house. I peered out the front window and saw a couple of birds on the ground in the middle of the street. I expected to see the crows fighting with each other. A few years ago, my husband and I witnessed a crow on the street with one attacking another one, while the crow flock dive-bombed them. My first thought was this was happening again, but when I looked closer, I saw a Cooper’s Hawk had ahold of a crow.

I quickly grabbed my camera, hurried outside, and started taking photos and video. The hawk was holding onto the crow’s face while other crows cawed, and dive-bombed them. This went on for several minutes giving me time to find a better angle to photograph the action. The photo below is the best shot I got. The conflict ended when the hawk changed position giving the crow a chance to fly away. I witnessed a similar situation when a peregrine falcon was on the ground in a parking lot holding a crow by the ankle. It wasn’t long before a group of people approached, the falcon let go of the crow, and they both flew away. I think that the Cooper’s Hawk learned that crows are too large to prey upon, especially when they have a flock to protect them.

Above: RRAS Photo Contest “Honorable Mention;” Green-winged Teal, Arcata Marsh, by Sarah Hobart.

President’s Column

By Gail Kenny

This edition of The Sandpiper is spotlighting the winners of our bird photo contest. I dabble in bird photography using a superzoom camera. It seems that everything must be just right, especially the light, to get good bird photos. It also helps with my bridge camera to be closer to the birds, but I’m careful to not get too close so as to not disturb them.

Well, maybe not… let’s back up. The Catbird Committee’s outreach to the city about this issue began more than two years ago, in June 2019, when it was agreed that Friends of the Arcata Marsh (FOAM) and RRAS would work together to encourage the application of Section 10656. At this time, the Mayor had already assured FOAM via email that the Environmental Services Director would be asked to delegate someone to trap cats found in the marsh and remove them to a shelter. A member of the FOAM board even volunteered to trap the cats, and a RRAS member volunteered to transport them to the shelter. Discussion with the city on a solution to the cats-in-the-wildlife-sanctuary problem commenced.

We kept in touch with the city, encouraging their action, but when no tangible movement toward removing and impounding cats had occurred as of August 2020, more than a year later, the Catbird Committee took further action, including: phone conversations with the Environmental Services Deputy Director; in-person meeting and written communications with the Environmental Services Director; speaking during oral communications to the City Council; and continuing contact with FOAM. The Environmental Services Director ultimately sent a letter to all private and commercial residents of South G Street, to inform them of Section 10656, and the Police Department cited an individual who frequently released his cat directly into the wildlife sanctuary.

Sadly, as of this writing there appears to have been no further progress on the implementation of Section 10656. We have been informed recently that no city employee or volunteer will be performing the task of removing cats from the wildlife sanctuary. There have been a couple of retirements/new hires, the pandemic’s plummeting tax revenues, grumpy cat owners, aversion to controversy, and the b-word – bureaucracy – which apparently have all got in the way of doing what we see as the right thing for birds and other wildlife. The Catbird Committee intends to continue pursuing the goals of Section 10656 enforcement, and you can help us by contacting the Environmental Services Director and City Council Members to let them know that you want the City of Arcata to stand by its original vision of a true sanctuary for wildlife within the city limits.

If you have any thoughts, please email Harriet (harrieth6@gmail.com), at the RRAS Cat & Bird Safety Committee; Emily Sinkhorn, Environmental Services Director; esinkhorn@cityofarcata.org, and Stacy Atkins-Salazar, Mayor, SATkinsSalazar@cityofarcata.org.
Congratulations to all photographers, and to those who won prizes in the following categories:

“Top Four”
Mary Ann Machi – Wood Duck duckling, Sequoia Park Duck Pond, Eureka.
Jeff Todoroff – Northern Pygmy Owl flying, Warren Creek Road in Arcata.
Jeff Jacobsen – Great Horned Owl, north spit cypress patch, Arcata.
Rob Fowler – Common Ravens, V Street Loop, Arcata Bottoms.

“Multiple Non-Avian Wildlife Species in Shot”
Larry Jordan – Green Heron with Frog, Lema Ranch’s Hidden Pond, Redding, CA.

“Multiple Bird Species in Shot”
Dana Utman – Snowy Egret and Greater Yellowlegs, Arcata Marsh.

“Native American Language”
Connie Pearson – Cedar Waxwing, Horsethief Canyon Park, San Dimas, CA.

“Runner Up” – A Tie Between:
Kurt Angersbach – Sanderlings, Trinidad, CA.
Gary Bloomfield – American White Pelicans, Rocky Point, Upper Klamath Lake, Oregon.

“Three Nuthatches”
Lyndie Chiou – White-breasted Nuthatch, on Ohlone lands, Alameda Creek in Union City, CA; Pygmy Nuthatch, on Ohlone lands, Berkeley, CA; Red-breasted Nuthatch, on Ohlone lands, Gomes Park, Fremont, CA.

“Clark’s Nutcracker”
Gary Bloomfield. – Clark’s Nutcracker, feeding on Whitebark Pine, Crater Lake, Oregon.

“Brown Creepers”
Jeff Todoroff – Brown Creeper, McKinleyville.

“Greatest Photo Bomb!”
John Stuart – Northern Flicker peering at Pileated Woodpecker! Arcata.

“Rarest Bird”
Willie Hall – Hudsonian Godwit, Elk Creek, Crescent City Harbor, CA

“Honorable Mentions:”
- Bald Eagle; + Green-winged Teal, by Sarah Hobart.
- Steller’s Jay; + Chestnut-backed Chickadee, by Chris Hansen, in Willits, CA.
- Gadwall, by Lee Rusconi.
- White-crowned Sparrow (juvenile), by Zsazsa Dallenbach.
- Spotted Towhee, by Jeremy Cashen, Santa Cruz Island, Channel Islands National Park, CA.
- Wood Duck = bitwak daday’ in Soulatluk, the Wiyot language; + Marsh Wren = jush, in Soulatluk, by Mark Larson. Soulatluk words courtesy of the Wiyot Tribe.
- Red Crossbill, female, by Lucinda Adamson.
- Marbled Godwits, by Nancy Spruance.
- Red-tailed Hawk, Smith River, by Michael A. Sommer.

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Clockwise from above: Northern Pygmy Owl, by Jeff Todoroff; Pygmy Nuthatch, by Lyndie Chiou; Great Horned Owl, by Jeff Jacobsen. The word for owl in the Wiyot language, Soulatluk, is pitsou’laksh, courtesy of the Wiyot Tribe; Common Ravens, by Rob Fowler.

“Honorable Mention;”
Steller’s Jay, Willits, CA, by Chris Hansen.
Winner of “Native Language,” category: Cedar Waxwing, San Dimas, CA by Connie Pearson. The Tongva word for “bird” is: chi’iiy.

