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Green Colonialism

Many of us think of colonialism and colonization as things that happened in the past, but grabbing land to exploit its resources is still a practice very much alive today. Young climate activist Greta Thunberg recently shined a light on the concept of Green Colonialism when she made headlines for standing in solidarity with the Saami, the Indigenous Peoples of Norway, against plans by the government to build a large wind farm in their traditional grazing areas. They pointed out, as we often have, that the climate crisis is closely linked to the oppression, colonization, and patriarchal systems being practiced by developed countries that are fueling and causing the crisis in the first place. This struck a chord with us because while generating power using wind is less damaging to the environment than other energy sources, we shouldn’t be doing it at the expense of Indigenous Peoples, like we have in the past.

Wind Projects

Locally, we saw this play out when an out-of-town corporation, Terra-Gen, rolled into town and tried using Wiyot sacred lands for a wind energy project. Terra-Gen’s narrative became one that identified anyone opposed to the project as taking the side of the fossil fuel industry, which is an oversimplification of a complex issue. The project was defeated, but the attempt caused great division in the local community and the rifts have yet to completely heal.

Hydrogen Storage

The Yakama Nation of Washington State is another example of this attack on Indigenous Peoples’ land, culture and traditions in the name of renewable energy. A Boston-based company called Rye Developments wants to build a large pumped hydro storage facility using the promised cleanup of an old aluminum smelter as the leverage to try and force this project forward. They’ve been planning this project for almost a decade without any Free, Prior and Informed Consent (FPIC) from the Yakama Nation about this plan. The proposed site is sacred to the Yakama who use it for ceremonies and collecting traditional plants. As one Yakama leader has said in interviews, “Is it green energy if it’s impacting cultural traditional sites?”

Hardrock Mining

Globally, the much-needed push to shift from fossil fuels is leading to more conflicts like this as companies seek out the resources necessary for the shift, such as wind, water, and the metals (lithium, cobalt, copper and nickel) required for batteries and electrification. This adds complexity to our decisions as environmentalists as we search for solutions that are good for people and the planet. Specifically, how can we reconcile the environmental and cultural harm being done in the name of renewable energy?

Now more than ever we need to be listening to Indigenous Peoples and honoring tribal sovereignty in how we respond to climate change. Our goal at the NEC is to listen to local tribes about their concerns for proposed projects and to look at every project with the same critical lens, asking the necessary questions on the potential impacts it will have on our community and on wildlife. This is regardless of the project being a former mill site, a sustainable fish farm or an off-shore wind energy project.
DEAR ECONews

I would like to thank EcoNews Journalist, Elena Bilheimer, for two articles she wrote in the March, 2023 issue of the EcoNews: “Exploring Energy: Nuclear” and “Exploring Different Environmental Ideologies.”

Both are well-researched and clearly written. It was also nice to see she used Cal Poly Graduate Student, Alec Brown, as one of her sources. Alec and his graduate student colleague, Lorelei Walker, created the North Coast Resident Energy Survey with the NEC in 2022.

Ms. Billheimer enumerated some of the large costs of nuclear energy including uranium mining, storage of radioactive waste materials for thousands of years, etc. I would like to add a couple of other real costs we see today: costs of accidental radioactive exposure to the environment, and the costs of the real threat nuclear plants pose if terrorists steal radioactive materials or rods from plants.

To the first concern, we know all too well how dangerous nuclear power plants are to communities. Not only was the Eureka plant closed due to its location near an active earthquake fault, but also because whistleblower Rob Rowen, nuclear control technician and the person responsible for maintaining the plant’s monitoring system, found irregularities in the plant operation and registered those concerns. According to Rowen, records and his 2015 book, My Humboldt Diary: A True Story of Betrayal of the Public Trust, only three years after beginning its operations in 1963, Humboldt Bay Nuclear recorded invisible radioactive vapor that had spouted out the plant’s stacks and was carried by winds over the adjacent community. Devices deployed in southern Eureka to measure radiation in the atmosphere found that South Bay Elementary School, located approximately a quarter mile downwind from the plant, consistently showed the worst contamination.

What would the costs be if a plant were actually targeted by a foreign or domestic terrorist? After 9/11, that threat became very real. All repositories of nuclear material had to ratchet up barriers and monitoring systems to address potential terrorist threats. We do not know what the cost of that was but surely in the millions, if not billions, of dollars in addition to the ongoing cost of increased security personnel. As recently as the early days of the Russian aggression on Ukraine, Zaporizhzhia Nuclear Power Plant, the largest nuclear power plant in Europe, became a clear target and the plant’s electrical system was temporarily shut down, leaving it to heat up as water cooling was minimized at times. Imagine if that happened in Northern California either with the radioactive rods still in place at the decommissioned plant or if a new plant came online. How much of the area including private property would be uninhabitable not to mention the ecological impacts to the ecosystems? What would the cost be in lost jobs, ruined resources and perhaps lost lives?

I also wanted to add a local note related to the NEC to Ms. Bilheimer’s article, “Exploring Different Environmental Ideologies.” Though the 1960s’ era genesis of the movement defined loosely as Deep Ecology is generally attributed to the writings of Rachel Carson (author of Silent Spring), Paul Ehrlich, David Brower (Friends of the Earth) and Norwegian philosopher Arne Naess, perhaps one of the best academic papers on the topic added articles to broaden the understanding of the philosophy. Perhaps one of the best academic papers on the topic was by former Cal Poly Humboldt sociology professor and one of the founding members of the NEC, Bill Devall. THE DEEP ECOLOGY MOVEMENT, was published in the The Natural Resources Journal in 1980 and a follow-up book, Deep Ecology: Living as If Nature Mattered, with fellow author George Sessions in 1985. Devall, a practicing Zen Buddhist, looked at global as well as local philosophies that recognize a deeper relationship between people and the natural world. Devall’s earthly body was welcomed back into the earth he loved in 2008. Again, nice job, Ms. Bilheimer.

- Dan Sealy
April 5, 2023
Celebrate May Day: Support Workers, Defend the Earth

Caroline Griffith, EcoNews Journalist

As we’ve often reported in EcoNews, there are many ways that workers’ rights and environmental rights intersect. In celebration of International Workers’ Day (May 1) we wanted to highlight some of the work being done by our friends in the Labor Movement, locally and around the country.

What union/workers do you represent?
United Food & Commercial Workers Local 5, which represents retail food and drug employees, Cannabis workers, Wholesale Meat Processing, and Agriculture.

What are the big issues that you are following?
1. The proliferation of food delivery and mechanization impacts on the grocery and drug industry.
2. Rising worker organizing efforts and the brutal retaliation of employers in response to worker demands for a voice in the workplace.

How do they affect the environment?
1. The myth of convenience by getting everything delivered has increased miles driven to deliver products as drivers cross each other making multiple deliveries that could be done much more efficiently. Robotics and Artificial Intelligence at fulfillment centers use a ton of carbon and water to run the computer systems, and rare minerals to produce the technology.
2. Employers would rather replace workers than agree to living wages, benefits and terms and conditions of employment. Employers suppress wages while the cost of housing forces many retail workers to work in communities they don’t live in, so they have to drive long distances to get to and from work.

Do you have any call to action for our readers?
2. Companies to boycott: Starbucks has broken a ton of labor laws in retaliation to organizing drives across the country. However, Starbucks locations inside Safeway stores are Union, so those ones treat their workers better.

JOHN FRAHM, PRESIDENT OF THE HUMBOLDT AND DEL NORTE CENTRAL LABOR COUNCIL


FIREFIGHTERS FILE LAWSUITS AGAINST FIRE RETARDANTS AND FOREVER CHEMICALS

The dumping of fire retardant made of ammonium phosphate has ramped up in recent years, with 52.8 million gallons dumped in 2021, more than half of which was dumped onto California forests. Ammonium phosphate is essentially fertilizer, and many environmentalists have questioned if it does more harm than good. Not only is fighting fire by air very expensive, but it is also not clear how effective it is. Timothy Ingalsbee, a former wildland firefighter and executive director of the nonprofit Firefighters United for Safety, Ethics and Ecology, said in the LA times, “The Forest Service feels pressure to do something, as much for public relations as any operational benefit.... But it’s just a big airshow.”

Now a lawsuit has been filed by the Forest Service Employees for Environmental Ethics (FSEEE) that accuses the Forest Service of violating the Clean Water Act, which prohibits the discharge of pollutants into U.S. waters without a permit. FSEEE is an environmental nonprofit led by current and former Forest Service employees. Executive Director Andy Stahl is quoted as claiming: “There’s no scientific evidence that it makes any difference in wildfire outcomes.... This is like dumping cash out of airplanes, except that it’s toxic and you can’t buy anything with it because it doesn’t work.”

Matt McFarland, a firefighter with Humboldt Bay Firefighters Local 652 said, “The NFPA is highly regarded as the industry standard for safety rules and recommendations. As a firefighter, it comes as a shock to discover that the very equipment that we rely on to protect ourselves, that allows us to protect you, and to get us home safe, is causing harm. Firefighters already have higher rates of cancer than the general population, and the discovery of PFAS chemicals in our safety gear is very concerning. I fully support our parent union, the IAFF, in their efforts to have these chemicals removed from our turnouts.”

In similar news, the International Association of Firefighters (IAFF) has filed a suit against the National Fire Protection Association (NFPA) for its testing standards that require the use of Per- and Polyuroalkyl Substances (PFAS) in firefighter protective gear. The suit seeks to hold the NFPA accountable for not removing the test, which requires that turnout gear be exposed for 40 hours to UV light without degrading, essentially necessitating the use of PFAS, from its Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting (Standard 1971).

PFAS, also known as “forever chemicals” have been used in manufactured goods since the 1940s. PFAS break down slowly over time, accumulating in water and soil, and are known to lead to adverse health effects including hormone disruption, increased risk of certain cancers, decreased fertility and developmental effects and delays in children.

According to the EPA, there are numerous ways that people are exposed to PFAS, from eating foods packaged in plastics that utilize them, to drinking contaminated water or being exposed to contaminated soil. At the top of the list of ways to be exposed is “Working in occupations such as firefighting or chemicals manufacturing and processing.”
Landback in Goukd'in: An Opportunity for Healing and Justice

Caroline Griffith, NEC Executive Director

Landback, which Indigenous peoples have been working for since the time of colonization, has become more mainstream in recent years. The term has risen to prominence over the last few years along with a heightened awareness of Indigenous sovereignty issues and the effects of broken treaties. Although Landback on the surface means tribes regaining sovereignty over stolen lands, it also encompasses the healing that comes from reclaiming language and the traditions that are tied to the land. This is something that Steve Newcomb of the Indigenous Law Institute referred to as "rematriation," meaning "to restore a living culture to its rightful place on Mother Earth," or "to restore a people to a spiritual way of life, in sacred relationship with their ancestral lands, without external interference." Recent studies have shown that biodiversity loss and environmental decline are happening at slower rates on lands managed by Indigenous people, indicating that rematriation and land return are good for the earth, as well.

Here on the North Coast, there have been a handful of high-profile instances of land return recently, from the return of Tulawat Island and Mouralherwaq to the Wiyot Tribe in 2019 and 2022, respectively, to the more recent Katimiîn and Ameekyáaraam Sacred Lands Act which returned 1,200 acres of land to the Karuk Tribe in 2023. As exemplified by these events, Landback can take many forms: Tulawat was returned by the City of Eureka, Katimiîn and Ameekyáaraam by the federal government, and Mouralherwaq was privately held land acquired through a state grant.

One of the first steps in working towards Landback is looking at how land was taken in the first place and who ended up in possession of that land. As stated in the draft Red Paper "A California #LandBack Special Report" recently released by Save California Salmon, "Indigenous land dispossession was how the State of California became a world-renowned economy. Native lands were forcibly and often illegally taken via land-grab policies like: removal, the California unratified treaties, allotment, the seizure of lands to build National and State parks, the development of land-grant universities, and the creation of land trusts. Ongoing genocidal policies that included widespread massacres, enslavement, kidnapping of children, boarding schools, Indian child removal into adoptions and foster care, alongside policies outlawing Indigenous land management and knowledge practices contributed to the inability of Indigenous peoples to maintain their rightful ownership of land. Much of the land that was so called 'purchased' or 'deeded' during the 1800 and 1900s was done so illegally."

Dr. Cutchta Risling Baldy, one of the authors of the Red Paper, often points out that when people hear "Landback" they think, “Do they mean I should give my land back?” And although that is definitely an option, the largest landowners in the western U.S. are often state and federal government agencies. For example, the Karuk Tribe’s ancestral territory encompasses over 1 million acres, 95 percent of which is currently occupied by the U.S. Forest Service. Universities also own a large amount of land in California due to policies that allowed states to establish and fund public colleges through land grants that came from lands seized from tribes. So significant strides could be made on land return if government agencies and universities were to lead the way.

