

YAGER VAN DUZEN ENVIRONMENTAL STEWARDS



We hope that through this view of YES we have been able to share with you our commitment to, and love of this working landscape within the Van Duzen River Watershed. It has been an incredible journey for all of us associated with YES, from our founding members, many of whom remain active today, to our initial partners and consultants who continue to be an integral part of our success. We liken this kind of effort to a marathon; we are in it for the long haul. Over the span of the last 13 years, we have learned so much about our watershed, our community and ourselves. It really has become a “partnershed.” YES has been through every cycle of group dynamics—beginning with the early days of frenzied meetings and input into the TMDL, moving through the tumultuous times of robust and direct conversations, and on to the critical times of rest and recharge. Throughout it all, we have shared a strong sense of fairness and respect for each other, and a clear knowledge that what we can accomplish as a united voice and effort far outweighs what any of us are capable of as individuals.

As we move forward, and as we mature, both as a group and as individuals, we have broadened our interests by expanding to other groups and efforts of a similar nature. We remain committed to this geographic area and look forward to passing our reins off to the next generation. At the same time, we recognize the critical need for expanded efforts of this voluntary, landowner-driven approach to conservation. Our goal is to share with you our success, and by doing so, inspire you. If you are in another watershed, we hope that you may contemplate taking on this kind of collaborative effort. If you are a policy maker or regulator, we want to share that given an array of tools and incentives, we are making a difference in our ecosystems. If you are a reader who simply appreciates open space and the natural beauty of mother nature, we have tried to share with you our rich culture, and by so doing, have tried to convey that we are your “silent” partner in stewardship of this working landscape which includes caring for all that it has to offer.

Sincerely Yours,
Partners in Stewardship, Community and Sustainable Ranching.

THE YAGER VAN DUZEN ENVIRONMENTAL STEWARDS

“YES provided a critical communication link among local landowners, government agencies, and watershed consultants. The positive relationship that was formed as a result of this collaboration enabled stakeholders to use the TMDL (Total Maximum Daily Load) to assess watershed conditions in order to improve sediment loads. Thanks to the leadership and participation of YES, landowners have identified and mitigated road-related sources of sediment transfer to the Van Duzen River, and have contributed to a healthy watershed.” —Chris Heppe, Bureau of Land Management, Arcata, CA

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YES

The Yager/Van Duzen Environmental Stewards (YES) is a collaborative of ranching landowners who formed a small nonprofit watershed group in response to a U.S. Environmental Protection Agency (EPA) report, Van Duzen River and Yager Creek Total Maximum Daily Load for Sediment (1999). This report listed the watershed as “sediment impaired.” Occupying 78% of the land base in the mid-domain of the Van Duzen River watershed in Northwestern California, these landowners, many of whom are fifth generation ranchers, are guided by their mission statement: “To ensure the environmental integrity of our watershed, while maintaining our heritage and the economic sustainability of our endeavors.”

Members of YES embrace the concept of community-based conservation. For them, applying this concept means to strike a balance between conservation and their cultural/economic sustainability. They have taken a voluntary, pro-active approach to environmental concerns by educating themselves, and others, about innovative approaches to land stewardship. In addition, they are committed to implementing Best Management Practices (BMPs) designed to minimize the impacts of human activity on water quality. Finally, YES members aim to incorporate holistic approaches of land and resource management that not only enhance the quality of the ecosystem, but also preserve a way of life for ranchers and their families.

In the last twelve years, YES has grown from a grass-roots collaborative dedicated to improving water quality into a mature nonprofit organization that has voluntarily addressed regulatory challenges while striving to maintain the ranching culture and economic livelihood of its members. Its successes in forming unlikely partnerships with government agencies in order to reduce the sediment load in the Van Duzen River has grown into a value-added effort serving both the watershed and the broader rural community. Currently, YES is involved with working landscapes and collaborative partners locally, regionally and nationally.