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The Common Raven: A Bad Rap!

by Janelle Chojnacki

The loud, guttural call, glossy black feathers, wedge-shaped tail, and thick black bill of the Common Raven make it one of the most conspicuous birds throughout its range. These highly intelligent birds are known to associate with predators in order to find carcasses on which to feed and they also use this association to ensure that those carcasses are safe to eat. Ravens are also a playful species, which is a loaded term in ecological research as it can be very difficult to objectively define and identify play behavior in wildlife. Many of us have likely seen videos of ravens using plastic lids to sled down snowy roofs, and many dog-owners may have seen ravens playing with, or perhaps pestering, their dogs for no apparent reason, a behavior potentially dating back to ravens’ associations with wolves. Uniquely for a songbird, ravens develop strong, lifelong pair bonds which are often developed over multiple years and are cultivated throughout a pair’s relationship. It can take up to nine years for a raven to reach sexual maturity and there are several fascinating behavioral changes that occur before, during, and after a raven finds a partner.

Raven chicks are altricial, which means that after hatching, the young are entirely dependent on parental care for warmth, food, and protection. Around two months after hatching, the raven fledglings take off and spend the next several months learning from their siblings, parents, and other ravens how to independently find food, shelter, and other resources. Young ravens then join social groups with other young ravens and through these social groups they share information, such as the location of food, and they form relationships, including friendships as well as enemies. Remarkably, young ravens have been documented interfering with the bonding attempts of other young ravens in their social group, likely because a mated pair of ravens can more effectively defend resources than several young birds; so keeping the young social group together is a way to ensure that everyone continues sharing resources. Eventually each raven will find a suitable partner and throughout that partnership both birds continue practicing pair bonding rituals. These rituals include bowing displays, puffed head and throat feather displays, and many kinds of calls, some of which are directed quietly at only their partner while others are broadcasted up to several kilometers away. These rituals are used to form and secure pair bonds and can be observed in paired birds as well as courting birds throughout the year.

Attraction to, and then eventually avoidance of, novel items is one of the most fascinating behavioral transitions that ravens exhibit: when ravens are young, they are neophilic, meaning they actively explore new items, whether it be a stick, a piece of trash, etc. As ravens get older, they become neophobic and afraid of new things (which can be a fun way to differentiate young from old birds when observing them in the field!). All of these behaviors, especially the exceptional intelligence, have helped raven populations expand their species’ range. These birds readily take advantage of human food subsidies such as the food found in parking lots, campgrounds, picnic areas, and agricultural areas. The population growth of ravens has had deleterious effects on many other species because ravens eat almost anything they can catch or find, including insects, small mammals, nestlings, and eggs. In general, more human food subsidies in an area leads to more ravens, which leads to increased predation on a huge variety of species.

Locally in Humboldt County, populations of the federally threatened Western Snowy Plover are continuing to fall below recovery goals in large part because of raven predation on eggs and chicks. For the last year, as part of my graduate research at Cal Poly Humboldt, I have been attaching GPS units to ravens captured on beaches where Snowy Plovers nest and I am using those movement data to better understand the factors influencing raven use of Snowy Plover nesting beaches. While conducting this research I have observed numerous examples of humans feeding ravens intentionally and unintentionally on or near Snowy Plover nesting beaches and I have also followed GPS-tagged ravens to locations away from the beach where they reliably find sources of human-provided food. I’m hoping that through my research I can quantify the impact that human food sources are having on raven populations and can also perform public outreach to highlight the negative impacts that feeding wildlife, especially ravens, can have on the populations of other species.

Ravens get a bad reputation for several reasons, but I have found that some of the most dedicated biologists working to conserve species like the Snowy Plover still love ravens (they just don’t love raven predation on threatened species!). Ravens can be absolute goofballs and are so entertaining to observe. I recently saw a pair of ravens performing the bowing display to each other on the beach. I’ve observed a large male fluffing his head feathers in a macho display at a particularly reflective window, continually leaving then returning to the window to repeat the behavior, and I spent around an hour watching a raven repetitively swoop lower and lower over a road-killed barred owl the other day, presumably to make sure it was actually dead before starting to eat it. Now that the breeding season is beginning, raven pairs are exhibiting very strong territorial behavior. I’ve recently seen numerous raven pairs chasing single ravens or groups of young ravens away from their territories, some of which even involved locking talons mid-air for a moment! Many of us likely know that ravens can be problematic, but I hope the main takeaway from this article is that ravens are fascinating, we can (and should!) enjoy observing them, and there are things we can do to avoid subsidizing them with food to restore a balance to our local ecosystems.

Above: Janelle Chojnacki works with a raven: “I wear a whole-face mask and a hat to prevent the ravens from being able to identify me in the future, since I want to be able to survey and collect behavioral observations on the birds I tag over time.”
Evening Program
April 13, Wednesday. 7:30 p.m. “Silvery Phacelia, Rare Coastal Beauty of Del Norte Coast Dunes.” [February’s program rescheduled] Silvery Phacelia (Phacelia argentea) exists only in the dunes near Crescent City. Naturalist Sandra Jerabek, Director for the Tolowa Dunes Stewards, and Katrina Henderson, of California State Parks, will share the secrets of this charismatic plant, and feature the heroic, ongoing efforts of volunteers to protect its scenic dune habitat and adjacent estuary. Register on Zoom (on our website) to join from home, or gather at Six Rivers Masonic Lodge, 251 Bayside Rd., Arcata, with masks, refreshments at 7:00, program at 7:30 p.m.

Field Trips
April 10, Sunday. Stony Creek Day Hike. This famous botanical trail off Highway 199 in Gasquet offers diverse native vegetation and, hopefully, blooming Brook Wakerobin and fawn lilies. It is a 1-mile roundtrip hike on a narrow, uneven trail. Dress for the weather and all its changes; bring lunch and water. Meet at 8:30 a.m. at Pacific Union School (3001 Janes Rd., Arcata), 10:30 a.m. at the Gasquet Ranger Station, or arrange another place. Please call (707) 822-2015 to tell Carol you are coming.

April 23, Saturday. 10 am-12 noon. Ferns in the Dunes. At the Lanphere Dunes Unit of the Humboldt Bay National Wildlife Refuge Carol Ralph will introduce eight species of common ferns and discuss some of the amazing aspects of fern life. This is an easy walk of about 1/4 mile along the riparian edge of the dunes. Meet at Pacific Union School (3001 Janes Road, Arcata) and carpool to the refuge. Co-sponsored with Friends of the Dunes. Bring a mask. Reserve your space by contacting Friends of the Dunes at (707) 444-1397 or info@friendsofthedunes.org.

April 24, Sunday. Dykstra Farm, Willow Creek. In a 2-hour tour of a farm with masses of phacelia, madia, nemophila, chia, redmaids, California poppy, and more, learn how native plants are food for people as well as native bees. Brian Dykstra will cover topics of native plant taxonomy, native bee conservation, and ethnobotany. We’ll eat our lunches there and depart, with optional other stops in the afternoon. We need to carpool into 8 or fewer vehicles. Sign up with Carol: (707) 822-2015, theralphs@humboldt1.com.