And of course, massive amounts of land are privately owned by wealthy landowners. According to the Madison Trust’s report “Who Owns the Most Land in the United States” the largest landowners in the U.S. are the Emmerson Family, owners of logging and sawmill company Sierra Pacific Industries, with 2.3 million acres in California, Oregon and Washington. Coming in third on the list is the Reed Family, owners of Simpson Logging, with 2.1 million acres on the West Coast. The Fisher Family, owners of Humboldt Redwoods Company and Mendocino Redwoods Company, is number 23 on the list with 440,000 acres.

As reported by Carrie Tully in her master’s thesis, “Working Towards Land Return In Goukd’in: A History Of Genocide and a Future of Healing”, in 2019 the Emmerson family transferred an 884-acre tract of land located in Goukd’in, or the Jacoby Creek Forest, to the California State University and in the care of then-Humboldt State University. This transfer took a number of years to negotiate and Cal Poly students are already benefiting from using the forest for research but, as Tully points out, involving the Wiyot Tribe was never considered in the deal. Although students from the Forestry and Environmental Science departments have access to the land for research in ecological restoration and sustainable management practices, Cal Poly Humboldt does not have decision-making power over it; the parcels are owned and ultimately controlled by the California State University Board of Trustees, an entity of the State of California.

On September 25, 2020 Governor Gavin Newsom released a Statement of Administration Policy on Native American Ancestral Lands acknowledging and apologizing for state sanctioned violence and exploitation “which dislocated California Native Americans from their ancestral land and sacred practices.” The statement went on to outline actions that the State would take to facilitate tribes gaining access to and co-managing ancestral lands, including working to facilitate land return. It states, “When natural lands under the ownership or control of the State are in excess of State needs, [the State will work] cooperatively within existing statutory and regulatory frameworks with the California tribes that have ancestral territory within those lands and are interested in acquiring them, including by prioritizing tribal purchase or transfer of land.”

The acquisition of Goukd’în represents an unprecedented opportunity for Cal Poly Humboldt, an institution that centers equity, inclusion and sustainability, to put those ideals into action by returning this land to the Wiyot Tribe.

Although the Landback movement is gaining steam and the State of California has indicated that land return is a priority, even going so far as to name it as a climate change strategy in the 30x30 Plan, there are still structural and financial challenges to land return. On March 24, Save California Salmon and the Native American Studies Department of Cal Poly Humboldt hosted the Northern California Landback Symposium to explore these challenges and the policy changes that are needed to facilitate getting Indigenous lands back into Indigenous hands. Recordings of panel discussions and a link to the #Landback Special Report draft Red Paper can be found at californiasalmon.org/landback.
Landback, o tierra de regreso, por el que los pueblos indígenas han estado trabajando desde la época de la colonización, se ha vuelto más común en los últimos años. El término ha subido en prominencia en los últimos años junto con una mayor conciencia de los problemas de soberanía indígena y los efectos de los tratados violados. Aunque Landback en la superficie significa que las tribus recuperan la soberanía sobre las tierras robadas, también abarca la curación que proviene de la recuperación del idioma y las tradiciones que están ligadas a la tierra. Esto es algo a lo que Steve Newcomb, del Indigenous Law Institute, se refirió como “rematriación”, que significa “restaurar una cultura viva en el lugar que le corresponde en la Madre Tierra” o “restaurar a un pueblo a una forma de vida espiritual, en una relación sagrada”. Con sus tierras ancestrales, sin injerencias externas. Estudios recientes han demostrado que la pérdida de biodiversidad y el deterioro ambiental están ocurriendo a un ritmo más lento en tierras administradas por pueblos indígenas, lo que indica que la rematriación y la devolución de tierras también son buenas para la tierra. Aquí en la costa norte, ha habido una cantidad de instancias de alto perfil de devolución de tierras recientemente, desde la devolución de la isla Tulawat y Mouralherwaq a la tribu Wiyot en 2019 y 2022, respectivamente, hasta la más reciente Katimin y Ameekyáaraam Sacred Lands Act que devolvió 1,200 acres de tierra a la tribu Karuk en 2023. Como lo ejemplifican estos eventos, Landback puede tomar muchas formas: Tulawat fue devuelta por la ciudad de Eureka, Katimin y Ameekyáaraam por el gobierno federal, y Mouralherwaq era tierra de propiedad privada adquirida a través de una subvención estatal.

Uno de los primeros pasos en el trabajo hacia Landback es ver cómo se tomaron las tierras en primer lugar y quién terminó en posesión de esas tierras. Como se indica en el borrador de un Red Paper o Libro Rojo “A California #LandBack Special Report” o Un informe especial de California LandBack” publicado recientemente por la organización Save California Salmon, “El despojo de tierras indígenas fue la forma en que el estado de California se convirtió en una economía de renombre mundial. Las tierras nativas fueron tomadas por la fuerza y ilegalmente a través de políticas de acaparamiento de tierras como: remoción, los tratados no ratificados de California, asignación, incautación de tierras para construir parques nacionales y estatales, el desarrollo de universidades de concesión de tierras y la creación de fideicomisos de tierras. Las políticas genocidas en curso incluían masacres generalizadas, esclavitud, secuestro de niños, internados, traslado de niños indígenas a adopciones y hogares de guardia, junto con políticas que prohibían la gestión de la tierra indígena y las prácticas de conocimiento contribuyeron a la incapacidad de los pueblos indígenas para mantener su propiedad legítima de la tierra. Gran parte de la tierra que se llamó ‘comprada’ o ‘titulada’ durante los años 1800 y 1900 se hizo de manera ilegal”. Dr. Cutcha Risling Baldy, una de las autoras del Red Paper, a menudo señala que cuando las personas escuchan sobre Landback, piensan: “¿Quiere decir que debo devolver mi tierra?” Y aunque definitivamente no es una opción, los mayores terratenientes en el oeste de los EE. UU. suelen ser agencias gubernamentales estatales y federales. Por ejemplo, el territorio ancestral de la tribu Karuk abarcaba más de 1 millón de acres, el 95 por ciento del cual está ocupado actualmente por el Servicio Forestal de EE. UU. Las universidades también poseen una gran cantidad de tierra en California debido a las políticas que permitieron a los estados establecer y financiar colegios públicos a través de concesiones de tierras que provenían de tierras confiscadas a las tribus. Se podrían lograr avances significativos en la devolución de tierras si las agencias gubernamentales y las universidades lideran el camino.

Y, por supuesto, enormes cantidades de tierra son propiedad privada de terratenientes adinerados. Según el informe de Madison Trust “Quién posee la mayor parte de la tierra en los Estados Unidos”, los mayores propietarios de tierras en los EE. UU. son la familia Emmerson, propietaria de la empresa maderera y aserradero Sierra Pacific Industries, con 2.3 millones de acres en California, Oregón y Washington. En tercer lugar en la lista está la familia Reed, propietaria de Simpson Logging, con 2.1 millones de acres en la costa oeste. La familia Fisher, propietaria de Humboldt Redwoods Company y Mendocino Redwoods Company, ocupa el puesto 23 en la lista con 440,000 acres. Como informó Carrie Tully en su tesis de maestría, “Working Towards Land Return In Goukd’in: A History Of Genocide and a Future of Healing” traducido como “Trabajando hacia el retorno de la tierra en Goukd’in: una historia de genocidio y un futuro de curación”, en 2019 la familia Emmerson transfirió un terreno de 884 acres ubicado en Goukd’in, o el bosque de Jacoby Creek, a la Universidad Estatal de California y al cuidado de la entonces Universidad Estatal de Humboldt. Esta transferencia tardó varios años en negociarse y los estudiantes de Cal Poly ya se están beneficiando del uso del bosque para la investigación pero, como señala Tully, la participación de la tribu Wiyot nunca se consideró en el trato. Aunque los estudiantes de los departamentos de Ciencias Forestales y Ambientales tienen acceso a la tierra para realizar investigaciones en restauración ecológica y prácticas de manejo sostenible, Cal Poly Humboldt no tiene poder de decisión sobre la misma; las parcelas son propiedad y están controladas en última instancia por la Junta de Fideicomisarios de la Universidad Estatal de California, una entidad del Estado de California.

El 25 de septiembre de 2020, el gobernador Gavin Newsom publicó una Declaración de política de administración sobre las tierras ancestrales de los nativos americanos en la que reconoce y se disculpa por la violencia y la explotación sancionadas por el estado “que dislocaron a los nativos americanos de California de sus tierras ancestrales y prácticas sagradas”. La declaración continuó describiendo las acciones que el Estado tomaría para facilitar que las tribus obtengan acceso y co-administren las tierras ancestrales, incluido el trabajo para facilitar la devolución de tierras. Establece: “Cuando las tierras naturales bajo la propiedad o el control del Estado excedan las necesidades del Estado, [el Estado trabajará] en cooperación dentro de los marcos legales y reglamentarios existentes con las tribus de California que tienen territorio ancestral dentro de esas tierras y están interesadas en adquirirlas, incluso dando prioridad a la compra o transfeencia tribal de tierras”.

La adquisición de Goukd’n representa una oportunidad sin precedentes para Cal Poly Humboldt, una institución que se centra en la equidad, la inclusión y la sostenibilidad, para poner en práctica esos ideales al devolver esta tierra a la Tribu Wiyot.

Aunque el movimiento Landback está ganando fuerza y el Estado de California ha indicado que la devolución de tierras es una prioridad, llegando incluso a nombrarlo como una estrategia de cambio climático en el Plan 30x30, todavía existen desafíos estructurales y financieros para la devolución de tierras. El 24 de marzo, Save California Salmon y el Departamento de Estudios Nativos Americanos de Cal Poly Humboldt organizaron el Simposio Landback del Norte de California para explorar estos desafíos y los cambios de política que se necesitan para facilitar que las tierras indígenas vuelvan a manos indígenas. Las grabaciones de los paneles de discusión y un enlace al borrador del Informe Especial #Landback se pueden encontrar en californiasalmon.org/landback.
TAKING OUR WATERS, TAKE OUR LIVES
AN INTERVIEW WITH CHARLEY REED

Interviewer: Tali Trillo, NEC Staff

Describe who you are and your relationship to local lands.

My name is Charley Reed. I’m a Hupa, Yurok, Karuk person whose core identity is immersing through the roots of the trees, rivers, and mountaintops. Our everyday use of the lands and cultural practices is what connects me most to the land.

Can you share some of the ongoing, intergenerational history of Klamath River defense, including specific examples of injustices you have addressed?

My core memories are inherently included by being a hunter, fisherman, and gatherer, as most of our traditional areas have been made illegal to hunt, fish, or gather. We have been advocates just by practicing our culture. It wasn’t until after the 2002 fish kill on the Klamath River where I became a little bit more active. I was six, maybe seven years old. Being involved in dam removal rallies with my dad.

We’ve definitely experienced environmental injustices over the last four or five generations. The rivers being hydro blasted beyond recognition. The water diversion that is continuing to happen today, even though the dams are slated to be removed. Those are just two of the many injustices that happened to a river. It impacts our fisheries, which impacts the upslope management and the overall biology of our ecosystems.

It was a big hang up for who we are as Karuk people, as Native people. Take away our waters, you take away our lives. That’s at the core of the injustices we experienced.

The water is integral to our ceremonial practices where we’re not able to practice forms of our rituals that we would if we had healthy waters and access to an abundant amount of fish. There’s parts of our culture that haven’t been practiced since I’ve been around, or since my elders have been around, because of how impactful the dams have been on our water systems. That’s one of the bigger issues that is not often spoken about.

We continue to face mismanagement of our aboriginal territories. Since we didn’t have a ratified treaty, we lost any type of responsibility to burn and manage our forests, which is connected to river health.

These injustices aren’t accidents, but they’re created by design to remove our people. And it’s just great to know that they’re failing at that.

What does undamming the Klamath mean for your community, including nonhuman relatives?

I imagine it being some type of clot in a vein system. Removing the dams is like removing a life threatening blood clot. It’s very much a second-chance-at-life feeling. Like a breath of fresh air. A gleam of hope for next generations not to have to spend so much time on energy and resources trying to fight for the dams to be removed. Imagining what could come of that energy that I feel is now restored.

The undamming of the Klamath for fish, birds, mammals, plants, trees – they’re going to be the first ones to really experience the difference. We’re going to see that difference in the overall health of our watershed ecosystems, especially the spring Chinook salmon, who were very close to extinction. They’re going to bounce back quicker than we could ever imagine.

Can you explain how your fight for water protection connects to cultural fire?

Fire was and continues to be our tool that protects both our spiritual health and our upslope forestry health, which is tied together through our river health.