THE VAN DUZEN WATERSHED

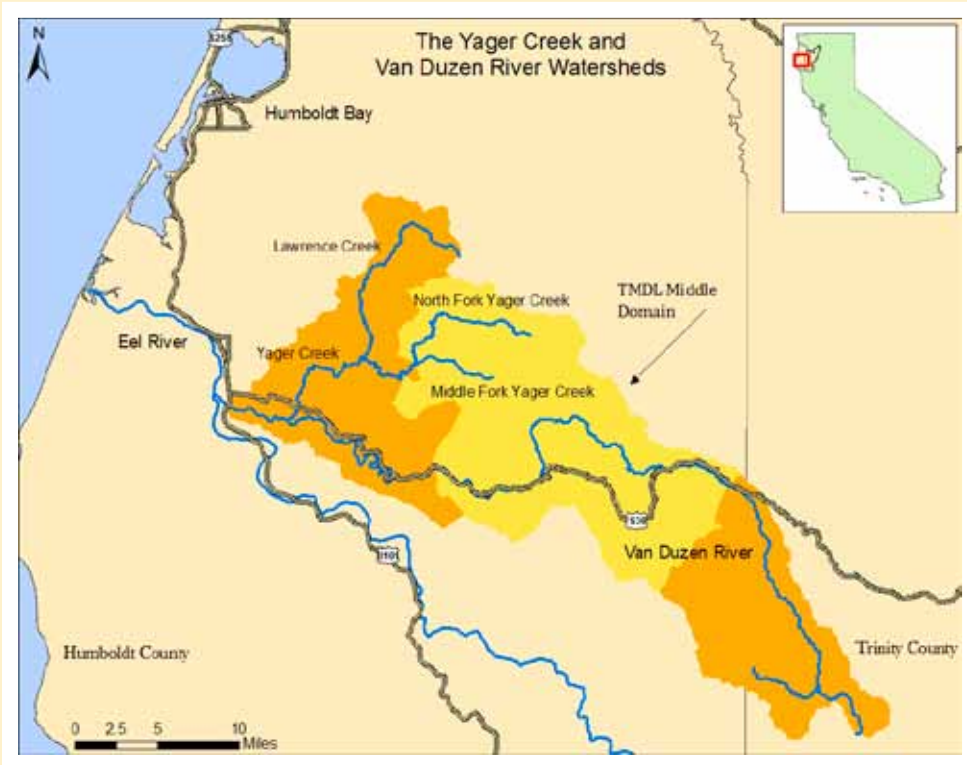
The Van Duzen River basin is one of the most erodible watersheds in the United States. High rates of erosion and sediment transfer are a result of the basin's location in an active tectonic region, combined with its sensitive terrain and high seasonal rainfall (Brown and Ritter 1971). Situated in California's North Coast Range, the Van Duzen River is positioned 50 miles from the "triple junction" of the American, Pacific and Gorda tectonic plates near Cape Mendocino. One of the last free-flowing rivers in California, it stretches 73.5 miles from its headwaters at Red Lassic Peak in Trinity County to its confluence with the Eel River, seventeen miles south of the city of Eureka, California in Humboldt County. Ranging in elevation from 5,096 feet to 62 feet, the basin drains an area of 429 square miles, 366 square miles of which are in Humboldt County; the remaining 63 square miles are located in Trinity County.

The Van Duzen River provides aquatic habitat for cold water dependent fish including anadromous Chinook and coho salmon as well as steelhead. Chinook and steelhead are federally listed as threatened; coho is federally and state listed. There is a shared investment among landowners, public agencies, and stakeholders in the health of resources and habitats. This important ecosystem provides for many species, including humans.

There are three zones within the Van Duzen River Basin, each characterized by distinct vegetation, varied terrain, land ownership, and land practices. The lower elevations are influenced by summer fog. The redwood forest dominates the lower domain and its land is primarily managed for industrial timber production. Several old growth groves of redwoods are preserved in state and county parks. Douglas fir and tan oak forests occupy the drier upper slopes of the redwood zone. Some farming takes place in the lower flood plains.

The private landowners of YES occupy the mid-domain, of the watershed. Here, prairies have provided grazing for sheep and beef cattle since the 1850s when Europeans settled the region after the Homestead Act. Ranchers have maintained their cultural and historical legacy of managing timber and livestock for up to six generations. Grassland and oak woodland, including tanoak, madrone, California black oak, as well as mixed conifer forest occupy this region.

The upper basin is primarily managed by Six Rivers National Forest. Dominated by coniferous forests of Douglas fir, Jeffrey pine, Ponderosa pine, incense cedar and white fir. Potentially unstable sandstone can be found in the higher elevations of the headwaters area, while melange and stable sandstone are represented in the lower regions.