Spring Native Plant Sale
Sat. April 30 & Sun. May 1
Freshwater Farms Reserve
5851 Myrtle Ave., Eureka

By appointment only, in-person shopping. Go to www.northcoastcnps.org to sign up. Questions? Email: northcoastcnps@gmail.com

Plant Stand Sales are temporarily unavailable.
Specialists will continue to work with Layla on a variety of ZWH projects, implementing and funding its new strategic plan goals; “she said. Richardson moved to Humboldt from San Jose, California in 2017. She earned her B.A. degree in Child Development and, three years ago, settled into Fortuna with her husband, James, and family. Richardson said she is excited to get started on ZWH’s new grant-funded project to help Humboldt County schools bounce back from COVID with Zero Waste plans and full compliance with California’s SB1383 food waste reduction law.

Zero Waste Humboldt is a grassroots, nonprofit environmental organization that works closely with Humboldt businesses. It is dedicated to reducing the waste generated in Humboldt County with public education, training/technical assistance, and Zero Waste public policy through independent research on economic, social, and political issues affecting sustainable materials management. ZWH’s grassroots organizing and leadership development approach emphasizes the hierarchy of waste, with prevention as the first goal, reuse as the second, and recycling and composting as the third.

Electric Vehicles Will Not Save Us

Myth #2: We can replace fossil fuel-powered cars on our roads with zero-emission vehicles fast enough to avert climate catastrophe.

The Facts: Even if automakers rapidly phased out gas and diesel vehicles, the problems wouldn’t end. After the last fossil fuel-powered cars roll off the assembly line, they will continue to be driven, emitting greenhouse gasses for many years — likely well over a decade. Scientific models therefore estimate that in order to avert the worst climate impacts, we need not only a transition to zero-emission vehicles, but also a reduction in our collective miles driven by somewhere between 15 and 70 percent.

Myth #3: The only problem with cars is their tailpipe emissions.

The Facts: Our reliance on cars contributes to social isolation and many of the other ills of modern society. Car crashes are also a leading cause of death, especially for kids. Bigger cars are more dangerous, and automakers are only making them bigger. Those big cars — even EVs — also require a lot of resources. Bigger EVs mean bigger batteries, which means more mining of lithium and other rare and toxic materials, and more plastic too (yes, there’s oil in EVs!). Battles are already being waged over access to ores for EV batteries, and local ecosystems are destroyed by the extraction of metals and petroleum. In short, the climate is only one of many reasons to reduce the role of cars in our lives.

Myth #4: People will always prefer cars over other options, and nothing can be done to change that.

The Facts: Cars were deeply unpopular when they were introduced in the early twentieth century. They killed people — particularly children — in large numbers, forced traditional uses like walking, socializing and commerce out of the street, and clogged up downtowns with their highly inefficient use of space. Public perception only changed in response to a sustained public relations and legislative campaign waged by an unholy alliance of corporations, business-friendly politicians and driving clubs. Over time, this campaign reshaped both the American landscape — through massive public investments in automobile infrastructure and land use rules that dictated car-oriented development — and the American mind — through a propaganda playbook that continues to associate cars with freedom, power and masculinity.

Cars did not become popular because they are naturally preferred by consumers. There is no such “natural” preference independent of the built environment and the social environment we have constructed. That means we could make other forms of transportation more prevalent instead. Not only could we, but we absolutely must.
Biden’s National Forest Policy: New Talk, Same Old Walk

Felice Pace, North Group Executive Committee

When Joe Biden beat Donald Trump and assumed the presidency the hopes of public land advocates rebounded. When his administration declared that it intended to preserve thirty percent of America’s lands and waters, they were jubilant. In addition to biodiversity benefits, preserving public forests would allow them to grow older. Older forests are fire resistant and store more carbon for longer periods.

Time has damped, if not destroyed, advocates’ hopes. The Biden Administration’s concept of “preserved lands and waters” differs radically from what I (and I suspect most of you) consider “preserved” or even “conserved”. For example, the administration’s America the Beautiful Plan considers all wilderness lands to be preserved even when, as has been documented for California National Forests, trampling by grazing cattle is shrinking and degrading wet headwater meadows.

According to Biden’s America the Beautiful Plan, lands that are farmed, grazed and logged count as “conserved” if those lands are managed in accord with “the long-term health and sustainability of natural systems.” That sounds good but “health” and “sustainability” are difficult to assess. How will public forests be managed to maintain and restore health and sustainability? Is restoration even possible and, if so, what indicators will tell us if we are on the right path and how will those indicators be monitored?

Restoring Resilient Forests

All along the North Coast of California, into Oregon and beyond, small landowners have demonstrated that restoration forestry is possible. But, while the US Forest Service claims to practice restoration, the forestry actually implemented within our national forests remains, for the most part, restorative in name only. A key problem is that national forest logging is still being done via commercial timber sales. When the tool is a commercial timber sale, it is timber economics, not what the forest needs to regain health and resilience, which determines what gets cut and what is left behind.

It is also possible to reduce a forest’s wildfire risk by retaining full canopy shade on the ground while removing the smaller trees and shrubs in the understory. Retaining a forest’s full shade canopy prevents the sprouting and growth of small trees and brush. Forests which are “treated” in this manner have less wildfire risk going forward.

Unfortunately, while it claims to be restoring fire resilient forests via logging, the US Forest Service is actually increasing fire risk except in the very short term. For economic reasons, a typical Forest Service “thinning” sale for fire risk reduction removes 60 percent or more of the forest shade canopy. By letting in more light and reducing competition for soil moisture, that amount of “thinning” encourages accelerated regeneration and sprouting of small trees and shrubs. Within five to eight years of “treatment” there is more risk of catastrophic fire than before the forest was “thinned”. Burned forests are also replanted, creating vast young tree plantations which are especially susceptible to wildfire.

Rather than managing for older, fire resistant forests that maximize carbon storage, the US Forest Service has implemented policies which result in vast forests of dense young trees which are highly susceptible to catastrophic wildfire while claiming to create forests that are resilient in the face of climate change fueled wildfires.

Can Biden’s Plan be Rescued?

I have shown above how President Biden’s 30-30 Plan for our national forests has already been undermined by a Forest Service with the same old leadership, intent on the same old practices. Nevertheless, many environmental groups endorse the plan. For example, the Wilderness Society organized an endorsement letter signed by over 300 organizations.

These groups say they want to work with the Biden Administration to identify lands for inclusion in the initiative. Others, however, including most grassroots public lands organizations, insist that lands that are commercially logged and grazed cannot be considered conserved.

Other opposition to the Biden Plan comes from predictable locations. The Farm Bureau strongly opposes it as do fourteen governors. Other governors, including California’s Gavin Newsom, have endorsed Biden’s logging plans.