You can imagine a warm day and it’s a little too warm for the fish to travel upstream where they need to be. There’s a nice plume of smoke from some burns that are going on up the river. That gives them just enough of a break to make their move to the next main cool water refugia site. The smoking itself is an identifying signal that fish can continue to make their journey. Without that smoke, maybe they’re holding out in a smaller refugia site, which makes them more susceptible to disease.

It’s very much a symbiotic relationship that we’ve known for millennia.

What is Save California Salmon and your role there?

It’s a nonprofit that centers Indigenous experiences on the river, especially in rural communities throughout the northern state. I’m the Education Director. We’ve created a TEK curriculum for sixth through eighth grade, as well as for high school aged students. We have two forms of curriculum that meet state standards, driven by community and environmental connection.

We do a lot of summer programming [like] getting Native students onto the river, in-person experience to see what’s surrounding them and hopefully inspire them to be great in their own way. We also offer in-person implementations of lesson plans. We don’t want to set anyone up for failure because it’s very fragile information that we’re putting out.

Organizing community events like [the Salmon Run], hosting different schools and getting them connected to the outside world, and having different trainings on how to equip youth with their voices in different public hearings. We know that youth’s voices are powerful. They’re ultimately the ones who are going to carry on this fight.

What does environmental justice mean to you?

A lot of people of color and Indigenous people have experienced environmental injustice, but I’ve never really thought of “environmental justice” per se growing up. It was more like an Us versus Them, you know? Natives versus Everyone. You basically have to be a smooth criminal to be a Native person or Karuk person. We’d go up with my dad and he would start burning a prairie, and we’d be like, “Wait, what are you doing?” And he’d be like, “This is what we gotta do.” I don’t know if it’s me being rebellious to policies or laws, if that’s environmental justice. Or if it’s just living as environmental justice. I feel like it’s one of those buzzwords right now as a way to advocate for ourselves and things. That is something that we’ve always done since contact.

Read the full interview at www.yournec.org/charleyreed.
Refrinery Pollution Worse in Communities of Color

Oden Taylor, EcoNews Intern

While it is clear that big oil pollutes the air, how does it affect the water and the creatures that depend on it? On Jan. 26, the Environmental Integrity Project (EIP) published a report entitled “Oil’s Unchecked Outfalls: Water Pollution from Refineries and the Environmental Protection Agency’s (EPA) Failure to Enforce the Clean Water Act.” The EIP is a nonpartisan, nonprofit organization established in March 2002 by former EPA enforcement attorneys to advocate for effective enforcement of environmental laws.

The report demonstrates a clear connection between industrial pollution and poor health outcomes for all forms of life that are forced to interact with these chemicals. Not only does water pollution from refineries clog public waterways with harmful algae, it also corrodes drinking water intakes with industrial salts. Even worse, certain toxic metals such as selenium or chromium can settle at the bottom of freshwater rivers, lakes and estuaries for hundreds of years.

“Although petroleum refineries are well known as major sources of air pollution, they also discharge nearly half a billion gallons of wastewater every day into rivers, streams, and estuaries. That’s enough to fill 712 Olympic swimming pools every 24 hours with wastewater loaded with toxic metals, ammonia and other forms of nitrogen, oil and grease, industrial salts and other dissolved solids,” according to the EIP’s report.

The Clean Water Act (CWA) was originally enacted in 1948 and was called the Federal Water Pollution Control Act, but was later significantly reorganized and expanded in 1972. The intent of this policy was to require the Environmental Protection Agency to limit the discharges of dangerous and harmful refinery pollutants by engaging the best available water treatment methods. Within the CWA is also a clause requiring these regulations to be assessed and tightened every five years to match the most up-to-date treatment technologies.

According to the EIP’s report, these standards for refineries have not been updated since 1985 and “apply to only a small handful of pollutants”, not reflecting the advancements in treatment methods or the “expansion and modification of refinery operations over the last four decades.”

Not only have these standards not been updated, according to the EIP’s report, when states have tried enacting their own limits on refineries the EPA has also failed to enforce state-sanctioned discharge limits and rarely penalizes violations.

“Most refineries are located in heavily industrialized areas, close to other petrochemical plants, tank farms, and export or import terminals, which also contribute to air and water pollution,” the EIP’s report says.

“Because of this, the surrounding waterways that receive refinery wastewater are often overburdened with pollution.”

The report goes on to explain that these refineries nearly always border low-income neighborhoods or communities of color, who suffer through “the brunt of water pollution, oil spills, air pollution, leaks, and explosions.” Those with the lowest incomes who “have less access to recreational opportunities and are more likely to rely on fishing for food” or have to drink from downstream water sources are most affected.

The closest oil refineries to Humboldt County are located in San Francisco. The Bay region’s four oil refineries – Valero Benicia Refinery, Chevron Richmond Refinery, PBF (formerly Shell) Martinez Refinery, and Phillips 66 Rodeo Refinery, have the capacity to process 691,200 barrels of crude oil per day, according to the EIP’s report.

“In 2021, as part of the refining process, they dumped into Bay tributaries at least 1.2 million pounds of total nitrogen, 209,968 pounds of suspended solids, 54,404 pounds of ammonia, 32,298 pounds of oil and grease, 1,436 pounds of nickel, 1,057 pounds of selenium, 525 pounds of arsenic, 271 pounds of lead, 196 pounds of cyanide, and 142 pounds of hexavalent chromium,” according to the EIP’s report.

Between the years of 2019 and 2021, the four refineries had a combined 50 water pollution violations, according to EPA Enforcement and Compliance Online data.

“Especially noteworthy is selenium, a toxic pollutant that has shown up in high levels in Bay area fish, clams, and birds,” according to the EIP’s report. “Local environmental organizations have sued Bay refineries to reduce selenium discharges and prevailed in winning large fines. The state of California, unlike many other states, includes limits for selenium in water pollution control permits. But elevated selenium levels remain an ecological hazard in the Bay.”

Ben Eichenberg, a staff attorney for San Francisco Baykeeper, focuses on oil spill prevention and refineries and raw oil restructure, evaluation, policy analysis and litigation. San Francisco Baykeeper is a non-profit organization that defends the health of San Francisco Bay, its watershed, and Bay Area residents by holding polluters accountable. According to Eichenberg, San Francisco Baykeeper is advocating for California agencies to take a closer look at these water impacts from refineries.

“All of these refineries have outfalls where they discharge refinery process wastewater, as well as stormwater directly to the bay or in the street,” Eichenberg said.

Eichenberg said he fears that with sea-level rise due to global warming, groundwater tables will be pushed higher and, in the process, they will interact with more of these harmful pollutants. Eichenberg said we must stop only looking at the present moment and think more about the future of these industries and our planet.

“We’re in a transition period here, and refineries and oil companies are looking at their bottom lines and what they’re going to do in the future, but I don’t think regulators and communities are looking forward with quite the same clarity of vision,” Eichenberg said.

“What I worry about is that profits will start to run out, or regulations will catch up with refineries that are going to shut down and they’re going to leave this legacy of pollution unless we put real measures into place now to make sure that when the refineries close and as they get phased out, they clean up all this pollution that’s left behind.”

Though we don’t have to worry about pollution from oil refineries here in Humboldt, Humboldt Bay is no stranger to pollution. According to the Humboldt Baykeeper, the main pollutants in Humboldt Bay include dioxins, bacteria, polychlorinated biphenyls (PCBs), and mercury.

“One focus of Humboldt Baykeeper’s Toxics Initiative is the past use of wood preservatives at dozens of lumber mills that once lined the shores of the Bay and its tributaries,” states the Humboldt Baykeeper’s website. “The mills used the chemical pentachlorophenol (also known as ‘penta’), which led to the release of contaminants such as dioxins and furans. Accidental spills and illegal dumping of these chemicals resulted in soil and water contamination.”

Executive Director Jen Kalt of the Humboldt Baykeeper said that in Humboldt, those most affected by the water pollution are Indigenous people and low-income people who rely on seafood from the Bay.

“Humboldt Bay was listed as Impaired by PCBs under Section 303(d) of the Clean Water Act in 2002, based on levels of PCBs found in fish tissue,” according to the Humboldt Baykeeper’s website. “PCBs have been demonstrated to cause a variety of serious health effects, including cancer and serious effects on the immune system, reproductive system, nervous system, and endocrine system.”

Although we don’t have exactly the same issues with pollution as the Bay Area, we still need to remember the danger of possible pollutants, past and present, and do our best to preserve the ecosystem for all forms of life that depend on it.

As we march toward a cleaner future, we must ensure that as big industrial polluters go out of business, we, the residents and taxpayers, aren’t left to deal with the fallout to clean up their messes and suffer the health consequences of their greed.
Is Your Cannabis Sun+Earth Certified?

Oden Taylor, EcoNews Intern

Generators, High-Intensity Discharge lighting, dehumidifiers, industrial fans, giant opaque plastic tarps, and single-use, non-recyclable plastic packaging; for a product that claims to put users more in touch with Mother Earth, cannabis production sure is ripe with environmental catastrophe.

Humboldt County has been known for its cannabis since the 1970s, but with recent booms in industry demands, the quality and sustainability of Humboldt cannabis production have taken a significant hit. With so many different products offered at dispensaries, how can cannabis consumers ensure they aren't adding to this problem?

Dominic Corva, leader of the Cannabis Studies program at Cal Poly Humboldt, says the best way to ensure that you are getting sustainably harvested and ethically sourced cannabis is to grow it yourself. But for many cannabis users, this is simply not a realistic way for them to obtain the product, usually forcing them into a dispensary.

Dispensaries have come a long way since the early days of medical legalization. Recreational legalization, while in many ways good for the state, has brought with it new challenges that have disconnected consumers from the cannabis they are buying by sealing it tightly in single-use non-recyclable packaging.

Corva explained that with the state restrictions on testing, all customers have to go off when purchasing cannabis is, “How pretty is the package and how high is that [THC] number?”

THC(Tetrahydrocannabinol, the psychoactive compound found in cannabis) may be what the cannabis industry wants consumers to think is the most important component of their product but Corva argues otherwise. Oftentimes THC percentages on cannabis products are inflated and unrealistic, he said.

Corva explained the concept of “lab shopping,” in which cannabis producers shop around to see which lab will report the highest THC percentages for their product. The methods used to extract these high THC percentages from plants often require the complete desiccation of the flower to a point that is beyond conventional smoking methods, Corva said.

Instead of focusing on THC, Corva recommends spending your time in the dispensary asking questions about how the cannabis was grown. He added that an easy way to find sustainable products is to ask for flower that is Sun+Earth certified.

In addition to the environmental benefits, Corva also explained that full sun-grown cannabis has a higher terpene profile and has greater medicinal benefits than its artificial light-assisted counterparts, despite what you may hear from your local budtender trying to sell you on the high THC content of an indoor.

As saturated as the cannabis market is with large scale corporations, there are still many growers that are in touch with natural farming methods. Local cannabis farmer Mary Gaterud has been growing cannabis on her property the natural way since 1998. Starting from seed, Gaterud produces one harvest per year under full sunlight.

Gaterud identified herself as a “dinosaur” in the industry, explaining that many of the large-scale cannabis operations’ modern techniques for year-round harvesting require huge amounts of fossil fuels in the forms of energy and plastic.

“You’d never think that people don’t want a plant grown from seed anymore, but many of these large-scale operations have to use clones versus seed plants,” Gaterud said.

Clones require artificial light to supplement the natural life cycle to keep them from flowering too soon, Gaterud explained. Year-round harvesting also requires the use of heaters, fans, dehumidifiers and more, all powered by loud generators and sustained with diverted water.

These techniques are not only unsustainable from an energy perspective, they also cause direct damage to the ecosystems and habitats of local species. In Humboldt County, these harvesting practices have been known to harm many species, including salmon, the spotted owl and the marbled murrelet, according to Corva.

Gaterud said the best way for consumers to know what they are buying is to understand where the products they purchase come from and how much actually went into producing them. According to Gaterud, even cannabis that claims to be grown outdoors and with sunlight often still uses much of the same equipment as an indoor grow operation.

“Mainly, it’s factory farming inside of greenhouses, light assisted, multiple harvests a year, claiming that that’s sun grown, [while] under plastic,” Gaterud said. “It’s the same power draw that you would have as an indoor, except it’s [outside].”

Gaterud also expressed that it is up to consumers to avoid cannabis products like disposable vape cartridges, and to try looking for natural products that come in recyclable packaging.

“We’re in the sea of plastic, it’s become this plastic coated extravaganza,” Gaterud said. “And to think that every piece of plastic that every human has ever touched is still with us on the planet and will probably outlive us is shocking to me, and it’s shocking that the state of California would encourage this.”

To mitigate the unsustainability of the cannabis industry, the Humboldt County Board of Supervisors voted on October 25 to include the Humboldt Cannabis Reform Initiative on the June 2024 ballot for a vote of the people. Author’s of this initiative say it offers “a new vision for cannabis cultivation in Humboldt County.”

