



*Thank you to all our members, donors, and funders for a successful year!*

### **Working Lands and Human Communities Program**

We have continued to collaborate with landowners and the Lower Mattole Fire Safe Council in the creation of projects. Aside from planning we have a HOT crew that does the work. The Fire and Fuels crew's biggest accomplishment in 2021 were completing 107 acres in the creation of a 250 acre fuel break along ridgelines including Gilham Butte through Stansberry Ranch and back up to meet Wilder Ridge. Truly a monumental challenge! Add this year's acres to our earlier work and there are fewer than 25 acres to go! This project was under contract with Save the Redwoods League to protect and enhance the Redwoods to the Sea Wildlife Corridor and nearby neighborhoods. Challenges included: laborious, but beauty-filled hikes to the remote middles of the Corridor, eating up saws with intense use but then not finding ANY during the-can't-hardly-get anything pandemic, and bears- to name a few.

Other projects the crew whipped out included: helping two of our elderly residents reduce hazardous vegetation around their homes and holding two Chipper Days, one



*The fuel reduction crew walking to their work site along the north side of Gilliam Butte.*

for each community of Petrolia and Honeydew. Meanwhile, Fire Mitigation Technicians of the MRC signed up another 20 people in the county's popular Fire-adapted Landscapes And Safe Homes cost-share program to treat hazardous fuel around the home.

We reviewed and commented on two Humboldt Redwood Company timber harvest plans that went beyond the selection-style forestry they had originally adopted through our Forest Practices Program. We comment on plans that target older trees and leave large openings. The vote is out whether Douglas-fir can grow in 2.5 acre openings or if they need 20. We sided with the former.

Contact Ali@mattole.org if you would like more information about the Working Lands and Human Communities program.

*Ali has been working for the Council continuously since 1996. Currently, she coordinates the Working Lands and Human Communities program for the Council, which has been focusing on reducing wildfire threat through fuels reduction projects throughout the watershed. To accomplish the increasing need to build resilience from wildfire she collaborates with landowners to implement county programs and other projects that reduce fuels along roadsides, in neighborhoods and around homes. Ali is also a renowned storyteller.*

### **Nick's Interns Program**

The pandemic brought us many challenges, and we were able to successfully tailor our program to meet new safety guidelines, and bring this program back with great success after having to put the program on hold in the prior year. Between the MRC's session and one with the BLM, a total of nine interns were hired. Two of these were college age and former interns, working as a team to supervise a group of four high school interns. They developed leadership skills with the excellent mentorship of Sandy Miles at the BLM.

### **Step Up Program**

We support the next generation of watershed stewards through providing assistance, education and work experience placements for many local youth with our partners in the restoration sciences field as well as many other local businesses. A new four year contract was approved by the County Board of Supervisors, which is part of the Humboldt Workforce Coalition, the county's



*NICK's interns conducting a pinniped survey to observe harbor seals and sea lions and trail conditions for maintenance.*

new alliance with Humboldt State University Sponsored Programs, College of the Redwoods and the Workforce Development Board. Step Up makes a real impact in the young lives that need it. Our ability to provide critical services is significantly enhanced by the contributions of donor organizations such as the GraceUs and St. Joseph's Care for the Poor Foundations.

For more information about Nick's Interns and Step Up contact [Theresa@mattole.org](mailto:Theresa@mattole.org).

*Theresa Vollotton is the Nick's Interns and Step Up Program Coordinator. She is grateful to be a part of this essential work. Theresa began in 2003 as an upriver landowner liaison for the Good Roads Clear Creeks program, and has been working with MRC youth programs since 2006. Theresa and her husband Ken brought their two young children to live in the headwaters of the Mattole River in the spring of 1977. She was a teacher's aide at Whitethorn School in the 1980's and fostered teens in the 90's. Theresa is the upriver contact for the MRC Whitethorn Office.*

### **Mattole Youth Environmental Stewards Program**

We provide field-based and classroom instruction on local and global ecological topics to our local public schools through the MYES program. In 2021, we were able to restart in-class lessons and local field trips, which was a welcome return to normal after supporting students remotely with video lessons the previous year during the beginning of the pandemic. In 2021, the younger students learned about habitats and the water cycle, and the older students learned about the carbon cycle and climate change. This program was solely funded through the California Coastal Commission's WHALE TAIL® Grants Program. For more information about MYES, contact [Jen@mattole.org](mailto:Jen@mattole.org)

*Jennifer Gilda has worn many hats at the MRC, currently the MYES coordinator since 2019, an AmeriCorps Watershed Stewards member in 2007, and later as field and administrative staff. Jennifer holds an MA in Social Ecology and Permaculture from Prescott College (2017), and a BA in Natural Resources Planning and Interpretation, with a minor in Native American Studies and Environmental Education from Humboldt State University (2005). She is grateful to share a life in the Mattole Valley alongside her family and two young sons.*



### **The Mattole Field Institute**

The institute creates educational opportunities to explore pathways towards shared understandings of how we inhabit these lands and waters. We offer guided hikes, hands-on workshops, and multiple day field courses in various ecological restoration topics. The vision of the Mattole Field Institute is to deepen resilience and field-based study of the unique Mattole watershed, King Range National Conservation Area, and surrounding bioregion's ecosystems and communities.