With support from many environmental organizations and politicians like Gavin Newsom, the Biden Administration is likely to continue forest policies that emphasize logging for fire risk reduction. Continued commercial logging will limit forest carbon storage and continue to perpetuate young, dense forests that are increasingly susceptible to catastrophic wildfire as the climate dries. Smaller private forests are likely to continue to be the only places where truly restorative forestry is practiced.

President Biden’s 30-30 Plan can’t be rescued.

Meeting Announcement

Share your ideas on “hazard tree” logging, Klamath salmon or any other topic by joining the North Group’s monthly video meetings. For meeting access directions, contact Gregg Gold at greggjgold@aol.com or 707-826-3740!
From Herbicide Wars to Forest Stewardship

Ilene Mandelbaum

In 1970 during my freshman year at Brandeis University in Massachusetts, the Vietnam War over-shadowed anything we learned sitting in classrooms and lecture halls. Our campus became the National Student Strike Center and the real education was in the streets. We organized marches, demonstrations and “sit-ins” and felt the exhilaration, camaraderie and power of being part of the anti-war movement.

But not even the activism nor the cynicism of that era prepared me for the outrage and need to fight that I felt a few years later as a graduate student at Humboldt State, confronting the toxic legacies of the Vietnam War brought home to our own backyards.

It was a winter’s day in 1976 when I walked into the Northcoast Environmental Center (NEC) office on 10th St. in Arcata, Ca., and asked the Director Tim McKay what I could do to volunteer. He handed me a folder full of letters written by residents from all over the North Coast urgently asking for help. People in rural communities were being bombarded by helicopters spraying “Agent Orange,” the phenoxy herbicides 2,4,5-T and 2,4-D, on US Forest Service and private timber company lands.

This toxic cocktail, straight from DOW Chemical Vietnam War stockpiles, had become the weapon of choice in the industrial forest practices of the times. Clearcut logging of large swaths of forest and then aerial spraying the unwanted “competing” brush and hardwoods had become the norm.

Tens of thousands of acres of forest were being sprayed all over the Pacific Northwest, not to mention rangelands, highway and utility corridors, universities and school grounds across the US. The chemical companies were making huge profits and trees were being cut like there was no tomorrow. Millions of pounds of phenoxy and other herbicides were dousing public and private lands and affecting unsuspecting residents every year.

The citizens’ letters were appalling. They described drifting chemical sprays onto family properties and drinking water sources, clusters of miscarriages, birth defects, illnesses and cancers, fish kills and dying wildlife and domestic animals. They reported zero notice of spraying by the responsible agencies and corporations and the callous dismissal of residents’ complaints as unwarranted and “emotional.” It was clear that people desperately needed to share information, strategize, organize and fight back together.

In February 1977 the NEC sponsored a meeting in Arcata for the folks under assault in communities as far flung as Klamath, Orick, Orleans, Denny, Hoopa, Willow Creek, Hayfork and Miranda. We gathered that night with other activists from southern Oregon who eagerly shared their experiences from already engaging in the “Herbicide Wars.”

The February meeting energized a regional organizing effort, including the formation of my group GOATS, the Group for Organic Alternatives to Toxic Sprays (grazing by goats is an alternative to sprays). Before long there were the Humboldt Herbicide Task Force, (HHTF, Arcata), Safe Alternatives for the Forest Environment (SAFE, Trinity County), a Chapter of the Northwest Forest Workers Association, (NWWA), and community-based groups in nearly every watershed throughout the north coast.

These activists got to work using every tool gleaned from the antipar movement, from political and union organizing, and from the early days of the environmental movement. We documented the disastrous impacts to people and animals, initiated public education campaigns, consulted with experts, demanded notice of spraying and strengthening of regulations. We filed editorials, appeals and lawsuits and packed hearing rooms in county seats from Eureka to Portland, OR. We held regional conferences and debates in forestry classes at HSU. We even approached loggers and mill workers to support the retraining of forest workers laid-off due to mill closures, as available timber steadily declined.

Working out of the NEC office, GOATS included HSU students, tree planters and community activists. We and other groups formed energetic field crews in which people cleared vegetation around the desired conifer species, testing and documenting the cost-effectiveness and utility of “manual conifer release.” The US Forest Service (USFS), however, was most reluctant to consider reasonable and fair specifications for awarding contracts that would level the playing field against their preference for spraying. GOATS lobbied the USFS at every level, from Ranger Districts to the Regional Forest Supervisor to the US Department of Agriculture (USDA) leadership in Washington D.C.

The battles from 1977 through the 1980s were intense, relentless, and a roller-coaster of victories and setbacks. The public was at a serious disadvantage, as industry poured thousands of dollars into the fray. Even though Trinity, Mendocino and Siskiyou counties banned aerial herbicide spraying, they were sued by the California Attorney General and the USDA for overreaching their jurisdictions. Then Humboldt County’s attempt at passing an initiative to ban spraying was defeated.

Nevertheless, after years of public outcry and unrelenting efforts to stop the spraying, DOW chemical finally discontinued manufacturing 2,4,5-T in 1982, but replaced it with 2,4-D, Roundup and dozens of new herbicides. Whistle blowers had revealed that the Environmental Protection Agency (EPA) was in collusion with the chemical companies and that the EPA knew that testing data had been falsified.

Eventually, the debate over the use of toxic chemicals on public lands led to a decision that prevented most aerial spraying on USFS lands and led to more constraints on private commercial forest lands.

During this time, GOATS evolved into a worker-managed corporation, Integrated Forest Management (IFM), when the expansion of Redwood National Park (RNP) took in 48,000 acres of mostly cutover lands in 1978. Suddenly, there were exciting opportunities to work on watershed rehabilitation projects, using a labor-intensive approach modeled after the Civilian Conservation Corps of the 1930s.

Those were such memorable experiences, living communally in old army tents next to giant old-growth redwoods interspersed with barren slopes piled with logging slash. Working in the mud and rain, we shored up the denuded hillsides, roads and creeks, transforming on-site materials into willow wattle bundles for erosion control and milled redwood logs into check dams and water ladders to stabilize down-cutting creeks.

The immersion in restoration work became a refreshing antidote to the relentless environmental battles of that era. Many in our forest worker groups found that the combined immersion in forestry and environmental organizing provided an unanticipated grounding to launch life-long careers in forest stewardship, watershed restoration, environmental sciences and advocacy. You do not have to look far to recognize the many community members who went on to provide environmental leadership in our region and beyond over the decades.

For a longer version of this article visit www.yournec.org/econews/apr2022
Nature and War: How Russian Invasion Destroys Ukrainian Wildlife

Oksana Omelchuk & Sofia Sadohurska
Climate department experts, Ecoaction, Ukraine

This article was translated to English by the authors, who work for a Ukrainian environmental advocacy organization, so some idiosyncrasies remain.

Full-scale Russian invasion of Ukraine has been ruining people's lives and civil infrastructure since February 24. But it also impacts Ukrainian wildlife.