According to the initiative’s website, if passed, it will “reduce the cannabis cultivation footprint, promote healthy environments and rural communities, ensure public involvement, [and] transition the industry to small-scale, environmentally-minded cannabis farmers by stopping expansion of industrial mega-grows in rural neighborhoods and limiting cannabis cultivation to less than 10,000 sq. ft.”

The initiative states it also seeks to protect the health of residents, landowners, and the watershed, by tightening rules on wells and water diversion, as well as “reducing noise pollution and risk of fuel spills by allowing only one emergency generator for new permits.”

Some in the cannabis industry, however, worry these new regulations could harm the way they run their businesses. The Humboldt County Growers’ Association, for example, is opposed to the initiative for fear that the new regulations will be too hard for cannabis farmers to bear, causing them to go out of business entirely.

Regardless of what side you land on, it is clear that reform is needed to move toward a healthier future for the cannabis industry in Humboldt.

Tips on how you can purchase more sustainably next time you are at the dispensary: Ask for full- sun-grown cannabis and avoid purchasing anything grown indoors. Buy in bulk to avoid single-use plastic packaging as much as you can. Try your best to support small local farms to reduce emissions from the transportation of products. And as always, remember that nothing will change unless we demand that it change. If your local dispensary doesn’t have eco-friendly products ask for them until they do.
SUPPORT JUNETEENTH

Black Humboldt Press Release

BLACK HUMBOLDT

Black Humboldt (BH) is interested in networking, building relationships and community with the Black & Brown communities of Humboldt, Del Norte & Trinity Counties. BH is a Dream Maker project of The Ink People Center for the Arts and all donations are tax deductible.

The importance of Black Humboldt is monumental in Humboldt County, as we work to educate the community about the hardships our very small BIPOC population faces. We strive to create spaces, opportunities and advancements for the BIPOC community at large.

The Black and BIPOC community is often underserved, underrepresented and looked at as a separate entity in relation to the majority identities in Humboldt County, although this community has created a prospering, healthy community for itself. Our efforts at Black Humboldt strive to preserve cultural heritage and strengthen the community here in Humboldt County who identity as Black and BIPOC.

JUNETEENTH

Help us bring Juneteenth to Eureka June 2023! June 17th will mark the 4th community wide celebration of Juneteenth in Humboldt County. This community celebration will create safe inclusive spaces for the Black and BIPOC community, as well as create safe spaces for meaningful conversations around race, equity and inclusion. This day celebrates diversity, community and Black liberation.

Platforms will highlight BIPOC community members, entrepreneurs and businesses and raises funds for Black Humboldt & the NAACP’s Juneteenth Black Business Fund which awards 10 local Black businesses with $2,500 of unrestricted funds.

This holiday is one that is very important and empowering for Black and Brown communities all over the United States but especially for Humboldt County, as Black people currently only make up 2% of the population.

WHY SPONSOR US

• Support the BIPOC community to create and maintain representation as an equal part of the Humboldt County community.
• Support Black & Brown efforts and organizing.
• Support county wide conversations around race, equity and inclusion.
• Create employment and monetary opportunities for the BIPOC Community.

Black history is a part of the United States’ history and is an important celebration as we create safe spaces and inclusion for Black, Indigenous and POC communities in Humboldt County. Through this celebration Humboldt County will be able to create and maintain space for Black communities to flourish as well as feel as they are a part of a community that is & American History while celebrating liberation. We will showcase over 15 local BIPOC artists, educators, community leaders and change makers while also honoring our Indigenous communities and our relationship to the land.

SPONSORSHIP PACKAGES

• General Support (In-Kind Donation): We are looking for in-kind donations in the form of festival equipment: pop up tents, chairs & tables. As well as space we can host events and items to be raffled off.
• Quartz Package ($25): With this level of support you will receive a limited edition Juneteenth poster and a Black Humboldt promo swag bag.
• Ruby Package ($50): With this level of support you will receive a limited edition Juneteenth poster, a limited edition Juneteenth T-shirt and a Black Humboldt promo swag bag.
• Diamond Package ($100): With this level of support you will receive a food & beverage wrist band to be used during our Juneteenth Celebration. Includes 4 small food bites from participating vendors & 2 drink tickets.
• The Homie Hook Up ($250): With this level of support you will receive all the benefits from the Quartz, Ruby and Diamond packages and a limited edition reusable Juneteenth tin cup.
• The Galveston Package ($500): With this level of support you will receive all the benefits from our Quartz, Ruby and Diamond packages and a limited edition reusable Juneteenth tin cup for two guests.
• Gordon Granger Package ($1000) With this level of support you will receive a limited edition poster, T-Shirt & a food/beverage wrist band for three guests. With this tier your business or organization will receive honorable mention during our Juneteenth celebration.
• The Change Maker Package ($2,500): With this level of support you will receive a limited edition poster, T-Shirt & a food/beverage wrist band for 4 guests. With this tier your business or organization will receive honorable mention during our Juneteenth celebration and will be recognized as a sponsor on all social media, website & promos.

WWW.YOURNEC.ORG

BLACKHUMBOLDT.COM/JUNETEENTH-Celebration
Public Land Timber Sale Round Up

Matt Simmons & Abigail Lowell, EPIC staff

Having trouble keeping track of all of the gigantic logging projects currently proposed by the U.S. Forest Service on Northwest California’s public lands? EPIC is here to help break down the projects and explain their implications.

The Region 5 Post-Disturbance Hazardous Tree Management Project, proposed in early 2022, is poised to be the largest timber sale in modern U.S. history, covering 5,780 miles of roads and trails throughout California. The “North Zone” of the project, located in our region, would permit clearcutting 300 feet along either side of 3,049 miles of roads and trails in Six Rivers, Shasta-Trinity, Mendocino and Klamath National Forests. Picture clearcuts the length of football fields on either side of enough seldom-used forest roads to drive I-80 from Los Angeles to New York City — totaling 187,880 acres of logging (or 294 square miles, nearly the size of New York City).

In December 2022 EPIC and allies filed an objection to the “North Zone” of the R5 Project asking the Forest Service to reduce the environmental impact by retaining living trees, focusing on high-severity burn areas, fully protecting riparian reserves, and reducing the extent of roadside logging by limiting the project to roads needed by the public. We believe these are reasonable constraints on a project that otherwise looks more like a massive timber sale than hazard tree management. Explore the Forest Service’s R5 project proposal documents at www.fs.usda.gov/project/?project=60950.

Also on the Salmon River, the River Complex project proposes 3,624 acres (6 square miles) of post-fire logging in the headwaters of the South Fork Salmon and Scott Rivers on the Klamath National Forest. The Forest Service plans to clearcut the Taylor/Carter Meadows Late Successional Reserve, which would create more flammable timber plantations. Explore the Forest Service’s River Complex project proposal documents at www.fs.usda.gov/project/?project=61558.

The Antelope Tennant post-fire timber sale proposes clearcutting 20,230 acres (or 32 square miles, slightly smaller than Miami, FL) of both live and burned trees in the Medicine Lake Highlands on the Klamath National Forest — which the Forest Service euphemistically calls “fire recovery” and “fuels reduction”. They are pushing this logging through as an “emergency” even though the fires were in 2021. And while the hundreds of projects EPIC has reviewed typically include additional reports on wildlife, soil, hydrology, botany, archeology etc., there is no in-depth information on any of these subjects for this project. Take wildlife, for instance: even though these forests are home to threatened and endangered species, there is zero additional wildlife-related information provided in the Environmental Assessment. Explore the Forest Service’s Antelope Tennant project proposal documents at www.fs.usda.gov/project/?project=61649.

Also on the Salmon River, the River Complex project proposes 226,944 acres, or nearly 355 square miles (almost a quarter of the size of the entire state of Rhode Island), and the cumulative impacts of all these projects together have not been adequately addressed. EPIC and our allies have been working hard to monitor, comment on and object to these projects in an effort to ameliorate the scope and damage. Read more about each of the project proposals on EPIC’s blog at www.wildcalifornia.org/news/categories/forests-and-public-lands.

To top it off, we just received a scoping notice for the FH7 “restoration project” proposing 9,575 acres of commercial logging on the Mendocino National Forest. Explore the Forest Service’s River Complex project proposal documents at www.fs.usda.gov/project/?project=63610.

In sum, these proposed timber sales encompass 226,944 acres, or nearly 355 square miles (almost a quarter of the size of the entire state of Rhode Island), and the cumulative impacts of all these projects together have not been adequately addressed. EPIC and our allies have been working hard to monitor, comment on and object to these projects in an effort to ameliorate the scope and damage. Read more about each of the project proposals on EPIC’s blog at www.wildcalifornia.org/news/categories/forests-and-public-lands.

For action alerts and updates on these projects and more, subscribe to EPIC’s biweekly e-newsletter at www.wildcalifornia.org/subscribe.
Please join Redwood Region Audubon Society on Wednesday, May 17, at 7:30 p.m. for a program by Dr. Jesse Conklin entitled

Bar-tailed Godwits: A Personal History of Excessive Flying

In this talk, Jesse will discuss how his own career in ornithology, including eighteen years of research on Alaska-breeding Bar-tailed Godwits, has been inextricably entwined with the quest to understand just how far a bird can fly. Each year, these birds make a round-trip of more than 30,000 kilometers between Alaska and their nonbreeding areas in New Zealand and Australia. Jesse will discuss how our understanding of the godwits’ incredible trans-Pacific migration has evolved over time with advancements in tracking technology, and how much we still don’t know.

Jesse grew up in Southern California and received a BSc in Graphic Design from San Jose State University in 1990. After learning that you could theoretically get paid to look at birds, he threw away that career and came to Humboldt State University, where he received an MSc in Wildlife in 2005, studying Dunlin in Humboldt Bay. Continuing to study migratory shorebirds, he has worked extensively in Alaska, received a PhD in Ecology from Massey University in New Zealand in 2012, and did ten years of postdoctoral research while based in the Netherlands. He has been Editor-in-Chief of the ornithological journal Wader Study since 2015. Now an independent researcher focusing on migration behavior and population genetics of shorebirds, Jesse recently moved back to Humboldt County, because it is just nicer than Europe.

The live program will be held at the Six Rivers Masonic Lodge, 251 Bayside Road, Arcata. It will be simultaneously zoomed – please see RRAS.org for the Zoom link. Hot drinks and goodies will be served at 7 p.m., so bring a mug to enjoy shade-grown coffee. Please come fragrance-free.

RRAS FIELD TRIPS IN MAY

Saturday May 6 – 8:30-11am. Join RRAS for a free guided field trip at the Arcata Marsh and Wildlife Sanctuary. Bring your binoculars and scope if you have them, and meet trip leader Bob Battagin at the end of South I Street (Klopp Lake) for easy-to-walk trails, a beautiful view of Humboldt Bay, and the opportunity to hear and see a diverse range of shorebirds, migratory songbirds and raptors, and resident birds likely engaging in breeding activities. Reservations not required.

Saturday May 13 – 8:30-11am. Free guided field trip at Arcata Marsh with trip leader Bill Rodstrom. Meet at the end of South I Street (Klopp Lake).

Sunday May 14 – 9-11am. Join trip leader Ralph Bucher for a walk at the Humboldt Bay National Wildlife Refuge. This two-mile walk is along a wide, flat, gravel-packed trail easily accessible on foot. Just outside of town, this refuge offers astounding and easy access to tidally influenced habitats including mudflats, riparian vegetation, conifers, and bay, which host a variety of geese, raptors, shorebirds, and waders. Email Ralph to sign up for this field trip at thebook[at]reninet.com.

Sunday, May 20 – 9:30-11am. What better way to celebrate Mother’s Day than with a Women and Girls Bird Walk! Join us for a stroll along the Blue Lake levee and maybe through the cottonwoods, where we will likely hear some vocal species like kingfishers and killdeer; see other species that enjoy this productive riparian area, including sparrows, finches, corvids, raptors, ducks, and wrens; and we may be able to observe the fledglings of some of the early nesters as well! Trip leader for this walk is TBD. Meet in the parking area on the south side of the Hatchery Road bridge.

Sunday May 21 – 9-11am. For a wheelchair accessible walk along the Eureka shoreline, join trip leader Ralph Bucher at the foot of Del Norte St. An active Osprey nest, along with waterbirds, can be viewed from the pier. Email Ralph to sign up for this field trip at thebook[at]reninet.com.

CONTINUED NEXT PAGE
RRAS FIELD TRIPS IN MAY CONTINUED

Saturday May 27 – 9-11am. Wigi Wetlands Volunteer Workday. Help create bird-friendly native habitat and restore a section of the bay trail behind Bayshore Mall. We provide tools and snacks. Please bring your own water and gloves. Contact Jeremy Cashen at jeremy.cashen@yahoo.com or 214-605-7368 for more information.

