The Northcoast Regional Land Trust is actively designing a second phase of restoration on the Wood Creek estuary at Freshwater Farms Reserve. This wetland project, on approximately 10 acres, will build on the success of the first phase of the Wood Creek Tidal Marsh Enhancement Project by creating a more diverse, productive and scenic marsh complex. The effort will connect the already restored marsh and channel habitat downstream with the wetlands restoration work being done upstream by ranching neighbors Sean and Kathy O’Day (see page 3).

The phase II project area currently consists of an extensive patch of cattails and a vegetation choked stream channel with little standing water to support fish.

During the first phase of the Wood Creek project, completed in 2009, NRLT worked with partners to restore tidal flows to 35 acres of estuarine habitat, including historic backchannel habitat where young salmon could escape the high velocity wintertime flows occurring in the main stem of Freshwater Creek. The project included five years of monitoring in order to gauge effectiveness. From these observations, we
From the Executive Director

As the new Executive Director of the North Coast Regional Land Trust, I am excited to work with this inspiring community. The North Coast is the place where I learned how important it is to support the people who produce our food and fiber. Farmers and ranchers are at the beating heart of our economy and represent the spirit and character of our unique way of life. If we can support our neighbors and keep land working, we will also protect habitat for wildlife and clean water for all of us. These straightforward principles have guided the North Coast Regional Land Trust’s work for the last 14 years and the results have been inspiring – the conservation of 25,000 acres of wild and working lands.

Since I began work here in January, I have learned that North Coast Regional Land Trust does a remarkable amount of work because it maintains a smart, hardworking and close-knit team of staff. We are guided in our work by an accomplished, passionate and experienced Board of Directors, composed of folks who are used to rolling up their sleeves and who fully understand how to make a difference in the community we serve. Our insightful advisors lend their expertise from all walks of life, connecting us to the community, while bringing us an increased understanding of the sciences, ranching, farming, and politics of this work. Our partners include landowners of great vision and courage, who step forward to permanently protect their farms, ranches and forest lands from subdivision. We are also lucky to maintain strong partnerships with allies, members, donors and supporters throughout Humboldt, Trinity and Del Norte counties where we work and beyond. It takes a whole community to protect wild and working lands, and North Coast Regional Land Trust is dedicated to the community we serve. Our partnership with you is the greatest asset we have.

I want to acknowledge and thank Lindsay Green for the outstanding job she has done as Executive Director for the last five years. The quality of the Land Trust’s work and its overall health are a direct result of her inspiring leadership. It speaks volumes about Lindsay’s care, character and work ethic that she is continuing with NRTL as a part-time staff member (while juggling twins!) to support the Land Trust’s work. I also want to thank Bill Bragg and Susan Marshall for their amazing service as they step away from the Board of Directors. Bill has been critical in shaping NRTL; his clear and thoughtful direction, expertise, and sense of humor have been of tremendous value to the organization. Bill’s care and commitment will continue as he stays on as an advisor. Susan’s specialized knowledge, passion and direct experience with wildland soils and resources contributed greatly to our conversations and we will greatly miss her perspective.

I am still in the process of meeting our partners and supporters, so if you’re tempted to reach out to connect, or have ideas to share, please do. Let’s do this vital work together to protect the North Coast lands we love, and the quality of life they provide.

Michael Cipra

Thank you, Bill and Susan!
I
n 2009, Kathy and Sean O’Day approached friends Joe and Debra Frazier with a proposal to partner in the purchase of 210 acres located in the Freshwater drainage. Sean and Kathy had been introduced to the property through friend and fellow rancher Chris Prior, who characterized the ranch as a diamond in the rough. The property is located adjacent to Freshwater Creek to the northeast, with a beautiful mature redwood forest on the southeast. Wood Creek originates on the property and meanders through the ranch. They recognized the property's potential to be productive sub-irrigated pastureland.