For now, it's still impossible to evaluate the overall environmental impact of the war because of the lack of accurate data. There are two main reasons why. First, it is dangerous for the experts even to gather such information, for the warfare is still on. Secondly, not all data can be disclosed for tactical reasons.

Yet it's obvious that the longer this war lasts the harder it damages the environment and the tougher its consequences may be in the future. It was seen at the beginning of this war eight years ago when Russia annexed Crimea and parts of Donetsk and Luhansk regions of Ukraine, though on a smaller scale. Warfare, as well as the actions of the occupational administrations, impacted the nature of those regions. Looking at the past attacks, we may foresee the consequences of the current full-scale attack.

Impact on Landscape and Habitats

In the first few days of the full-scale invasion, Russian troops moved through the existing infrastructure. But as the war lingers, Russians are changing their tactics and preparing for extended fights. For this reason, they're forming bases and fortifications. It means they're moving farther into the wildlands taking up forests and conservation areas. Moving of heavy machinery, construction of fortifications, and fighting damage soils that leads to degradation of vegetation and worsens wind and water erosion.

According to preliminary estimates of the Ministry of Ecology and Natural Resources of Ukraine, as of March 1, Russia was waging hostilities in 12,406.6 sq. km of nature reserves – that makes almost 1/3 of Ukrainian protected areas.

Roughly 200 territories (2.9 million hectares) of the Emerald Network are endangered. The Emerald Network is the network of conservation areas created to preserve species and habitats that need protection all over the non-EU countries in Europe. Those territories take a huge role in biodiversity protection and saving the climate.

Wildfires Caused by Warfare

Spring is a season of higher risk of wildfires and the shellings make it even higher. The snow melts and last year's grass dries out and becomes more flammable. In the dry conditions fires instantly spread widely. State Emergency Services cannot provide necessary help and liquidate fires on the territories occupied by Russians. Especially favourable conditions for the wildfires spreading are in the monocultural pine forests in the North and East of Ukraine.

Many Ukrainian peatlands are dried so they're also extremely flammable. Such wildfires are hard to fight even in peaceful times so far worse warfare in the North of Ukraine – the region full of dry peatland – would cause tough consequences for the environment and public health. Burning peat causes toxic emissions into the air: CO, CO2, PM2.5, volatile organic compounds containing acrolein or formaldehyde.

Chemical Pollution Caused by Shelling

The Ministry of Defence of Ukraine reports that in twenty days Russia shot roughly 900 rockets of different types and calibers at Ukraine. Enemy attacks civil and military infrastructure, including airports, ammunition warehouses in Krasnopillya, Kryvyi Rih, Dnipro and Zhytomyr cities, airfields and their fuel storages in Hostomel, Chuhuyiv, Chornobayivka, Melitopol, Ivano-Frankivsk and Mykolaiv cities, as well as naval objects. But most of the shellings target settlements and their industrial objects. Explosions of rockets and artillery create chemical compounds: carbon monoxide and dioxide, water vapour, nitric oxide (NO), nitrogen oxide (NO2), nitrous oxide (N2O), formaldehyde, hydrogen cyanide vapour (HCN), nitrogen (N2) and loads of toxic organic. They also cause acidification of soil, wood, sod and metal constructions such as bridges.

Soil and Sea Pollution with Oil Products

Russian troops attack port infrastructure alongside the Black and Azov seas shores, as well as the anchored ships, causing water pollution and spreading of poisonous substances into the sea. Oil products harm marine biocenosis, forming pellicles on the water surface and breaking energy, heat, humidity and gas exchange between sea and atmosphere. Moreover, they directly impact the physical chemistry and hydrologic conditions killing fish, marine birds and microorganisms. All the components of the oil are toxic to marine life. Oil also has other harmful qualities. Its hydrocarbons can dissolve other pollutants such as pesticides or heavy metals, which alongside oil concentrate in the upper layer and poison it even more.

Wastewater in the Dnipro River

Damaged municipal communications may lead to organic pollution of water. On March 14, Russia shelled sewage treatment plants in Zaporizhzhya region destroying the pump station that distributes wastewater of Vasylivka city to the facilities so those waters are now flowing directly into the Dnipro River without any filtering. They consist of lots of organic substances, helminth eggs, pathogenic bacteria, sulphates and chlorides. It may cause a large-scale algal bloom in the Dnipro River and the Black Sea when the warmer weather comes.

Biodiversity Losses and Danger to the Threatened Species

If the war doesn't stop by the end of the spring it may endanger mating for birds and mammals. Most of the birds need peace in this period to produce offspring. Mooses – the rare specimen from the Red List of Ukraine – produce their offspring during April-June. Warfare puts at risk this process and the survival of the calves.

Three main bird flyways lay through the territory of Ukraine: Azov-Black Sea latitudinal (southern pathway) with the highest concentration of migrating birds in Ukraine; Polissia latitudinal along the forests of Polissia and in the North of forest-steppe; and Dnipro meridional migration route which lays along the stream bed of the Dnipro River and its tributary Desna. This route is widely used by waterfowl and shorebirds – geese, ducks, loons, waders, gulls, terns, etc. Most of the flyways are now located over the warfare zones.

What Happens After the War is Over?

After the war, we will face the consequences of the attacks: destroyed ecosystems, polluted soils, biodiversity losses, and higher amounts of pests in the forests. Moreover, the country will need lots of natural resources to rebuild. There is also a risk that Ukraine will fail to reach our declared climate goals, for the war is an additional contribution to climate change and the rebuilding will inevitably contribute to greenhouse gas emissions.

Since the major chemical pollution of soils and waters is expected, it is crucial to create effective environmental monitoring. It would help to evaluate the overall environmental damage and take necessary measures to avoid further aggravation and recover ecosystems for people and for wildlife.

Now the Ministry of Ecology of Ukraine, civil society and the environmental committee of the Parliament should document all the environmental damage caused by the Russian invasion to make the aggressor pay for it.

It is also important to include ecosystem recovery and protection into the Ukrainian recovery plan and rebuild our settlements focusing on nature-based solutions and adaptation to climate change.

For a longer version of this article, visit www.yournec.org/econews/apr2020
Suppose Arcata wants to expand its boundaries. Or suppose Humboldt Bay Municipal Water District wants to pipe water to a distant area. Or suppose the Humboldt Bay Harbor, Recreation and Conservation District wants to expand its Sphere of Influence in preparation for floating offshore wind. These proposals must be approved by Humboldt LAFCO. LAFCO stands for Local Agency Formation Commission. There is one LAFCO for each California county, but they are not county agencies: LAFCOs are independent quasi-judicial, non-governmental bodies created by the California Legislature to control the boundaries of cities and most special districts, except school districts.

The mission of LAFCOs is to promote orderly growth; discourage urban sprawl; preserve agriculture and open space; and encourage efficient, sustainable public services.