Saturday May 27 – 8:30-10:30am. Join RRAS in Southern Humboldt on the fourth Saturday of every month at Tooby Park, one mile west of Garberville on Sprowl Creek Road. These walks will be easy walking lasting 2-3 hours each. Start time is variable so please text or call Ann at 707-296-8720 for start time each month. Heavy rain cancels.

Sunday May 28 – 9-11am. Join two Humboldt Wildlife graduate students studying rangeland birds for this grassland bird-centered walk along the V Street loop in Arcata. Maddie Ybarra and Ximena Moura will focus on sparrows, finches, and other grassland songbirds during an easy-to-walk stroll along the restored wetlands in southern Arcata, where raptors, waterfowl, and shorebirds will likely also be present. Meet at the small parking area on Old Samoa Road, west of Pacheco Road.

Monday, May 29 – 8am-noonish. Spend the morning with us exploring the newly restored Ocean Ranch Unit of the Eel River Wildlife Area. We’ll see how well the area is supporting birds that breed in our local estuarine habitats. With luck, we may see Red-necked Phalarope, White-faced Ibis, and/or Purple Martin. Be prepared for 2-3 miles of easy walking. Meet leader Ken Burton at the parking area off Table Bluff Road (40.691833, -124.273462). If you want to carpool to the location, contact Ken (sschaefer@gmail.com) with your address.
A Refuge for All
Appreciating Birds at Famed Arcata Marsh and Wildlife Sanctuary with the Redwood Region Audubon Society, by Jessie Bunkley

At 8:30 on a chilly, winter morning, a group of about a dozen people gather at Arcata Marsh for a guided walk to identify and admire the many bird species that use the renowned wastewater treatment facility as habitat. The Redwood Region Audubon Society has offered these walks on traditional Wyot lands every Saturday since 1986. Judi Brown has found community at the walks, which she started regularly attending two years ago after moving to the area. “You can talk about a subject that you all love and it takes you away from the cares of the world,” she says. “You can stand in any one place at Arcata Marsh and feel happy,” she adds with a laugh.

Today, the group comprises birders of all skill levels, and Gary Friedrichsen, a local biologist, leads the way. As we meander through the wetlands, everyone scans the water, naked trees, and gray sky. Winter’s grip is firm, but colorful hats and jackets keep the chill at bay. We stop at the edge of a pond and Gary sets up a spotting scope. Dunlins, Dowitchers, Least and Western Sandpipers all busily probe the mud bank for invertebrates. Participants discuss plumage, leg color, and behavior, pulling field guides from coat pockets to make careful notes in the margins. Buffleheads, Willets, Black-crowned Night Herons, Fox Sparrows — as penciled lists grow longer the noise of the highway is momentarily eclipsed by the high and wild calls of Aleutian Cackling Geese.

I ask Gary what inspires him to be a walk leader and he explains his gratitude for the birding mentors in his life, Dr. Stan Harris and Ron LeValley. “Being a part of Audubon allows me to do something on behalf of the community and give back.” Later, as people say their goodbyes and express their thanks, it is clear that the cycle of inspiration continues.

Thick-billed Fox Sparrow
by Gary Bloomfield

The Fox Sparrow is a familiar winter visitor to our area but that is only half of the story of this large and variable sparrow in the Klamath Bioregion. This species complex is comprised of four distinct population groups; the Red Fox Sparrow, a boreal breeder and eastern winter bird; the Slate-colored Fox Sparrow, breeding primarily in the Rocky Mountains; the Sooty Fox Sparrow, our common Pacific coast winter form that breeds from northwest Washington up the coast to the Aleutian Islands; and, finally, the Thick-billed Fox Sparrow, that winters in southern California to Baja California and breeds in the mountains of Oregon and California, including our local Klamath Mountains.

A good look at this bird reveals some obvious differences between it and the Sooty form. Most apparent are the gray head, gray-brown back, and rusty wings and tail, all in contrast to the uniform chocolate brown upper parts of the Sooty group. An even closer look shows off the namesake massive bill, often blue-gray on the mandible, unlike the orange of other Fox Sparrows. Their feeding habits, however, are similar, so they can also be detected by their noisy kicking up of leaf litter deep under the cover of the brushy understory.

These birds begin to arrive by May, when the snow is gone from their mountain brushfield breeding grounds. It is then, through spring into early July, when they can easily be found singing from atop higher vegetation in their territories. Their song is a rich and variable jumble of whistles, warbles, and trills that can be confused with that of the Green-tailed Towhee, another large sparrow that shares this breeding habitat. Their calls, however, are quite different, and most helpful in clinching an identification. The towhee utters a cat-like mew call, while the Thick-billed Fox Sparrow’s call is a high metallic “tink”, which is also very different from the Sooty Fox Sparrow’s moist and harsh “tchick”. As the summer progresses, their songs become less frequent, until finally by late August even their calls disappear as they quietly depart for their wintering grounds.
Intrepid RRAS birders faced down complicated weather conditions to participate in Audubon’s annual Christmas Bird Count (CBC). RRAS first participated in the CBC in 1947, while it was the 123rd year for the nation’s longest-running community science bird project. Here are the reports from our five participating circles.

**Tall Trees submitted by Ken Burton:** The Tall Trees count was held the day after the January 4 windstorm. The highway had been cleared, but Bald Hills Road was closed beyond the Redwood Creek Trail turnoff, so two of our eight areas and large parts of many others were inaccessible. The day was stormy, with flooding and winds predicted, and some of our expected counters were without power and/or stuck in their homes behind fallen trees, so we had our smallest turnout and least effort ever. Almost every metric was well below normal. Count-week effort, however, was extensive. No rare birds were found, but we did add count-week California Condor and Golden Eagle to our cumulative species list.

**Willow Creek submitted by Birgitte Elbek:** This year’s CBC in Willow Creek took place on December 21, and we were finally blessed with reasonable weather after a couple of years with weather postponements and cancellation. The past two summers also saw significant wildfire activity, though much of it was low-intensity, and much of the forest canopy remains. Due to Covid complications, we had four teams in the field, rather than the usual five. Overall, it was a fairly slow day, with a total of 78 species. There were a couple of noteworthy items: Gary Lester located two Black-capped Chickadees at the mouth of Willow Creek, the same spot where four individuals were seen on the count in 2018. Also, Turkey Vultures have only rarely been seen up here in winter, but this year's teams saw fifteen individuals, three times the previous high count. Nine Greater White-fronted Geese were found, almost twice the previous high count of five. Ken Burton also noted that wetlands species overall seemed somewhat sparse.

**Del Norte County submitted by Lucas Brug:** 18 people did the Del Norte CBC on Sunday the 18th of December. It was mostly clear with little wind and very cold in the morning. We had 157 species, with the overwintering Sandhill Crane and two White-faced Ibises the most unusual.

**Arcata submitted by Tony Kurz:** Arcata CBC ended up with 178 species! We had a total of 42 people participate this year. Weather was fantastic for the count: clear but a little on the cold side. A number of folks participated in nocturnal surveys, which paid off with an impressive eight species of owls! The count highlights included a continuing Nelson’s Sparrow staked out at the Arcata Marsh. The offshore team spotted a flying Yellow-billed Loon pass by their boat. Other highlights included two Pacific Golden-Plovers, two Horned Larks, two Tropical Kingbirds, and a Tennessee Warbler. Our biggest misses were Clark’s Grebe and Caspian Tern. Thanks to everyone for all their amazing effort.

**Centerville submitted by Sean McCallister:** 41 observers participated in the 61st annual Centerville Beach to King Salmon CBC on January 3, with 179 species tallied. Highlights included two Trumpeter Swans, Cassin’s Auklet, Snow Bunting, Tricolored Blackbird, Red Fox Sparrow, Orchard Oriole, Black-necked Stilt, Blue-gray Gnatcatcher, two Barrow’s Goldeneyes, and Ross’s Goose, among others. As for weather conditions, we threaded a needle between storms and had very nice conditions with mostly clear skies, no precipitation, and quite manageable wind! Special thanks to Gary Friedrichsen and Hal Genger for attempting to get offshore on Gary’s boat. Ocean conditions didn’t quite allow for it, but fortunately David Fix managed to do a six-hour sea watch from Table Bluff that added some goodies to the list.
Creativity Shouldn’t Cost the World

Maker’s Apron Press Release

Humboldt’s new Creative Reuse Center is up and running in Old Town. Maker’s Apron Creative Reuse, the spiritual successor to SCRAP Humboldt, is open weekly, accepting donations, offering drop-in crafting during Arts Alive, and presenting hands-on workshops in their colorful new home at 317 E Street.

“We opened the doors in January,” says Maker’s Apron Director Kati Texas. "Those first few weeks were all about getting into the flow of processing donations. The volunteers and I have already sorted and priced over 2,800 pounds of tools and materials that were on their way to a landfill!" According to makersapron.org, donations of arts and crafts, home improvement and education supplies are accepted during all store open hours, Thursday through Saturday from 11:00 a.m. to 6:00 p.m. plus 6:00 p.m. to 9:00 p.m. for Arts Alive. There’s also a handy list on the website of what they do and do not accept.

During Arts Alive, Maker’s staff will be offering à la carte crafting. Kids and adults can choose a crafty kit made from all reclaimed and donated materials, then stay and create at the big work table.

Other days at the big table, there is a growing menu of hands-on creative reuse workshops. These are built around reducing waste like “BYO Jar Terrariums” or simply make use of an interesting material like costume jewelry odds and ends in “Magpie Mobiles.” “The idea is to keep people thinking about the possibilities of materials, and how we can get creative about reducing waste,” says Texas. Maker’s Apron Creative Reuse is a DreamMaker Project of the Ink People Center for the Arts.

Learn more about Maker’s Apron Creative Reuse at www.makersapron.org.

Juncus the Rushes by Gordon Leppig

Rushes (Juncus) are a large, diverse, ecologically important, and nearly ubiquitous group of grass-like herbs. Most are tufted or rhizomatous perennials, though the common and cosmopolitan toad rush and many vernal pool species are annuals. Rushes occur in almost all habitats on the North Coast, especially wetlands and moist places. They have small flowers resembling lilies, but are most closely related to sedges. Many rushes possess an austere understated beauty, while several are pesky weeds. The name *Juncus* is derived from Latin “to join or bind,” because of their utility in weaving mats, baskets, cordage, etc. Rushes are widely distributed in chiefly temperate and montane regions worldwide in habitats as diverse as coastal dunes and salt marshes to mountain tops and tundra. There are over 300 rush species worldwide and 95 in North America, but California is a diversity hotspot with nearly 80 taxa.
UPDATE ON HUMBOLDT BAY LIVING SHORELINE PLANNING

On April 6 the Coastal Conservancy approved a grant of up to $750,000 to the County of Humboldt for the “Humboldt Bay Living Shoreline Planning Project, which consists of completing preliminary designs, California Environmental Quality Act (CEQA) review, preparing 65 percent design plans, and preparing permit applications for phased salt marsh restoration along the Eureka-Arcata Highway 101 and Humboldt Bay Trail Corridor.”

The proposed salt marsh restoration project is intended to reduce flooding risk along the safety corridor and provide natural shoreline infrastructure for sea level rise adaptations, while restoring historic salt marsh landscapes. The project area along the Highway 101 corridor was highlighted in several recent project studies as highly vulnerable to coastal erosion. In a review of historic imagery conducted by GHD engineering consulting firm, they found that salt marshes within the area had been reduced by 90 percent since 1870; where approximately 44.3 acres of salt marsh once existed, now only 4.8 acres exist. This is likely due to a number of anthropogenic interventions including the history of logging and rock quarrying in Humboldt Bay tributaries, canal channeling, levying of marshes, and dredging of the Bay, which has resulted in alterations of watershed sediment delivery, shoreline erosion, and may have altered wind wave currents, tidal hydraulics and sediment dynamics throughout the Bay.

The proposed salt marsh restoration effort is a part of Humboldt County’s 2021 Sea Level Rise Adaptation Plan for Eureka Slough Hydrographic Area. This plan describes a phased approach involving elevating the rail prism, completing the Humboldt Bay Trail connection between Eureka and Arcata, and improving Jacobs Avenue flood and levee resiliency.

The Coastal Conservancy’s grant will help support the designing and permitting of natural shoreline infrastructure (NSI) for a 1.25 mile section along Highway 101 between Brainard and Bracut. The proposed plan aims to reduce wave exposure and flooding to the highway while also providing space for the marsh habitats to migrate upslope with sea level rise. The project plans to explore options for reusing dredge spoils from Humboldt Bay in the hopes of creating a cost-effective alternative for disposal. However, the spoils will need to pass chemical testing to ensure they will be suitable for the project site’s aquatic habitat, and do not exceed toxin levels already present at the proposed site.