Every May, the Mattole Field Institute hosts a university group for a weeklong immersion in watershed restoration. Many of these students have never experienced a place like the Mattole River watershed before. Last year, one student reflected:

*“This field course really blended the spiritual beauty of Nature with more modern scientific approaches. We had conversations about ecological history, restoration practices and projects, environmental planning, social justice and how responsibly giving land back may look. The list goes on! I learned so much from this course, it's extraordinary. Online ecology tends not to be a personal experience. But in person, in the field, I feel like I gained a connection to the land.”*

This is what we do. And in this, we seek to build connections not just to the land, but among each other.

This year, we are working hard to demonstrate the need for creating a permanent home base for the Mattole Field Institute. We envision a resilience, education, and research center where we will deepen our collaborative teaching and research partnerships with universities, local tribes, land managers, schools, community organizations and residents. Contact [Flora@mattole.org](mailto:Flora@mattole.org) if you'd like to be involved.

*Flora joined the MRC staff in 2007. Her prior experience includes leading trail crews in the Bob Marshall Wilderness, conducting soil and veg surveys, and working as a river guide and a naturalist. She has a B.S. in Natural Resource Conservation from the University of Montana's School of Forestry (2002) and an M.A. in Environment and Community Social Science from Humboldt State (2012). Flora loves collaborating within the Mattole River and Range Partnership, the King Range Alliance, and working with Indigenous and academic partners. She's passionate about salmon and growing food, and ran a small CSA farm in Petrolia from 2008-2010.*

*Mattole Field Institute/ HSU students connect on a hike to the Mattole River mouth in May 2021.*

## Watershed Information Systems

Mapping and database management are essential for many of our other program efforts. Much of the work that goes on in the WIS Program consists of making maps for site visits, project proposals, and final project reports, such as producing maps for the Redwoods to the Sea Fuel Break project, as well as managing the MRC's website and providing technical support when needed. Most notably, we've been working towards a better data management structure allowing for greater ease of sharing data both within our own organization and with our partner organizations in the King Range Alliance. We have been hard at work optimizing the MRC website including expanding the store to sell seed packets, which couldn't be done without the help of the Native Plant Nursery.



*Placing douglas-fir removed from Prosper Ridge grasslands restoration site in a lower river willow structure.*

*Miles Kinman began in 2020, working on Fire Planning and Fuels Reduction maps, later the same year he was brought on as a Watershed Information Systems Technician. Miles holds a Bachelor of Arts in Environmental Studies and a minor in Geospatial Analysis from Humboldt State University. Prior to working for the MRC, he interned and worked for HSU's Campus Center for Appropriate Technology.*

## Ecosystem Restoration Program

The goal of the Ecosystem Restoration Program is to protect and restore diverse and productive native ecosystems throughout wild and working lands in the Mattole watershed and King Range National Conservation Area. This year we completed an incredible amount of work in our six principal sub-programs described below.

**Riparian Ecosystem Restoration** - This year we worked with BLM, Mattole Salmon Group, William J. Etter Construction, Edwards Excavation and Restoration to design and implement floodplain restoration projects adjacent to the Mattole River Estuary. The project included removal of over 400 whole Douglas-fir trees from our grasslands restoration sites and installation at 50 wood structures and 2 apex jams to help promote mid-channel floodplain development and riparian growth. Our crews harvested 3000 15' willow cuttings and installed them into over 5000' of willow baffles and 50 willow and wood structures. 4000 wetland plants and 6000 riparian trees and shrubs were planted throughout the project area.

**Native Grasslands Enhancement** - We worked with BLM, Mattole Valley Construction, and William J Etter Construction to burn and cleanup burn piles from previous vegetation removal projects. Over 100 acres of piles were burned by BLM crews. An additional 3 acres of encroached Douglas-fir was removed from restoration sites on Windy point. Over 30,000 native grass and forb plugs were planted into vegetation removal areas and burn piles. To assist in building the capacity for using fire, we hosted a week long wildland firefighter II training with Firestorm Inc. Six local volunteer fire departments and MRC staff participated in the training.

**Forest Restoration** - Staff were hard at work in 2021 developing forest restoration projects on Apple Tree Ridge and above McGinnis Creek in Petrolia which will include

800 acres of forest thinning, grasslands restoration, native plant restoration, prescribed fire, and helicopter placed wood to utilize removed biomass.

**Oak Woodland Enhancement** - We continued protecting Mattole oaks with over 5 acres of encroaching Douglas-fir removed in oak woodlands adjacent to Saunders Creek. We also developed an oak woodland restoration plan for a restoration project in Ettersburg.

For more information about our Ecosystem Restoration Programs contact [Hugh@mattole.org](mailto:Hugh@mattole.org).