The reason for LAFCOs goes back to a time after World War II when California’s population was exploding, especially in suburban areas. This led to competition among cities for lands that could bring in revenues. “Annexation wars” were common as cities and special districts scrambled to annex areas in order to capture revenues or to shut out competing agencies.

Hence the formation of LAFCOs by the state government. LAFCOs regulate cities, counties and special districts by reviewing and acting on proposals to change (expand, shrink, merge, or modify) their boundaries and district services within those boundaries. Additionally, LAFCOs can work with new cities to incorporate, as the unincorporated area McKinleyville has been considering on and off for years. They do this by adopting and revising “Spheres of Influence,” which are planning documents that show a city or special district’s boundary and service areas. Each incorporated city or special district (for unincorporated areas) has a Sphere of Influence. It is territory that a city or special district may or may not annex in the future. It’s also an area where the local government may build facilities and deliver services like street lighting, water, sewer, and park services sometime in the future.

LAFCOs must review all of the agencies that provide public services within the study area (called a Municipal Service Review). State law requires LAFCOs to revise the Spheres of Influence every five years and, therefore, the Municipal Service Reviews as well. This results in an ongoing, ever-rotating workload, much like painting the Golden Gate Bridge.

City annexations, and other revisions to a local agency’s Sphere of Influence are all subject to environmental review under the California Environmental Quality Act (CEQA).

What is LAFCO?

HOW IT ALL WORKS

If a city, district or its residents want to change boundaries, they can circulate a petition in favor of this change, which up to 25% of the affected residents must sign. Alternatively, the governing body of an affected local agency can propose a change of organization. Any city or special district that overlaps the affected territory is an affected local agency. A county is always an affected agency because its boundaries include all of the cities and special districts in that county. Therefore, the Board of Supervisors can initiate any boundary change in its county.

LAFCO staff reviews both the effect on the agency’s finances and the environmental effects of the proposed changes. Within 30 days of receiving a proposal, LAFCO staff decides whether or not an application is complete. If complete, it goes ahead with the process by filing a certificate and setting a public hearing date.

Before the LAFCO hearing, the executive officer prepares a written report and recommendation which goes to all LAFCO commissioners, all affected local agencies, and other persons named in the application to receive a report. Public notice for the hearing is required. At the public hearing, the LAFCO commissioners listen to testimony and debate the proposed boundary change. LAFCO can approve or deny the application, or send it back for more information. If LAFCO approves it, terms and conditions can be attached. These terms and conditions spell out the boundary changes, and include details on topics such as property tax transfers and water use priorities.

Once LAFCO approves a boundary change, it holds another public hearing to measure protests. At the second public hearing, any registered voter or landowner within the affected territory can protest the proposed boundary change. When the hearing ends, the conducting authority counts the protests and adopts a formal resolution that either: 1) orders the boundary change without an election, 2) orders the boundary change, subject to voter approval, or 3) stops the boundary change because of the protests. Completion of a boundary change happens only if LAFCO and, if necessary, the voters, approve it.

Humboldt LAFCO’s commissioners are two county supervisors, two city council members or mayors, two special district members, and one member of the public. Humboldt LAFCO also has alternates for each commissioner. Currently, there is an opening for an alternate public member. Applications can be found at www.humboldtlafco.org. Commissioners are paid a $20.00 honorarium for each meeting they attend. Humboldt LAFCO is funded by payments of one-third each from the county, the cities, and the special districts. Additional funding for the less than $200,000 annual budget comes from service fees.

Humboldt LAFCO meets every other month, virtually, for the time being. Its website is humboldtlafco.org/
OMNIBUS SPENDING BILL — NOT SUCH A GREEN DEAL

There is a big battle being waged in Congress right now regarding the large Omnibus spending bill that includes some good old fashioned pork barrel, many parts aimed at preservation and water-related projects, and some that might be considered components of the Green New Deal. As the Senate passed its version of the bill, and sent it back to the House for reconciliation, some environmental groups are not happy pointing out the Green New Deal is missing from this final version after years of fighting for those elements. Though such a moderate approach is expected in an election year, especially one where both the House and Senate could favor Republicans, conservationists worry the future may hold few victories. Congressman Chip Roy (R-TX) calmed his gas-producing constituency in a tweet saying the bill has “zero actual changes to USA Oil & Gas restrictions.” Speaker Nancy Pelosi (D-CA) pointed out the legislation “unlocks more federal funding under our Bipartisan Infrastructure Law — bringing transformational investments to roads, bridges, transit, water systems, airports, broadband and more across America.” Senator Dianne Feinstein (D-CA) hopes to bring home the bacon with about $260 million earmarked for several water projects and studies, including $8.6 million for the Channel Islands Harbor dredging project and another $33 million for California Bay-Delta Restoration. The final list of those water projects is not yet known and will be hashed out as the bill goes back to the house for revisions to reconcile the House and Senate versions. We trust Congressman Jared Huffman (D-CA) will be working hard to keep any projects that would divert more water to Central Valley out of the final legislation.

PLASTICS

While plastic-generating companies such as Nestle are urging federal support for “chemical recycling” which basically uses incineration to break plastics down to their fossil fuel components, Congress has been stuck for over a year with Senate and House bills that would tackle the corporate side of plastic use. The Break Free from Plastic Pollution Act (SB 984) and its companion bill (HR 2238) aim to provide national leadership to reduce the amount of wasteful plastic produced and reform our broken waste and recycling systems. The bill would shift the burden of cleanup and waste management to the corporations that produce plastic waste. The bill has a myriad of components and a lot of cosponsors. But the plastics industry, for both production of plastics in general and plastic bottles in particular, has very strong lobbying forces. Some components of that larger bill have been stripped into smaller bills such as the Plastic Pellet Free Waters Act (SB 1507) which utilizes the Clean Water Act to regulate the discharge of plastic pellets (aka nurdles) into US waters. Most conservation groups support the larger bill but realize any portion is a win for now.

Last September, the Environmental Protection Agency issued an advanced notice of proposed rulemaking weighing whether plastic chemical recycling should be regulated as solid waste incineration.

Industries who are engaging in chemical recycling disagree that they are simply incinerating plastics. Joshua Baca, the American Chemistry Council’s vice president for plastics argues, “It’s a very flawed way of thinking about it. This is a process that breaks down material back to the molecular building block. Incineration implies that it’s the end of the life of a material.”

Denise Patel, a program director with the Global Alliance for Incinerator Alternatives, or GAIA, says there could easily be hidden health concerns with the process and states, “I believe the general public has every right to be both skeptical and concerned.”

Meanwhile, in the California state legislature there are several bills to tackle waste from vape pens, cigarette filters, and used batteries as well as remove energy credits from trash incinerators.