GHD’s report references previous feasibility assessments done which concluded that relocation of Highway 101 would be a more costly alternative to the proposed NSI, and would result in community impacts due to varying land ownerships.

More information can be found about the proposed project by visiting the Coastal Conservancy’s website at scc.ca.gov or the County of Humboldt’s website at humboldt gov.org/2487/Sea-Level-Rise.

EVENTS

- **Kinetic Grand Championship:** Join us on May 21 for gathering trash along the Kinetic Grand Championship route starting in Halverson Park at 2:00 pm and working our way south along Waterfront Drive.

- **Trash Craft Night:** Trash Art Contest! When: May 23 from 6:00-8:00 pm. Where: NEC Office 415 I St, Arcata. Get started on your Craft for the Coast submission, help us make art & bribes for the Kinetic Grand Championship team, Trashlantis, or simply come get crafty. Trashlantis bribes & artwork due May 24 by 4:00 pm.

- **Craft for the Coast:** The NEC’s 2023 Trash Art Contest will be hosted in June. Submissions will be accepted May 1-31. Learn more at www.yournec.org/craft4coast.

- **More Events:** New Cleanup Days and Trash Craft Nights released monthly! Check yournec.org/events.
TRASHLANTIS RISES

Janine Redwine and Dawn Thomas

“That thing came right for my Frappuccino!” Panicked local resident Pete Hagstrom described how he was knocked to the sand during his morning beach walk with Snicker, his Golden Doodle. “It sort of looked like the creature from the Black Lagoon.”

Members of The Northcoast Environmental Center (NEC), working a beach clean-up, witnessed the attack. “It was humanoid with enormous face gills and webbed hands,” reported Bob van de Walle, an intern with Team Pineapple’s Marine Biology department. “This is the third time I have seen one of them. They are definitely getting bolder.”

“I showed Bob a photo I snapped of what the creature wrote in the sand,” Mr. Hagstrom said.

Van de Walle used ChatGPT to translate the marks in the blurry photograph. “This one says, ‘We are Trashlanteans and we need more plastic!’ ”

“For ten thousand years,” the translation continues, “our People have lived in the Pacific Ocean, surviving on whatever scraps we could gather. On the beautiful, vast, floating rafts of durable and buoyant plastic making up the Great Pacific Garbage Patch, we Trashlanteans have learned to cultivate mussels, crabs, sea vegetables, and barnacles for food.

“Our great city of Trashlantis is the only home hospitable to beings who are part human, part fish, and part garbage. We rely upon a steady stream of abandoned nets and floats to sustain our growing population. Rafts of floating plastic have been readily available – but suddenly, humans are cleaning up our ocean! Our Trashlantean food farms are being pulled up onto barges as ‘garbage’ and being hauled away! We are afraid of famine. We have no choice but to come to Dryland to seek the source of our life-giving plastic!”

Van de Walle speculated that Trashlanteans carry genetic mutations formed from extended exposure to – and ingestion of – plastic trash.

Are Trashlanteans yet another cryptid? An aquatic Bigfoot? Recent work by Dr. Linsey Haram established that coastal species are persistently being found in the open ocean. Floating plastic debris from pollution now supports novel sea surface communities composed of coastal and oceanic species, portending a significant ecological shift in the marine environment.

The reality is that plastic is pervasive. Microplastics are now found globally in soils, water, ice, air, and in living beings. Oil companies spend $50 million per year on marketing to promote recycling to a credulous public to obscure the fact that fossil fuel-derived plastic production continues to increase. Fourteen million tons of plastic ends up in the ocean each year, with predictions there will be as much plastic as fish in the ocean by 2050. The NEC is partnering with Grand Champion kinetic racers Team Pineapple to bring more awareness to this issue.

This Memorial Day weekend, Humboldt County will once again host the Kinetic Grand Championship, a race that requires athleticism, engineering, and art. Humor and fun are essential elements. Team Pineapple’s dystopian entry will be the fictional Trashlantis. Performing as a “university” of Trashlanteans, strange “half-human, half-fish, and half-trash” beings, the team hopes the humor of Trashlantis will provide an opening to have meaningful conversations about the hazards of living in the “Plastisphere”.

Team Pineapple’s dystopian street theater found favor with spectators with last year’s entry Humpbacks of Notre Dame, an apocalyptic view of Notre Dame Cathedral submerged in the deep warm water of the melted polar icecaps, with beautiful humpback whales exploring the ruins. The team is currently combing the beaches and byways, sidewalks, and highways for more plastic to build Trashlantis.

You can help thwart the Trashlantean effort to get more plastic into the ocean: come to NEC’s trash clean-up days! Dates released monthly; join us on May 21 to gather trash along the Kinetic Grand Championship route starting in Halverson Park at 2pm and working our way south along Waterfront Drive.

You could also come to a craft night and make art from gathered trash to place on the sculpture to carry throughout the race! Join us May 23 from 6-8pm for Trash Craft Night at the NEC office, 415 I St in Arcata.

Until we solve the plastic problem, a powerful action you can take right now is to host your own trash cleanup event with tools from the NEC lending library. Visit the NEC website for more information or to submit a lending library request: www.yournec.org/lendinglibrary.

The siren song of single-use plastic remains powerful but this Memorial Day Weekend, the NEC will be at the race to make sure that Trashlanteans don’t actually convince anyone to make more plastic.

To join the mission to thwart Trashlanteans, please go to Team Pineapple's fundraiser at go.rallyup.com/trashlantis or text Trashlantis to 33100.
Logging in Your Neighborhood? Here's Some Advice.

By Elena Bilheimer, EcoNews Journalist
With Help from Tom Wheeler and Matthew Simmons from EPIC

Here at the NEC, we receive many questions from community members and local residents regarding the logging practices of private companies. We asked local experts Matt Simmons and Tom Wheeler from EPIC to help us answer some of the common questions we receive in order to provide a brief overview of what people can do when logging begins on private property next to their house. Unfortunately, impacting these practices is a difficult and complex topic, but understanding more about the process can hopefully help everyone better advocate for themselves.

WHAT EXACTLY IS A TIMBER HARVEST PLAN (THP)?
A THP is a document that must be submitted to the state when a company wants to log on private land. These plans contain information about the kinds of logging methods and harvesting methods that will be used, in addition to information about the location and class of watercourses in the THP area. THPs are prepared by a Registered Professional Forester (RPF) and are considered the functional equivalent to an Environmental Impact Report under CEQA. This means that THPs are “supposed to evaluate all of the potential direct and cumulative impacts that might occur as a result of the logging plan and to implement any feasible measures which would reduce this impact to a level of insignificance,” according to EPIC.

WHO NEEDS TO FILE A THP?
A THP is required for all timber operations unless those operations fall under some kind of exception (like a fuel break or a non-industrial timber harvesting plan).

WHAT DETERMINES WHETHER A THP IS APPROVED OR NOT?
According to EPIC, a plan shall be disapproved if it would cause “significant, long-term damage’ or cause a ‘taking’ of a threatened or endangered species or if it would cause irreparable harm to rare or endangered plant species (see Title 14, California Code of Regulations, 898.2 of the FPRs).” Although this may sound promising, 99 percent of the THPs that are submitted are approved by CAL FIRE.

Other public agencies can make suggestions for mitigations, but ultimately it is up to CAL FIRE to determine whether to take them into account or proceed with the approval process. Sometimes CAL FIRE will encourage submitters to withdraw and change a THP that is not up to standards, “but most often a new THP is submitted and approved in its place which covers the exact same area and only differs from the original plan by small, cosmetic changes,” states EPIC.

IF SOMEONE FINDS OUT THAT LOGGING IS SET TO START ON PRIVATE LANDS IN THEIR NEIGHBORHOOD, HOW DO THEY FIND OUT MORE INFORMATION?
The website caltrees is a good option for finding plans that are under consideration, allowing people to search for plans by name, by number, or by watershed. For already approved THPs, Calwatershed mapper is the best option.

WHAT IS THE IMPORTANT INFORMATION TO LOOK FOR IN A THP?
Simmons pointed out that it’s important to check for the number of acres of harvest, silvicultural method, the last year that they entered that area, any discussion of impacts to endangered species. In a previous article for EcoNews, Wheeler wrote that “Sections II and IV of a THP are the most useful to identify potential issues, if you are time-limited. Look for answers to basic questions, like: Is the THP in an area with endangered species? If so, what is being done to mitigate impacts? Are there unstable slopes? Will new roads need to be punched in?”

ARE THERE GENERAL RULES ABOUT WHEN LOGGING CAN HAPPEN AND WHERE (PROXIMITY TO STREAMS, GRADES OF HILLSIDE, ETC.)?
“Logging generally can’t occur when the ground is wet,” said Simmons. “So, logging is less likely in the ‘wet weather period’ between November and April (but if there is no rain then they can still log). Logging is also not allowed during northern spotted owl (NSO) breeding periods if NSO were identified during the surveys. In terms of location, there are rules about logging close to riparian areas, particularly streams that flow into watersheds that contain anadromous fish.”

HOW DO YOU COMPLAIN ABOUT A THP?
Once a plan has been submitted, neighboring landowners are supposed to receive notification. There is then a period for public comment. “Every member of the public has the right to file comments on THPs (similar to other CEQA documents),” said Simmons. “CAL FIRE is required to respond to your comments. If you believe that their response was inadequate, you can file a lawsuit challenging the approval of the THP. Doing so is quite expensive and risky (the THP may very well still be approved anyway).” Wheeler suggested in the previous EcoNews article that, “Effective comments will point out logical inconsistencies, missing or abused science, or other considerations that may not have made it into the analysis.”

HOW DO WE IMPACT THESE PRACTICES?
Influencing logging on private land is tricky, but there are organizations and advocates working to improve private forestry. EPIC has a newsletter you can sign up for on its website (www.wildcalifornia.org) that informs community members about issues in California private forestry and what it’s doing to fight back. There is also a California State Forest Committee headed by Karen Maki as part of the Sierra Club that focuses on changing the regulatory regime at the Board of Forestry.

RESOURCES:
• www.wildcalifornia.org/how-to-find-a-thp
• www.wildcalifornia.org/post/an-explanation-of-the-timber-harvest-plan-process
Rural Counties Wood Pellet Export Scheme Raises Concerns

Gary Graham Hughes, Americas
Program Coordinator, Biofuelwatch

Over the first months of 2023 Humboldt County has taken on a leadership role in a massive scheme that aims to export wood pellets from California to global bioenergy markets.

In January, Humboldt County Supervisor Rex Bohn, who is the official delegate of Humboldt County to the Rural County Representatives of California (RCRC), an organization of some 40 rural counties from around the state, was appointed to the Board of Directors of Golden State Natural Resources. The five-person board also includes supervisors from Inyo, Modoc, Siskiyou and Butte Counties.

Golden State Natural Resources (GSNR), an “affiliated entity” of RCRC, is a wood pellet manufacturing and export scheme that proposes to construct two new facilities, one each in Tuolumne and Lassen Counties, to manufacture 1,000,000 tons a year of wood pellets. GSNR would then move those wood pellets by rail to ports in Stockton and Richmond for export by ship to markets in Asia, Latin America and Europe.

Increasingly, because of political convenience and carbon accounting loopholes, coal powered electricity generating facilities are converting to burning biomass. This global trend has continued despite the growing body of evidence that shows that wood pellets are a highly carbon-intensive, polluting, expensive, and inefficient energy source.

Even as the imperative to stop burning coal is becoming clearer by the day, the switch to biomass is climate suicide. Per unit of electricity produced, burning wood coughs up more carbon emissions at the smokestack than burning coal.

In fact, greenhouse gas emissions and air pollution would be emitted at every step of the GSNR project, exposing this wood pellet export scheme as a losing proposition for the climate.

Cutting forests, trucking trees long distances, chipping the wood, manufacturing pellets, transporting the pellets by rail hundreds of miles to ports, and shipping the pellets to be burned overseas — every single one of these steps would be a significant source of climate pollution.

The feedstock for these wood pellet manufacturing plants would be drawn from at least a 100-mile radius around each industrial facility site, removing trees of any type and size from both private and public lands, damaging habitat for sensitive and endangered species and harming already seriously stressed forest ecosystems.

GSNR initiated the California Environmental Quality Act (CEQA) review of its project in November 2022, with a public comment period on the scoping of the project closing in December. A curious element to the scheme is that another ‘affiliated entity’ of RCRC, the Golden State Finance Authority (GSFA), is acting as the lead agency for the CEQA review of the GSNR project.

GSFA has a financial stake in the GSNR scheme, in that GSFA made a $10 million dollar loan to GSNR to initially capitalize the project.

Scoping included public meetings in Lassen and Tuolumne Counties, and one ‘virtual’ scoping event held online.