*Hugh has spent the last two decades designing and implementing riparian, grasslands, in-stream and oak woodland restoration projects. He joined the MRC in 2006 and is currently the Ecosystem Restoration Program Director and directly manages riparian, grasslands, forest and oak woodland projects. Prior to his time with the MRC, he has worked for private ecological restoration firms, the National Park Service, and as a private consultant managing restoration projects throughout the western United States. He holds a BS in Environmental Science from the University of Vermont. He is a Certified Ecological Restoration Practitioner and a CA licensed contractor.*

**Invasive Plants**-We treated five species at nine sites this season, covering approximately 1200 acres within the King Range National Conservation Area and Mattole watershed. Our target species included tansy ragwort, French and Scotch broom, Cape ivy, pampas grass, European beach grass, and Japanese knotweed.

**Sudden Oak Death Monitoring**- We continued our 15th year of monitoring for SOD by installing sterilized leaf bait traps in seven streams throughout the Mattole. After collection, these samples were sent to a lab for analysis to determine if they have been infected with the pathogen that causes SOD. All but one (Stanley Creek) came back negative for the pathogen. This is one of the best tools for tracking the spread of SOD as it spreads through the watershed. Such work helps us to prepare for the consequences of the disease, including high rates of tree mortality and increased wildfire risk.



*Big smiles while harvesting California fescue from the Native Plant Nursery Seed Farm.*

**The Native Plant Materials Program-** We propagated over 50 native grass, herbaceous, wetland, shrub, and tree species for restoration projects and public retail at our nursery. The program includes an additional acre of native seed farms to produce seed for native plant restoration projects. The nursery is not only an operational facility but also an educational asset, and hosts students of all ages learning about native plants propagation and conservation. 2021 was a busy year at the nursery. In the seed farm, rows were weeded, burned, and maintained. Collectively, staff harvested more than 50 lbs of native seed from the farm and wild sites. More than 21,000 plants of 38 different species were sold to local landowners or outplanted on MRC related projects. The nursery hosted quite a hub of activity, with weekly nursery volunteer days, MRC crews coming and going to other work sites, and Nicks Interns and MFI Watershed Restoration Field Course

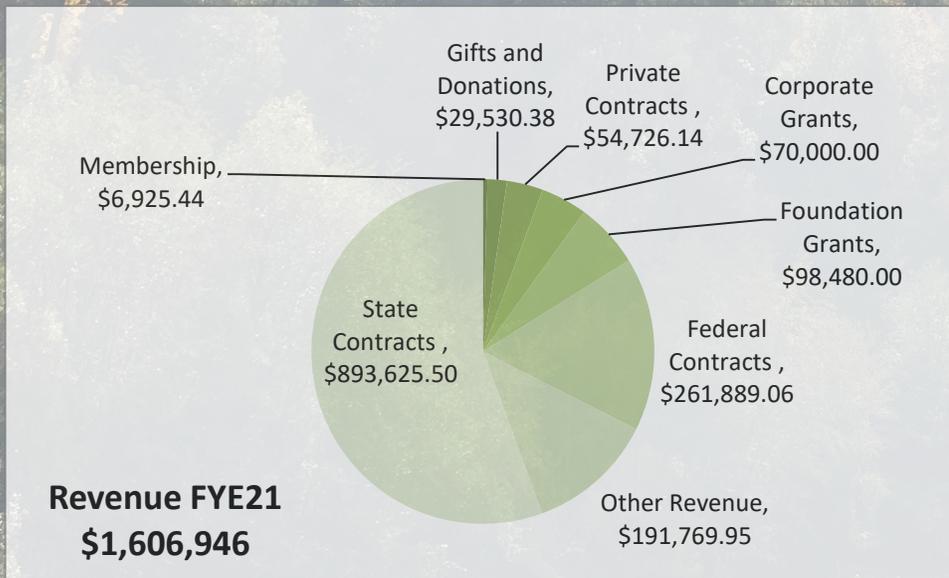
For more information about Oak Woodland Enhancement, invasive plants, or help with getting SOD samples tested, and to be added to the informational events mailing list, please contact [Lisa@mattole.org](mailto:Lisa@mattole.org).

participants visiting this great educational resource. For more information about our Nursery Program, contact [Veronica@mattole.org](mailto:Veronica@mattole.org).

*Lisa worked as field crew for the MRC before being elected to the Board of Directors in 2018. She currently holds a position as the Ecosystems Restoration Program's Project Coordinator for the Sudden Oak Death, Oak Woodland Enhancement, and Invasive Species programs. Lisa holds dual BA/BS degrees from the Evergreen State College where she focused on botany, terrestrial plant ecology, and environmental history. She is passionate about restoration science and scientific communication.*

*Veronica has been involved with various programs at the MRC since 2014, beginning as a field crew member. In 2015-2016 she served as a member of the AmeriCorps Watershed Stewards Program here in the Mattole, where she helped build our new and improved native plant nursery, which she now manages. She has participated in many local and regional restoration and education programs. She holds a B.S. in Chemistry with a concentration in Environmental Chemistry from UC Santa Cruz.*

## 2021 Financials



**Total Employees: 57**

**8 Full Time  
43 Part Time  
6 Interns**

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