MAKE YOUR VOICE HEARD

HUMBOLDT COUNTY SUPERVISORS
1st District - Rex Bohn 707-476-2391 rbohn@co.humboldt.ca.us
2nd District - Michelle Bushnell 707-476-2392 mbushnell@co.humboldt.ca.us
3rd District - Mike Wilson 707-476-2393 mike.wilson@co.humboldt.ca.us
4th District - Virginia Bass 707-476-2394 vbass@co.humboldt.ca.us
5th District - Steve Madrone 707-476-2395 smadrone@co.humboldt.ca.us

U.S. SENATORS - CALIFORNIA

Senator Dianne Feinstein www.feinstein.senate.gov/public
Senator Alex Padilla www.padilla.senate.gov

Look up other senators here: www.senate.gov/senators/index.htm

U.S. REPRESENTATIVE - CALIFORNIA DISTRICT 2

Congressman Jared Huffman www.huffman.house.gov

Look up other representatives here: www.house.gov/representatives

CALIFORNIA GOVERNOR
Governor Gavin Newsom www.gov.ca.gov

Look up other California state legislators: www.findyourrep.legislature.ca.gov/

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COMPOST: KITCHEN SCRAPS FIGHT CLIMATE CHANGE

Susan Nolan

Who would have thought your discarded coffee grounds and carrot butts could be a significant source of greenhouse gases? Turns out, food waste in landfills is a big problem. Organic material rotting in anaerobic conditions produces methane, an even more potent greenhouse gas than carbon. So your kitchen scraps, buried in the landfill, contribute disproportionately to climate change. Rachel Machi Wagone, the director of CalRecycle, says “Diverting our organic waste is the single fastest and easiest thing that every single Californian and every American can do to fight climate change.” Composting does produce carbon dioxide, but paradoxically, that’s a good thing when the alternative is methane from landfills.

Composting is not a chemical process like rusting. It’s a matter of culturing living things, more like making yogurt, beer, or bread dough. And just as you don’t make a cup of beer at a time, or bake bread a muffin at a time, you can’t expect a small amount of compost to succeed as a culture. It needs volume to build up the warm moist environment where the microorganisms that break down organic matter efficiently will thrive.

Also, compost needs lots of roughage to create an environment that supports the right microbes. Pure food waste degenerates into a stinky and disgusting mess that draws flies. Lots of roughage creates an environment that supports the right microbes for an earthy, airy compost pile. The rule of thumb is: four parts of “brown” (dry, carbon-rich material) to one part “green” (fresh, nitrogen-rich material). Dry leaves, hay and straw, and paper and cardboard qualify as “brown.”

Eggshells, hair trimmings, cotton rags, and similar organic materials can go in too — old jeans will disappear except for thread, zipper, and pockets. Wood breaks down in a different way, consuming a lot of nitrogen, and should be avoided in your home compost. Commercial compost facilities add chemical nitrogen to power wood-rotting microbes.

Manure is great in compost. The concentrated nitrogen gives your microscopic allies a big boost. Use poultry or farm animal manure, the fresher the better (sorry, dog and cat poop don’t count). Bagged fertilizer is okay but fresh is best, as it will contain live bacteria that go to work for you.

“Bioplastics” on the other hand require the high heat of commercial compost facilities and are not suitable for home processing. Some paper is generally okay, but plastic-coated water- or grease-proof food containers, including packaging for refrigerated foods, are not advised.

Compost is alive, and full of living things. A big pile on the ground outdoors will host earthworms, plus a variety of millipedes, centipedes, and maybe slender salamanders. A baby garter snake turned up in mine.

A good-sized bin can be made from four pallets standing upright in a square and tied together at the corners. This is easy to open up for turning or removal of finished compost. All kinds of bins are available commercially, just bear in mind: bigger is better.

You may have been put off by reading that compost needs to be turned a lot. That’s when you re-pile it with a pitchfork to move undigested material from the edges into the more active center, and create better aeration. Yes, it’s as much work as it sounds — but no, you don’t have to unless you’re eager for the finished compost. Rot will continue even without turning, just more slowly. A compacted pile may emit some methane if left unturned.

One thing you need to do is water the pile. The little critters that do the work need warmth and moisture. They generate their own heat metabolically, but in the dry season they depend on you for water.

Food waste can attract unwanted attention from wildlife and pets. There are workarounds: using an animal-proof bin, digging down and burying kitchen waste, or letting fruity waste begin to mold in a bucket first.

So, the three key elements for successful compost are volume, roughage, and moisture.

Maybe you want to do the right thing, but for whatever reason, home composting is not going to work for you. Here are some options: the Local Worm Guy (www.localwormguy.com), provides weekly pickup from Trinidad to Eureka for a monthly fee. CCAT on the CP Humboldt campus accepts compost for free. Full Cycle Compost (fulcyclecompost.com) will pick up food waste by bicycle for composting in Arcata and accepts drop offs for a small fee. Arcata residents can also purchase a discounted backyard compost bin at the City of Arcata Environmental Services Department.

No doubt other options will open up as a new law, SB1383, takes effect. The goal is a 75 percent reduction in organic waste going to landfill by 2025.

Susan Nolan has studiously avoided growing up and getting a real job, but is proud to be both a former timber worker (taller, Humboldt Redwoods Manufacturing, 1987-8) and a one-time employee of the NEC (2002-3) besides state and national parks, the California Wilderness Coalition, and almost any sector of the economy you would care to name.

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Get on Board for the Climate

California Walks a Fine Line

Martha Walden

California’s cap and trade program catches it from all sides. As a market-based strategy it’s a less controlling approach to reducing carbon emissions than dictating performance standards or specific technology changes for individual businesses. For that reason some climate activists criticize it for being too industry-friendly. But of course, many industries already chafe under California’s regulations, which are more stringent than most states’.

Critics on the left were handed some live ammo recently in the form of a report from the Independent Emissions Market Advisory Committee (IEMAC). The report charges that California’s cap and trade program isn’t working, and at this rate California might not meet its crucial 2030 emission reductions goal (40 percent below 1990 levels). At a Senate hearing on February 23, alarmed senators questioned top regulators from the California Air Resources Board (CARB) and California’s Environmental Protection Agency (CalEPA).

Before getting into that, here’s a quick review of how cap and trade works. Every year California issues x number of allowances to each polluting industry – each allowance worth one ton of emitted carbon – and then leaves it up to the industries to figure out how to operate within those limits. Over time the number of allowances – the “cap” – decreases.

The “trade” part of cap and trade depends on the monetary value of the allowances, many of which are issued free from the state. Others are auctioned. Industries can buy and sell those allowances from each other. So if your business is operating within its allowance limit, you can sell your extra allowances to industries that exceed the limit. Polluters that have to shell out would get the message that it pays to reduce emissions, and they would follow suit.

That’s the idea anyway. But IEMAC says California has handed out way too many allowances. Industries are operating within their limits so comfortably that there’s no incentive to further reduce emissions and no market for buying or selling them. Consequently, industries are banking their allowances for future use. These banked allowances represent a potential 321 million tons of emitted carbon – more than the amount that should be eliminated by the program by 2030.

The IEMAC considers the problem fixable. Industries could be required to turn their allowances in at the end of the year instead of banking them, for instance. But first California’s top regulators must admit there’s a problem.