Strikingly, even though port operations are inherently a significant aspect of the GSNR proposal, the scoping of the project made no effort to engage the Richmond or Stockton communities to get their input on what would constitute an adequate environmental review of the scheme.

The proposed deep-water port in Richmond is located next to a disadvantaged community with some of the highest pollution burdens in the state, especially diesel pollution and refinery emissions. Richmond is home to a notorious Chevron refinery, which is one of the largest sources of pollution in the state. The Chevron Richmond refinery is a facility famous for flaring, upsets and historic accidents, such as the August 2012 fire and explosion that seriously endangered refinery workers and impacted thousands of local people.

Both the Richmond and Stockton communities already have a high exposure to particulate matter, which carries with it significant public health risks.

Storing wood pellets at ports prior to maritime shipping poses substantial fire hazards and significant air pollution emissions, while loading operations at the port would release methane and dust.

Despite the substantial impacts that this project would have on Richmond, GSNR did not engage Richmond city authorities and the Richmond community during the scoping of the project last fall.

This failure to do adequate outreach in Richmond is apparently evident to the board of directors of GSNR on which Humboldt County Supervisor Rex Bohn sits. At the late March GSNR board of directors meeting the need to return to square one with CEQA review and actually do adequate scoping in Richmond was discussed extensively.

The flubbed and amateur start to the CEQA review of the GSNR wood pellet export plan is just one of many reasons why the official role of Humboldt County in this massive wood pellet export scheme raises concerns, and merits scrutiny.
CELEBRATE BIKE MONTH

TEST OUT COMPLETE STREETS “POP UPS” ON BROADWAY

Caltrans

Caltrans and partners have been working toward implementing the vision laid out in the Broadway Multimodal Corridor Plan, and soon will test out some proposed improvements. Throughout the month of May, pedestrians, cyclists, and drivers will encounter “pop-up demonstrations” along the Broadway portion of U.S. 101 in Eureka. These test demonstrations will include the temporary installation of materials such as vertical cone-like delineators and paint to analyze proposed improvements before possible construction. Proposed improvements include class IV bikeways, curb extensions, and traffic calming features.

The projects under development are intended to enhance safety for all road users, improve connections to local roads, improve transit access for pedestrians and cyclists, and make walking and bicycling a more enjoyable experience on Broadway.

Feedback from stakeholders and community members will be used to adjust project designs before permanent construction. Look for a survey to be posted on broadwaypopups.com once the pop-ups are installed. You can also find more information on the pop-up demonstration features and project background at broadwaypopups.com.

BIKE MONTH EVENTS

- **May 7-13**: Bike to Work Week in Arcata and there are some sweet deals that week for biking to Bike Friendly Businesses.
- **Thursday May 11**: Bike to Work Day Arcata. Start with an Energizer Station at Arcata Co-Op 7am-9:30am and Noon Rally at the Plaza 12pm-1pm.
- **Friday May 12**: Bike-thru Breakfast at Revolution Bikes Arcata store, 7am-9am.
- **Saturday May 13**: Fortuna Bike Rodeo, 10am-1pm Newburg Park. Contact Emily Apodaca at eapodaca@ci.fortuna.ca.us
- **May 14 - 20**: Bike to Work Week Eureka
- **Tuesday May 16**: Eureka Mural Ride, departing at 5:30 pm from under the Samoa Bridge. Take a loop around Old Town and up to Henderson Center to enjoy some of Eureka’s murals.
- **Thursday May 18**: Bike to Work Day Eureka. Energizer Station at Eureka Co-Op 7am-9:30am
- **Friday May 19**: Bike-thru Breakfast at Revolution Bikes Eureka store, 7am-9am.
- **Saturday May 20**: Bicycle Celebration and Expo at the Jefferson Community Center Park (1000 A Street, Eureka) 11am-2pm. See poster for details of group rides.
- **Saturday, May 20**: Arcata Bike Rodeo Creamery District, 10am-12pm. Contact Jak Kirchubel jkirchubel@cityofarcata.org
- **Memorial Weekend**: Follow along the human-powered Kinetic Sculpture Race or join the Bigfoot Big Life ride.

BIKE MONTH CHALLENGES!

- **Bike Month Challenge**: May 1-31. Learn more at bikemonthhumboldt.org.
- **Bike Commuter and Workplace Challenge**: May 1 through May 20. Take a picture of your bike commute and tag #bikemonthhumboldt23 to enter. Winners will be announced at Bicycle Celebration May 20, includes category for best workplace group picture.
- **Pledge to Pedal**: Take the Pledge to Pedal and commit to ride! bikemonthhumboldt.org/pledge-to-pedal
Yurok Tribe Partners with Women in Fire Program

Yurok Tribe and National Park Service Press Release

Through the Yurok Tribe’s partnership with Redwood National Park, the Yurok Fire Department was selected to train four female firefighters for the National Park Service’s forward-looking Women in Fire Program.

“It is a huge privilege to train these firefighters for the Women in Fire Program,” said Yurok Fire Chief Rod Mendes, who has trained hundreds of firefighters. “We look forward to providing four Native American women the skills and experience they need to acquire good-paying jobs with tribal, federal or state wildland fire departments.”

“It is the goal of this program to recruit, train, and offer exposure to multiple aspects of wildland fire in addition to exposure to the planning and implementation of prescribed fire projects,” said Redwood National Park Fire Management Officer Rick Young. “After completion of this program the participants will not only be able to compete for a career in wildland fire as a crewperson, but hopefully be inspired to continue on to become future leaders in the fire service. I’m excited to partner with the Yurok Tribe in this effort and I hope to expand the program in the coming years, creating more opportunities for a large segment of our community that is currently underrepresented within the fire service.”

With $100,000 from the National Park Service (NPS), the Yurok Fire Department is recruiting four Native American women to participate in the paid program. Once hired, the Yurok Fire Department will put the women through an intensive wildland fire training academy focused on the fundamentals of wildland firefighting. Based out of the department’s headquarters on the Yurok Reservation, the comprehensive training will be comprised of classroom instruction and hands on skill-building exercises. The classroom part of the course will cover a wide variety of topics, such as wildland fire behavior, firefighting tactics and the Incident Command System, as well as communications, fire line safety and situational awareness. In the field, the four trainees will perform exercises with many different forms of firefighting equipment, ranging from fire pumps to chainsaws. They will also learn to work as a team.

The in-depth training will prepare program participants to pass the written and physical tests required to receive an interagency-certified Incident Qualifications Card, or Red Card, and a Firefighter 2 credential, which will qualify them to land firefighting jobs anywhere in the United States.

After they complete the training and certification process, the four women will work out of the Yurok fire house in Tulley Creek. On a daily basis, the firefighters will be assigned duties and respond to calls for service as members of the Yurok fire crew until the end of the 2023 fire season. Their duties may include fighting local forest fires, participating in cultural burns on tribal lands and managing woodland fuels to protect elders’ homes. The female firefighters will also spend stints with Redwood National Park and US Forest Service fire crews, which will further expand their skillsets.

The Yurok Fire Department is the first tribal firefighting organization to administer the transformational Women in Fire Program in California. The National Park Service launched the program in 2021 in an effort to make its workforce more resilient and encourage more females to pursue leadership positions within in the male-dominated profession. Women currently make up just 12% of the federal wildland fire workforce. The Yurok Tribe and the park service recognize that diversity drives innovation, which is needed now more than ever before as the land managers confront climate change, drought and longer, more severe fire seasons. Prior to partnering with the Yurok Fire Department, NPS implemented Women in Fire Programs with conservation corps in multiple states.

The Yurok Fire Department is an all-risk, all-hazard organization that focuses on fire detection, prevention and suppression in conjunction with traditional and conventional fuels management. The chartered tribal agency fights wildfires in the local area and across the US. In addition to extinguishing fires, the Yurok crew conducts cultural burns to moderate forest fuel loads, improve wildlife habitat and increase access to traditional basket-weaving materials on tribal lands. When they are not contending with fires or performing controlled burns, the Yurok crew works on projects that reduce fire risk on the reservation.

The Yurok Fire Department is led by Chief Rod Mendes. Chief Mendes has more than 35 years of fire officer leadership experience, including lengthy terms as a District Fire Management Officer for the Klamath National Forest and as the Chief of Fire and Office of Emergency Services for the Hoopa Valley Tribe, and over 20 years with Interagency Incident Management teams. He is also a governor-appointed member of California’s Homeland Security Advisory Committee. Chief Mendes will design and oversee the Women in Fire Program training.

“I can say from experience Chief Mendes is a tremendous resource for new firefighters, especially those who want to climb the ranks. The park service couldn’t have selected a better mentor for participants in the Women in Fire Program,” concluded Yurok Firefighter and Yurok citizen Faith Tracy.

To apply for the Women in Fire Program on the Yurok Reservation, please fill out the Yurok Tribe employment application, which can be found here: www.yuroktribe.org/jobopportunities.
Located in the City of Arcata’s Bayside Park is a three-acre fruit and vegetable farm dedicated to sustainable agriculture and creating an educational space for community members and students to connect with how and where their food is grown. This year, the farm celebrates 30 years in operation. Originally developed in 1993 for Cal Poly Humboldt’s (formerly Humboldt State University) organic gardening class, a group of professors — including Susan Ornelas and Deborah Giraud — created a partnership with the city to aid beginner farmers in their development of practical and experiential skills. Contributing to its significance, Bayside Park Farm was also the first in the county to develop a model of Community Supported Agriculture (CSA).

Although the city of Arcata owns and operates the farm, it is funded by community members buying a share of the farm to help with startup costs and then receiving a portion of the harvest every week during the summer and fall growing season. Volunteers curious about growing organic food provide much of the labor for the farm, in addition to the two managers employed by the city. “The farm offers a space for people to build community and learn together in providing a source of organic local food,” said Jessica Speyer, one of the farm managers. “CSA members get to enjoy the farm as it changes on a weekly basis and also get to interact with the farm by harvesting their own flowers.”

As well as being a running CSA, the farm partners with other groups in the community to do tours, put on educational workshops, and host volunteer days. Students, volunteers, and visitors are able to learn about permaculture, sustainable farming practices, and appropriate means of energy use. The city’s website states that, “Over the years, this farm has been managed by many generations of student farmers. Many notable farmers within the community learned how to farm here.”

A wide variety of annual crops and some perennials are grown on the farm, including an array of Brassicas, root crops, tomatoes, peppers, alliums, herbs, flowers, peas, beans, strawberries, fruit trees, artichokes, potatoes, squash, and cucumbers. “Strawberries are a great crowd pleaser that we have growing on the farm,” said Speyer. “Most people eat them as is because they are so ripe and sweet. They are also great in smoothies or for making jam. We have five hundred strawberry plants that were planted last spring and will be adding a hundred more new plants this season to fill in gaps.”

For Speyer, continuing the educational legacy of the farm is a large priority. “It’s very rewarding to see the excitement of people who are learning about growing food for the first time,” said Speyer. “I see it as an important skill that many people have become disconnected from.”

To support the farm, people can buy a farm share for $520 to receive 20 weeks of organic produce from June until the end of October. Each share contains a significant amount of produce, and depending on consumption can be split between two to four people. Payment plans are available to those who need it. People can also support the farm by dropping in for volunteer Thursdays from 1:00-4:00 PM. Additionally, the farm offers garden plots that people may rent for a year at a time in order to develop their own abilities. Although the plots are currently full, there is a waitlist for those that are curious.

For those interested in a more in depth learning experience, the farm offers a volunteer program that requires a weekly commitment for two months. Volunteers in the program learn useful general skills like planting, pruning, and harvesting, in addition to transplanting crops, growing crops from seed, irrigation techniques, and many more. Visit Arcata City Hall to sign up. In exchange for their time and help, volunteers receive plant starts and veggies!

To learn more, visit the City of Arcata’s website or email baysideparkfarm@cityofarcata.org. For drop in volunteer days, the farm is located at 930 Old Arcata Road.
Get on Board for the Climate

Expecting Everything to Burn Anyway

Martha Walden

Anyone who walks in the forest knows there is a lot of dead wood out there. Rotting wood is good for the soil and wildlife habitat, but too much dead wood can be a fire hazard—a fearsome risk these days. Logging and thinning produce huge piles of slash, and the wind takes down a lot of trees that also become a fire hazard. Open pile burning emits carbon and soot, particulates, and toxic pollutants.

Removing fuels to make the woods safe would generate tens of millions of dry forest waste every year. What to do with this stuff? California wants solutions. AB 625, introduced by Representative Aguiar-Curry, ventures to deal with the fire hazard by treating wood waste as a resource to help the state achieve carbon neutrality by 2045. An ambitious twofer.