Before the purchase of the Freshwater Ranch, the O’Day’s focus was on their cow-calf operations on Palace Rock Ranch near Bridgeville and on their home ranch near Fortuna. “Freshwater provided an opportunity to further vertically integrate our business. The addition of prime bottomland pasture enables us to grow out calves once they have been weaned into animals either ready for the grass fed market or for further finishing.”

While the Freshwater Ranch presented an ideal fit, it needed rehabilitation and new infrastructure to realize its potential. “We had partnered with local rancher Dean Hunt on cattle for a number of years. Dean’s expertise on running cattle on the bottoms is second to none. While the Freshwater Ranch presented an ideal fit, it needed rehabilitation and new infrastructure to realize its potential. “We had partnered with local rancher Dean Hunt on cattle for a number of years. Dean’s expertise on running cattle on the bottoms is second to none. With his guidance, we developed a rotational grazing system. We put in a new water system that gives the cattle access to clean water and keeps them out of Wood Creek.”

A rotational grazing system is fairly intensive – during the late spring, when the grass production is at its peak, cattle are moved from one pasture to the next every few days. As the growing season tapers, the period between moves stretches out to as long as 45 days. “We recognized two advantages to the ranching operation soon after we commenced rotational grazing. Both the quantity and quality of the grasses growing on the ranch improved dramatically. The native grasses came back, replacing the non-native invasive species which had previously dominated the property. The tremendous improvement in grazing conditions and the quality of the pasture is doing more than benefiting the cattle. We have witnessed a significant increase in population of waterfowl and other birds.”

Sean and Kathy are equally committed to achieving the durable economic viability of their working land, while creating a better environment for wildlife. Whether it is improving grazing conditions and quality on their mountain ranch or on the bottoms, the goal is the same—holistic management. “We are seeking sustainability. We have encouraged our children to educate themselves in resource management and animal husbandry. One day they will be managing these ranches and we trust their goal will be as ours has been, to continue to do their part in making the land a better place for the next generation.”

Donor Voices:
Eddie Tanner, NRLT Advisor, DeepSeeded Farm Owner and Farmer

Since deciding to make a career of farming my relationship to the land has deepened and changed. I came late to the business—having grown up in the suburbs, farms and ranchlands were something I appreciated in the abstract: “Open space is beautiful” and “No farms, no food.” The natural beauty and working landscapes of Humboldt County were big factors in my move here, and over the last 15 years of farming I have come to realize that we cannot take these assets for granted. When economic pressures cause a farm or ranch to cease production, that land is often subdivided and loses some of its natural integrity. Without security it is harder for landowners to be stewards and the environment can suffer. This is why I am so grateful for the work of the Northcoast Regional Land Trust. Their programs are helping to maintain the qualities that make us all happy to live in this region. Locally produced, quality food from a thriving landscape just makes life better!
know that the restoration area is being utilized by coho salmon and other fish species as envisioned. In March 2012, net surveys conducted in a small, newly constructed seasonal freshwater pond detected over 123 juvenile coho salmon utilizing the new habitat at one time. We enter the second phase of restoration confident that constructing these off-stream pools provides significant benefits to the watershed’s salmon population.

The upcoming restoration will involve excavating several ponds that are hydrologically connected to Wood Creek so that juvenile coho salmon – and other fish, including coastal cutthroat trout, Chinook salmon, steelhead trout and Tidewater Goby – will have the habitat they need to feed well and grow fast. Increasing the diversity of native wetland plant stands and planting riparian hardwood trees such as willow, alder and cottonwood will further enhance the value of the habitat for fish, birds and other wildlife. These and other design elements, including project funding strategies, are currently being developed with support from the United States Fish and Wildlife Service, NOAA Fisheries, California Department of Fish and Wildlife, the Natural Resources Conservation Service and the California State Coastal Conservancy.

True to the property’s agricultural history, cattle grazing will continue across much of the property and flash grazing may be incorporated into the long-term maintenance of restored areas. A trial run at flash grazing in 2013 showed much promise where implemented, with the practice increasing scenic, park-like qualities in the agricultural wetlands complex and leaving distinctive stands of native wetland plants unharmed. Due to the drought conditions and low rate of grass growth in 2013, the additional feed created by expanded grazing was also a boon to the resident cattle operation.