Liane Randolph of the CARB seemed unimpressed by the urgency expressed by senators or by IEMAC’s research. She said the state’s Scoping Plan, scheduled for later this year, would make the picture clearer. Her boss, Jared Blumenfield, head of CalEPA said CARB wouldn’t make any recommendations until the end of 2023. Both expressed confidence that cap and trade will yield its most crucial reductions in the long run. The program sunsets in 2030, but regulators are already talking about extending it.

Cap and trade covers approximately 400 major polluting industries and 70 percent of California’s total emissions. Oil and gas companies received 80 percent of the free allowances in 2021. If a substantial number of these industries move to a different state or country where they’re less regulated or not regulated at all, California’s clout as the sixth largest economy in the world could be jeopardized. Not only that but the emissions of the defecting industries would likely rise.
large banks, none of their financial institutions would agree to favorable terms for a loan. For example, all of Red Emma’s banks required at least one person from the co-op to offer personal collateral — if the business failed, the bank could repossess the signer’s house, car, or other assets in order to recuperate part of the debt. But the mission of cooperatives is to distribute these risks (and their rewards) amongst all the worker-owners so that no individuals have such severe exposure; it wouldn’t make sense to put a few people on the hook. Red Emma’s also asked for smaller loan amounts to reduce the risk each bank would take on, but since transaction costs for small and large loans are generally the same from the bank’s perspective, none agreed to that either. Because of their unorthodox ownership and management models, most co-op businesses don’t fit neatly enough into lenders’ boxes.

So Red Emma’s reached out to a co-op incubator fund in New York called The Working World. Since Red Emma’s was established and didn’t require incubation (in fact, they were already moving to help incubate other Baltimore co-ops by this time) they partnered with The Working World to create Seed Commons, networking with incubators and co-op funds around the country.

Loan funds are managed by Seed Commons and distributed to businesses in need. They also partner with local leadership to coordinate advising and vetting services. Most loan amounts are relatively small (under $15,000) for strategic reasons: they insulate small businesses from large debt until they find their footing and are better able to repay big loans. Repayment plans follow the spirit of “non-extractive financing”; payments are made as a percentage of monthly profits instead of a flat rate. If there’s no profit, there’s no loan payment due. This eases burdens on borrowers and incentivizes the larger organization to help ensure the business succeeds.

Since its launch in 2016, Seed Commons has enabled its members to make over one hundred loans totaling more than $10 million.

Sources: Solutions Journalism, nextcity.org

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**CO-OPS NETWORK FOR INVESTMENTS**

Seed Commons, a nationwide network of cooperative loan funds and business incubators, provides support and funding for worker-owned co-op businesses across America.

Working as a group, the various member organizations of Seed Commons collectively share the burden of fundraising, vetting investments, and advising business startups. It’s a network built largely by and mostly for worker-owned cooperatives. "This is about using our collective power to create a new financial institution," says Kate Khatib, co-director of Seed Commons and worker-owner at a restaurant and bookstore co-op in Baltimore, MD, called Red Emma’s. "We’re fundraising collectively, raising the investment capital collectively and figuring out how to deploy that capital most effectively in our individual communities."

Seed Commons has its roots in frustrations Red Emma’s endured some years ago. Red Emma’s needed financing to move to a new location, and although they were well-established and held deposits at several
Maps are spatial representations of our world. America, so they say, was named after an Italian mapmaker Amerigo Vespucci. But these seemingly innocuous acts of ascribing space are not as harmless as they may seem.

Story mapping is a form of mapmaking represented through the collection of information and stories. This exercise helps bring stories to life visually, inspiring us to foster a greater connection to our area.

Historically speaking, maps have also been used as instruments of colonialism, aiding in the theft of land from Indigenous Peoples. Despite these origins and what we commonly understand as conventional maps, they can be used today in many contexts and are used to depict relationships between a subject and a place. For instance, they can show relationships of rivers to oceans, bird migrations to Earth’s magnetic fields and people to place. By using maps to connect ourselves to places, we can unearth new insights into our own stories, and expand our relationship with the land and people with whom we share a place to call home.

We begin by understanding colonialism as an ongoing process of genocide and total dominion through displacement, dispossession, and erasure of Indigenous People from their land.

Colonialism has directly and indirectly shaped landscapes through the processes of exploitation, racialization and domination. This legacy seeps into our stories and the ways in which relationship to land is framed, creating a group of those who have benefited from colonialism and those who have suffered consequences from its impacts.

It’s important to uncover the historical impacts of the land when doing initial research for your story in order to paint a more complete picture. Take place names for example: Who are these parks, trails, and cities named after and why?

**TO CREATE A STORY-MAP**

The first step in creating your story-map is to reflect on your relationship to land and place, and your relationship to the Indigenous people of that place. The second step is exploring the “dominant narrative” of the land while considering what is missing or potentially false from that narrative if anything. Lastly is piecing together the information you collect, using a mapping software or creating your own Google Map.

This exercise is used to inspire a sense of accountability to ourselves, to our people, to those who came before us and to the land. How are we honoring the first peoples of this land? Or how do we honor our ancestors that have always been on this land? In what ways are we working to dismantle the perpetuation of colonialism in society? Finally, how are we working to engage in reciprocity and relational ways with our environment and society?

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Raven E. Marshall, EcoNews Intern

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**Resources**

- Google Maps
- *An Anticolonial Land-Based Approach to Urban Place: Mobile Cartographic Stories by Refugee Youth* by Michelle Bae-Dimitriadis
- The idea for “story mapping” was introduced by Dina Gilio-Whitaker, (Colville Confederated Tribes) a current lecturer in American Indian Studies at Cal State San Marcos. Author of *As Long as The Grass Grows*
Help us continue to educate, advocate, and bring you

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☐ I will donate online at www.yournec.org/donations
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This Membership is: (check only if applicable)
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In recognition of your generosity, we will list your name as a donor in EcoNews once a year.
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The Northcoast Environmental Center is a 501(c)(3), non-profit. All donations are tax-deductible. EIN 23-712386.

Northcoast Environmental Center
415 I Street, Arcata, CA 95521
MAIL TO: PO Box 4259, Arcata, CA 95518

TRASH-A-THON
APRIL 16 - 23, 2022
ANYTIME, ANYWHERE

Celebrate Earth Week with citizen science, direct-action activism, and fundraising for the Northcoast Environmental Center. Volunteers have a chance to win prizes!

Volunteer or Donate at yournec.org/trashathon2022
or email nec@yournec.org

7TH ANNUAL TIM MCKAY
BIRDATHON 2022
APRIL 30 – MAY 7

Join in the fun! Go birding for a day and get a chance to win prizes! Ask your friends and family to make a pledge for each species you identify. This event supports Redwood Region Audubon Society and the Northcoast Environmental Center.

LEARN MORE AT WWW.YOURNEC.ORG/BIRDATHON