Several different biofuels, including renewable natural gas, cellulosic ethanol and hydrogen, can be manufactured out of wood. But the most common use for woody debris, of course, is burning it to make electricity. These fuels are called carbon-neutral or even carbon-negative because theoretically the feedstock would otherwise burn in an open pile or in a wildfire, releasing tons of carbon with nothing to show for it.

The first and biggest hurdle for all of these uses is the cost of transporting the material out of the woods. Let’s say we have an ethanol plant in Willow Creek. Wind has downed a lot of trees in surrounding areas that could be trucked to the plant, but how long before the trucks will have to range farther and farther to keep the works humming? Next thing you know, facilities that use wood waste as a feedstock but need to make a profit end up going after the forest itself. This is certainly true for wood pellet manufacturers and biomass electricity plants, though not all. (The biomass plant in Scotia burns mostly sawmill waste and some woody debris and non-merchantable wood.)

AB 625 doesn’t deal with this problem of transport. It mandates the collection of valuable data in order to quantify carbon emissions from fuel reduction activities. These standards are needed for the accounting requirements of the Greenhouse Gas Reduction Fund. It instructs the Air Resources Board to come up with a scoping plan to achieve the “maximum cost-effective reductions” in greenhouse gas emissions from using bioenergy to replace other fuels and to produce electricity. It also mandates training workers for different biomass utilization industries.

If the transport problem can be solved, and biofuels can be produced without cutting down the trees we all depend upon to sequester carbon in addition to so many other benefits, the steps outlined in AB 625 could promote non-combustion uses of woody debris. Unfortunately, the bill also wants to expand the Bio-MAT program which requires utilities to buy biomass electricity. Theoretically, this could mean renewable natural gas or green hydrogen that would spin those turbines to make electricity, but incinerating wood is simpler and easier. Nothing in 625 would change that.

The biomass biz is booming these days because no one knows how to stop it. Forests are clear-cut, the trees chipped and sent to utilities in Europe and Asia to replace coal. Coal is such a dirty carbon-intensive fuel that there’s only one thing worse we could burn, and that’s wood.
Solar power companies around the world are designing ground-based solar panel installations that support native plants, animals, and insects, protecting and enriching local ecosystems.

Connexus Energy in Ramsey, Minnesota, boasts what they call the first pollinator-friendly solar project in the U.S. When the energy co-op was installing an array of solar panels in a Minnesota field almost a decade ago, the plan was to surround the panels with gravel. Instead, they decided to grow native flowering plants in the area, and the results have inspired companies around the world to do the same.

This Connexus solar site hosts black-eyed Susan flowers, purple wildflowers, hover flies, swallowing, and at least one hummingbird moth. "It's just like being in a nice, natural place," says Rob Davis, Connexus public affairs lead. "But it's also just a visual delight, because there's so many things to see." A survey of four Minnesota solar installations with flowering ground cover found that a variety of butterfly species — including the Endangered monarch — were present.

"It provides a pretty incredible opportunity," says Wendy Caldwell, executive director of Monarch Joint Venture, a nonprofit for conserving the habitats of monarch butterflies and other pollinators. Caldwell's team is often looking for ways to expand pollinator habitat, creating buffer zones on agricultural land, roadsides, urban gardens, and now solar developments. Solar sites have the added benefit of avoiding herbicides and pesticides, unlike farm lands. "We know that monarchs and other pollinators are using these sites," Caldwell confirms.

In the U.K., researchers studying these "solar meadows" found boosted numbers of bumblebees not just onsite, but in the surrounding area. A 2021 report in Environmental Entomology concluded that native flowering plants at a solar site could indeed support pollinator populations, though taking care in implementing and closely overseeing the plant life is essential.

At the Ramsey location in Minnesota, Connexus sends a team out once per year to walk the meadow and clear away threatening plants. Every other year, the site is mulch mowed to break up dead plant matter and keep the soil healthy. Other locations use sheep grazing for similar upkeep. Rob Davis at Connexus says the site needs very little maintenance, aside from occasional spot reseeding. Connexus now uses pollinator-friendly habitat designs for all its installations, some of which include beekeepers who can sell the resulting honey.

In 2016, Minnesota became the first state to pass legislation establishing a pollinator-friendly scorecard for solar projects. Sites use the scorecard to guide details like the diversity of their planting or the percentage of wildflower cover. As of March 2022, there are 55 pollinator-friendly solar sites in Minnesota, and more than a dozen other states also use a similar official metric. "The movement shifted to thinking about the entire landscape instead of just a superficial fringe," Davis says.

Katie Siegner is a manager in carbon-free electricity who has researched pollinator-friendly solar. According to her studies, solar meadows sequester carbon, help recharge groundwater, and reduce soil erosion. There are signs that improved habitat for bees and insects could improve crop yields at neighboring farms. Incorporating native habitat designs can also win local community support, a major hurdle many developers face.

Because planting a solar meadow is often more expensive than laying gravel or turf, the Bee and Butterfly Habitat Fund launched an initiative called Solar Synergy. The new program, which began in March 2023, will provide solar developers with appropriate seed mixtures suited to their area and specific designs free of charge, and give the option of connecting projects with trusted commercial beekeepers.

Monarch Joint Venture aims to monitor solar sites and report on how well the habitats work for pollinators.

Sources: Reasons to be Cheerful, IUCN

In 2022, the World Wildlife Fund reported on the recovering wellness of eight key animal species around the world due to decades of conservation and protection efforts:

Black-footed ferrets in the Northern Great Plains of the U.S went from Extinct status to a population of over 350 — with conservationists aiming for 3,000.

Black rhino populations in Namibia were lifted out of the Vulnerable status, and while the species overall is still considered Critically Endangered, populations across the continent have been steadily rising since 2012.

Greater one-horned rhino in India and Nepal have a combined population of nearly 4,000. In particular, Manas National Park in northeastern India saw significant growth and now boasts 47 protected rhinos.

Humpback whales in oceans around the world have been steadily growing in number, especially in Australian waters where populations are now 50 percent greater than their pre-whaling figures.

Mountain gorillas, once considered extinct, have been recorded in a large protected area stretching from a National Park in Uganda to a Reserve in Democratic Republic of the Congo. A survey in 2011 estimated around 400 individuals; recent records list 459.

Snow leopards in Mongolia were tracked in the nation's first-ever leopard survey. The survey found a stable population of over 950 individuals, indicating area conservation is working.

Swift foxes were reintroduced to their natural habitat in Montana after more than 50 years absent, in a program led by the Nakoda and Aanih Nations. After the first 27 foxes were found to reproduce, an additional 48 individuals were released in the area, heading toward a sustainable population.

Tigers in areas of Nepal and India more than doubled in number from 2010 to 2022, especially in Bardia National Park, where tiger populations went from fewer than 20 individuals to almost 90.

In addition to these key species, a 2021 biodiversity monitoring survey in a vital region of Sumatra recorded the presence of tigers, Sumatran elephants, Sunda pangolins, Malayan tapirs, Sunda clouded leopards, and more. All these creatures are benefiting from conservation efforts.

Sources: World Wildlife Fund
CREATURE FEATURE

ENGLISH IVY

Elena Bilheimer, EcoNews Journalist

Hedera helix, commonly known as English ivy, is an evergreen vine from the Araliaceae (ginseng) family. Native to Europe, Scandinavia, and parts of Russia, English ivy was introduced to North America by colonial settlers. It was first documented in the United States in Virginia in the 18th century. Despite this plant being invasive, it is still sold in plant nurseries as an ornamental that is advertised as fast-growing and shade-tolerant. In Humboldt, and across the United States, enormous effort and time is given to managing ivy infestations.

WHY IT’S INVASIVE

Often planted in gardens to cover walls and large swaths of ground, English ivy refuses to stay contained to where it is planted. It will invade and persist in wild spaces, overwhelming native species and becoming a monoculture. Utilizing runners and vines that reroot as they move along, ivy can outcompete understory vegetation while also killing and dominating overstory trees. Due to its dense foliage, ivy blocks sunlight from reaching other plants, therefore restricting the process of photosynthesis and any new growth of native plants.

Additionally, the plant’s heavy vines can climb mature trees and cause death by loosening bark and holding moisture, creating a welcoming environment for fungal and bacterial infection. This extra weight can also make trees more susceptible to damage in winter storms and can increase the spread of wildfires. By displacing native plants and trees, ivy can negatively affect local wildlife. Joann Kerns, a member of the North Coast California Native Plant Society (CNPS), has worked extensively on local ivy removal efforts. “Ivy is a bit of a poster child for what havoc invasive species can wreak upon any given ecosystem,” said Kerns.

PHYSICAL CHARACTERISTICS

English ivy leaves are dark green, glossy, palmate, and alternate along the stem. Although the shape is variable, leaves are usually three-lobed with a heart-shaped base; they often become un-lobed and spade-shaped throughout maturation. During its juvenile stage, ivy grows as a dense undercover, but becomes a vertical vine during its adult stage. As a ground cover, ivy is around 6 to 8 inches (10-20 cm) tall. When a vertical structure is available (including trees, buildings, and utility poles), ivy will climb using root-like structures that release an adhesive substance. Vertical vines can typically reach 90 feet (30 m) in height, although they can sometimes grow to the tops of 300-foot (90 m) conifers.

HABITAT

According to the United States Department of Agriculture (USDA), English ivy can be found in the west in all Pacific Coast states and British Columbia, in addition to Idaho, Utah, and Arizona. In Pacific Northwest coastal areas below 3,000 feet (900 m), it is considered a threat to almost all forest types. Commonly associated with other non-native species, English ivy thrives in urban and disturbed forests near populated areas. Part of what makes this plant especially intractable is its ability to survive in full sun, partly-shaded and full shade areas.

In California, and specifically in Humboldt County, ivy can be found in redwood (Sequoia sempervirens) forests, as well as in riparian forests made up of Fremont cottonwood (Populus fremontii), white alder (Alnus rhombifolia), and willow (Salix spp.) trees. The USDA website states that sites in the Pacific Northwest dominated by English ivy have lower diversity compared to uninvaded sites, only appearing to provide a good habitat for rats. English ivy is common in climates with moderate to high annual precipitation, making Humboldt the perfect habitat.

SEXUAL REPRODUCTION

Once adult ivy plants mature, they sexually reproduce by producing bisexual flowers that are cross-pollinated by a wide variety of insects. The flowers usually develop between late summer and early fall and are small, greenish-yellow, and have a globular starburst form. Once the flowers have been pollinated, black berries with fleshy outer layers and stone-like seeds develop. The seeds are then dispersed far and wide by birds who love to eat them, contributing to ivy’s expansion. The birds that spread the seeds include the European starling, cedar waxwing, American robin, Steller’s Jay, mockingbird, and house sparrow.

HOW TO MANAGE IVY INFESTATIONS

In order to manage ivy infestations, there are a few options available. It is possible to deal with ground cover by pulling it out with thick gloves or with a trowel and making sure to remove all the roots. It is important to wear long-sleeved clothing as ivy may cause skin irritation. Mowing it can sometimes work as well, but it often needs to be done multiple times to have an impact. As an alternative to herbicides, white vinegar can sometimes be effective.

According to Kerns, tall trees that are being choked with ivy can be treated by cutting out a five foot band around the base of the tree, while also removing the ivy for six feet around it. This makes the ivy at the top of the tree die and eventually fall off. This allows the tree to regain the use of its foliage and bark for photosynthesis, increasing its ability to sequester carbon and mitigate climate change. Pulling ivy is “…a very concrete activity that anyone can do to help mitigate global warming,” said Kerns. “As you remove large patches of ivy from the ground or trees, you open up the area to repopulation by natives. Often there are still seed beds, or random patches of natives under the ivy, and they can thrive once the ivy is gone.”

LOCAL REMOVAL EFFORTS

Many local organizations and government entities are involved with ivy removal, including the State Park, Sequoia Park, Fortuna County Park. Once a month, The Sequoia Park Ivy League meets formally to remove ivy, however, it also hosts ‘pop up’ ivy pulls during the month. The next formal volunteer work day is May 13. The North Coast CNPS is also working with the County on an ordinance that would prohibit the use of ivy (and other invasive non-natives) in any new building development.

In addition to benefiting local ecosystems, pulling ivy can be a tangible, measurable way to get outside and manage feelings of eco-grief. “Sometimes, after reading a Timber Harvest Plan (THP) or trying to wade through PG&E’s 1,000+ page ‘vegetation management’ protocol, I become daunted by the immensity of what we are working against,” said Kerns. “Heading out and pulling ivy with other people is one way that I keep from being swamped with eco despair. It seems like such a simple thing, but it can have far reaching consequences and make a real impact.”

FURTHER LEARNING

• fs.usda.gov/database/feis/plants/vine/hedhel/all.html
• wildlife.ca.gov/Conservation/Plants/Dont-Plant-Me/English-Ivy
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