In addition to continued grazing, the restoration project will be designed to accommodate other uses of the property, including the improvement of a nature trail, educational programming, scientific research and the continued operation of the Kneeland Glen Farm Stand by farmer and rancher Kathy Mullen. Cows, crops, cattails and coho will continue to co-exist at Freshwater Farms – increasingly a nexus for connecting the lands, waters, people and priorities of our community.
The land that drains to Eureka Slough by way of Fay, Freshwater and Ryan Slough is diked former tideland that is vulnerable to flooding. By 1898, most of the salt marsh areas on Eureka Slough had been diked off to become agricultural lands (Figure 1) and today agriculture still dominates the landscape in the form of grazing. Flooding is common in winter on these lands around Humboldt Bay with high groundwater because over time the land has compacted up to 3 feet as the organics in the former salt marsh soil have oxidized.

Today, there are approximately 14.5 miles of earthen dikes on Eureka Slough, with some in better shape than others. A recent shoreline inventory and mapping project (Laird 2013) found that 7.2 miles or 50 percent of the dikes are highly vulnerable to breaching from erosion or by overtopping during storm surges and/or King tides (Figure 2). If the dikes were breached today, as much as 1,500 acres could be flooded with salt water (Figure 3). These low lying lands face two challenges going forward: rising sea levels and rising groundwater. Compounding their vulnerability is the fact that the Humboldt Bay region is subsiding — add in sea level rise and over the last century the tides are about 18 inches higher.

Since 2010, the Humboldt Bay sea level rise adaptation planning project has been inventorying and mapping shoreline vulnerability, preparing inundation models and maps, and exploring regional adaptation strategies. One of the more important findings as a result of this effort is that these diked former tidelands cannot be protected one parcel at a time or one jurisdiction at a time; every entity behind a shared dike is in this together.

To build and maintain the dikes when they were first constructed on the banks of the sloughs in 1894, the Board of Supervisors authorized the formation of a Reclamation District covering the former tidelands from Freshwater Slough in the south to Brainard’s Point in the north. The District was disbanded long ago but perhaps this concept is worth reconsidering again, at least on discrete hydrologic units where landowners who share a common dike to hold back the tides can join together to protect their lands from flooding. Aligning with organizations like the Northcoast Regional Land Trust, landowners may be able to organize and potentially secure programmatic permits that would allow agriculture to continue, at least for another 4 or 5 more decades, until rising groundwater converts the land or rising tides overcome these historic dikes.

Figure 1. Inter-tidal lands on Eureka Slough (U.S. Coast and Geodetic Survey, 1870)

Figure 2. Shoreline vulnerability on Eureka Slough: red is highly vulnerable, yellow-moderately, and green low (Laird, 2013)

Figure 3. Potential inundation area on Eureka Slough if the diked shoreline were to be breached or overtopped (NHE, 2013)
The Northcoast Regional Land Trust is pleased to provide our members with an accounting of organizational and programmatic accomplishments for 2013:

- Freshwater Farms Reserve thrived as we completed our fourth year of restoration monitoring and continued leasing the property to a local producer for grazing. The Farm Stand was opened, selling locally produced food and products.
- NRLT monitored nine easement properties, covering over 25,000 acres, and received nearly 50 inquiries for new projects throughout the year, including a 408-acre easement located in the upper Summit and Panther Creek drainages in the Trinity River watershed.
- The Martin Slough Enhancement Project moved forward with restoration design plans that include a two-phase fish passage improvement, wetland enhancement, and flood reduction.
- Among other local land trusts and conservation organizations, NRLT was selected to be a part of a national pilot study, the Durable Collaboration Initiative, exploring various options for sustainable collaboration in our region.
- Again this year, over 1,000 students participated in our Stewards of Tomorrow programs, getting outside to discover and play, while learning about scientific practices, ecology, restoration, local production and conservation.
- NRLT was nationally accredited, adopting policies and procedures to ensure our long term sustainability. Out of 1,700 land trusts nationally only 238 are accredited and NRLT is now one of them!

### INCOME

**2012** | **2013**
--- | ---
Government Grants | $131,870 | $16,541
Foundation Grants | $130,164 | $122,530
Donations & Events | $89,664 | $109,532
Other Income | $30,785 | $49,209
Restricted Donations* | $286,753 | $0
Investments | $75,784 | $140,962
**TOTAL** | **$745,020** | **$438,774**

*Restricted donations are made to our Stewardship or Board Designated funds which allows for the ongoing monitoring and stewardship of our easement properties and continuation of our work.

### EXPENSES

**2012** | **2013**
--- | ---
Land Conservation | $280,769 | $181,593
Education & Outreach | $32,158 | $34,140
Conservation Planning | $15,363 | $76,111
Operational** | $39,323 | $67,180
**TOTAL** | **$367,613** | **$359,024**

**Includes administration, fundraising, staff development & board expenses.

THANKS TO OUR SPONSORS:
THANK YOU NRTL Members and Supporters!
The Northcoast Regional Land Trust is forever grateful to the following who gave cash grants, donations or project support from April 1, 2013 through March 31, 2014.

The Northcoast Regional Land Trust is a tax-exempt, nonprofit, 501(c)(3) organization listed with the Internal Revenue Service under EIN 68-0456290. All donations are tax deductible.

**Agencies & Foundations**
- Audubon/Toyota Together Green
- CA Council of Land Trusts
- CA Department of Fish and Wildlife
- CALFIRE
- CA Northern Region Land Trust Council
- CA State Coastal Conservancy
- CA Wildlife Conservation Board
- City of Eureka
- Community Alliance for Family Farmers
- Dean Wright Foundation
- Friends of the Dunes
- James Takon Fund
- Land Trust Alliance
- Natural Resource Conservation Service
- NOAA Fisheries
- Nacimiento Wildlife Foundation, Inc.
- Northern California Association of Nonprofits
- Pacific Coast Joint Ventures
- RCAA Natural Resources Services
- Redwood Region Audubon Society
- S. D. Bechtel Jr. Foundation
- The Nature Conservancy
- Unipqua Bank
- U.S. Bank
- U.S. Fish & Wildlife Service
- U.S. Forest Service, Forest Legacy Program
- Yager/Van Duzen Environmental Stewards

**Active Lifetime Members**
A special thanks to these members who have continued to sustain NRLT. See a full list of Active Lifetime Members at: [ncrlt.org/partners.](http://ncrlt.org/partners)

Blake & Stephanie Alexander
Gary & Lyn Baker
Gloria Barnwell
Les & Janet Barnwell
Barbara Bartlett
Bob Bariaghi & Deborah Fitzpatrick
Joan Bennett
Scher Berman
Harry Blumenthal & Scott Mitchell
Bill Bragg & Lee Roscoe-Bragg
Rees Burgess
Francis & Carole Carrington
Maya Conrad
Reeve Carney
Stephen & Sharon Davies
Yvonne Everett
Shayne & Lindsay Green
Steve & Jill Hacker
Danny Hagan
Richard & Nancy Head
Judith Himman
Annette & Greg Holland
Amy King Smith
Roland Lambeirson & Michele Olsen
Tomi Lute & Lori Dengler
David & Madeline McMurray
Steve Millet & Yvonne Schell
Lee & Edith Hare
Fred Neighbor & Joyce Hough Neighbor
Margaret Nielsen & Chris Froliking
Felicia Oldfather
Rob Parks
Tim & Jackie Price
Dennis Reid & Carol Falkenthal
Jeff & Edith Schwartz
Martha Ann Spencer & Eric Nelson
Francis Swore
Bill Thompson
Donald & Donna Thompson
John & Nancy Vanderbroek
Marty & Dan Vega
Mock Wah landlord

**Steward’s Circle**
A special thanks to our monthly donors. To sign-up go to: [ncrlt.org/Stewardcircle](http://ncrlt.org/Stewardcircle)

- Harry Blumenthal & Scott Mitchell
- Laura & Bob Chapman
- Nancey & Richard Correll
- Frank Cox
- Mike & Annette Downey
- Becky Evans & Bob Benson
- Brian Ferguson & Brett Meyer
- Betty Filipponi
- Gary & Janis Friedrichsen
- Julie & Lynn Fullerston
- Rex Hughes & Amy Uyeki
- Charlie Jordans
- Mike & Rene Miles
- Terry & Erica Roleps
- Rondal Snodgrass

**Black Oak ($25$–$499)**
Heidi & Bill Bourne
Catherine & Thomas Allen
Eric & Mary Almquist
Ann Alter & Betty Watson
Celestine B. Armstong
G. Randel Hillebrand & Ben Hillebrand
Paul & Deborah Carpenter
Wendy & Donald Chene
Gail Coonen
Sara & Joe Connell
Burt & Cynthia Rees
Mike & Cindy Jeffress
Rox Keller & Andy Aranow
Arnold King
Richard Laforgue
Kim & Barbara Lucas
Debbie Marshall
Kate Martin
Chris McAliff
Kate McClain
Carol Mone
Wes Moore & Leslie Cornell Moore
Lori Mora
Frederick & Katherine Morehouse
Jim & Gae Morrison
Stuart Moskowitz
Arch & Sue Moisiman
Kathy Motz
Denise Newman & Mitch Block
Skyhawk & George Ogla
Janice Paradiri & Roy Bear
Claire & Gene Perrelli
Sarah & Colin Pilkington
James D. Poovey
Chuck Powell
Beth & Cindy Rees
John & Nilu-Quyen Schaefer
Linda Setrano
Larry & Becky Simpson
Emily Sindhorn
Richard Stanewick
Harold & Rebecca Stauffer
Eddie Tanner
Charlie Tripodi
Rita & Van Emmerick
James & Virginia Waters
Jim Wood
Mike & Katy Yankee
Gretchen Ziegler

**Manzanita (up to $99)**
We graciously thank our donors that gave up to $99. For a full list visit: [ncrlt.org/partners](http://ncrlt.org/partners)

**In-Kind Donations**
Does not include Annual Celebration donors.

**Bug Press**
FJ. Wheeler Consulting
Greenway Partners
Harl Unlimited
Harland Law Firm, LLP
Holtman & Associates Forestry Consultants
Hooven & Co., Inc.
Humboldt Association of Realtors
Humboldt Auction Yard
Humboldt Grassfed Beef
Humboldt Land Title Company
Humboldt Redwood Company
Jamie Walling, Benchmark Realty Group
La Trattoria
Law Offices of Catherine M. Kochkin
Law Offices of Nancy Diamond
Logger Bar
Los Bagels
Lost Coast Brewery
Mad River Brewing Company
Maya Conrad, Realtor, EcolBroker, Coldwell Banker
Sellers Realty
Mendocino Redwood Company
Mock Wahlund, Coldwell Banker Current Realty
North Coast Cleaning Services, Inc.
North Coast Auction
Northcoast Horticultural Supply
Pacific Builders
Pacific Watershed Associates
Person Building Center
Premier Intermedia
Redwood Curtain Brewing Company
Roy E. Coresiti, CPA
Shott Coffee
Solutions
The Historic Requa Inn
Timber Ridge
Umpqua Bank
U.S. Bank
Victoria Copeland, Ming Tree Realtors
Wildberries Marketplace
Zweedling, Bragg & Mainzer, LLP

**Our Business Partners**
Make our community strong!
Please support the following businesses:

- Aldaron Laird Consulting, Trinity Associates
- Alexandre Family EcoDairy Farms
- Alquim Lumber Company
- American AgCredit
- American Hydroponics
- Anderson, Lucas, Somerville & Borges, LLP
- Arcata Scoppy
- Arcata Scrap & Salvage
- Azure Bay Psychotherapy
- Baldwin, Blomstrom, Wilkinson & Associates
- Brooks Appraisal Service
- Bug Press
- Kyla & Charlie Tripodi, Coldwell Banker Carter Realty
- Chris Bell Appraisal Associates
- Clendenen’s Cider Works
- DANCO
- Deep Seeded Community Farm
- Emerald City Laundry Company
- Ferndale Farms
- FJ. Wheeler Consulting
- Greenway Partners
- Harl Unlimited
- Harland Law Firm, LLP
- Holtman & Associates Forestry Consultants
- Hooven & Co., Inc.
- Humboldt Association of Realtors
- Humboldt Auction Yard
- Humboldt Grassfed Beef
- Humboldt Land Title Company
- Humboldt Redwood Company
- Jamie Walling, Benchmark Realty Group
- La Trattoria
- Law Offices of Catherine M. Kochkin
- Law Offices of Nancy Diamond
- Logger Bar
- Los Bagels
- Lost Coast Brewery
- Mad River Brewing Company
- Maya Conrad, Realtor, EcolBroker, Coldwell Banker
- Sellers Realty
- Mendocino Redwood Company
- Mock Wahlund, Coldwell Banker Current Realty
- North Coast Cleaning Services, Inc.
- North Coast Auction
- Northcoast Horticultural Supply
- Pacific Builders
- Pacific Watershed Associates
- Person Building Center
- Premier Intermedia
- Redwood Curtain Brewing Company
- Roy E. Coresiti, CPA
- Shott Coffee
- Solutions
- The Historic Requa Inn
- Timber Ridge
- Umpqua Bank
- U.S. Bank
- Victoria Copeland, Ming Tree Realtors
- Wildberries Marketplace
- Zweedling, Bragg & Mainzer, LLP
Special thanks to these sponsors for underwriting this issue:

Winter Slough

COVER ARTIST – ANDREW DANIEL
Andrew Daniel has been painting and showing his art since 1992, graduating in 2001 with a BA in Fine Art from Humboldt State University. Long a student of art he tried many styles of painting, only to find that the simple approach of relating directly to the world in front of him and recreating it in paint was the best method for him. His paintings are inspired by the landscape and people of the Northcoast. He uses paint as a tool for slowing down and taking note of the constant flow of changes around him. Daniel lives and works in Arcata, dividing his time between his family, art and work with developmentally disabled adults. You can find more of his work at: andrewdanielportfolio.com

CAL EndAR OF EVNTS

Freshwater Farms Interpretive Walks: TBA, ncrlt.org
Experience, firsthand, beautiful tidal salt marsh and pastureland at the Land Trust’s restoration of wetland on the 74-acre Freshwater Farms Reserve. Each walk features a guest lecturer.

Canoe-the-Slough: TBA, ncrlt.org
Paddle Humboldt Bay and the Freshwater Slough with a NRLT naturalist. Learn about the Bay’s natural environment and the changes it has seen throughout the decades.

Pints for Non-Profits: Wed., July 16, 1-9pm, Mad River Brewing Company
Join NRLT board members, advisors, staff and supporters in Blue Lake to celebrate conservation. $1 of each beer sale goes to NRLT. Live music and food.

Annual Celebration: Sat., Oct.11, 5-9pm, Fortuna River Lodge
Celebrate NRLT’s work in the community at our annual gathering. A delicious meal, live auction and other entertainment will be included in the festivities.

Lay of the Land: TBA, NRLT Office
Join the Land Trust for the Lay of the Land, a one-hour presentation that gives an overview of what we are doing to protect and enhance our region’s farms, forests, rangelands and natural areas.

NRLT’s Mission
The Northcoast Regional Land Trust is dedicated to the protection and economic viability of working landscapes, farms, forests and grazing lands, and to the preservation and protection of land for its natural, educational, scenic and historic values. We work with landowners on a voluntary basis to promote stewardship of Northern California’s healthy and productive resource base, natural systems and quality of life.