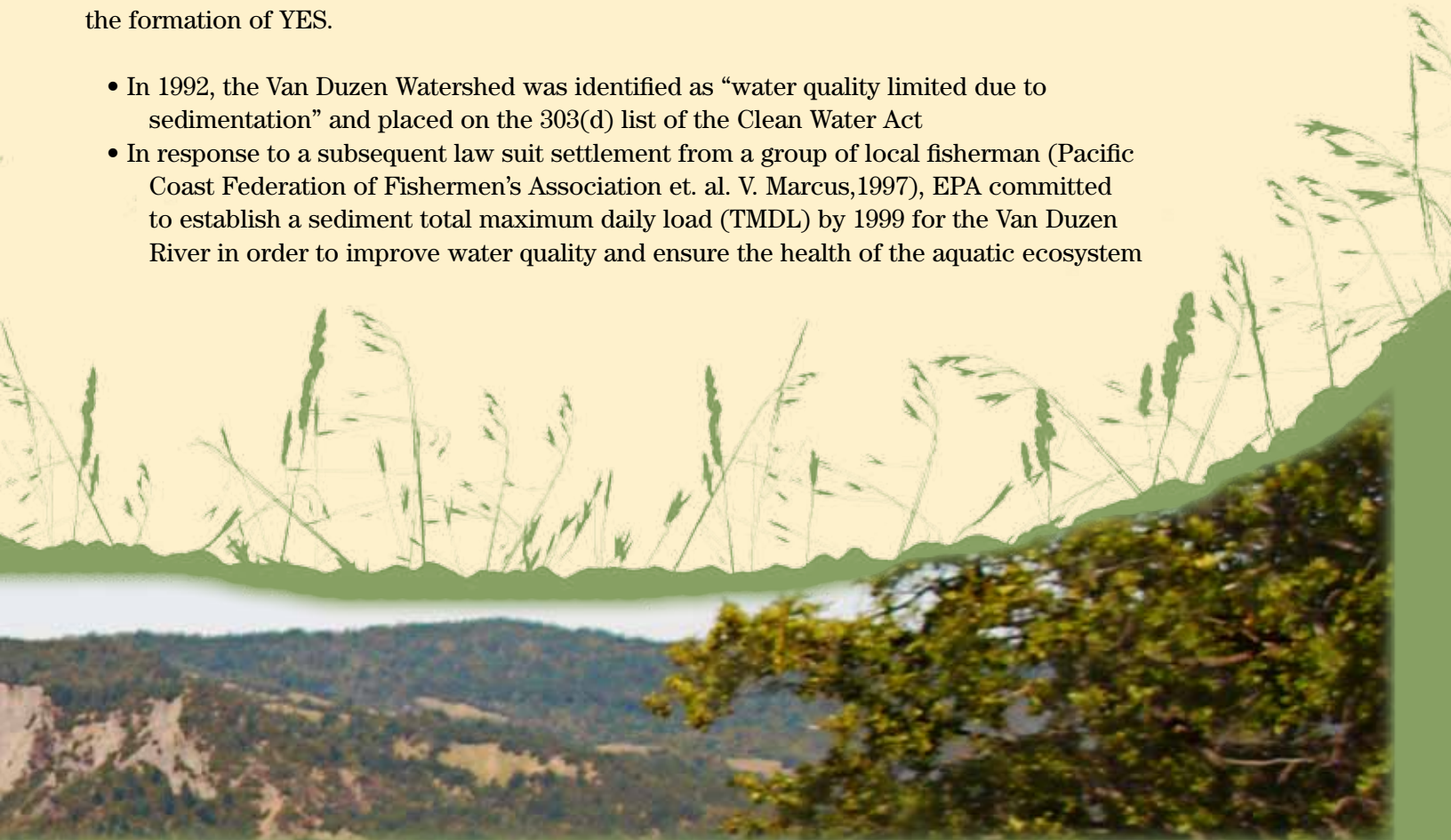


COMING TOGETHER IS A BEGINNING

“The partnerships we formed have opened our eyes to agency connections and to other landowners that bring different perspectives to the YES organization,” —Michael Mullen, YES member.

The confluence of two events attracted the attention of the ranchers in the mid-domain and resulted in the formation of YES.

- In 1992, the Van Duzen Watershed was identified as “water quality limited due to sedimentation” and placed on the 303(d) list of the Clean Water Act
- In response to a subsequent law suit settlement from a group of local fisherman (Pacific Coast Federation of Fishermen’s Association et. al. V. Marcus, 1997), EPA committed to establish a sediment total maximum daily load (TMDL) by 1999 for the Van Duzen River in order to improve water quality and ensure the health of the aquatic ecosystem




The Van Duzen TMDL identified the mid-domain, encompassing about 200 square miles, as contributing the largest amount of overall sediment to the watershed. The TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still safely meet water quality control standards (USA EPA, 1994). According to the EPA, high uplift and stream incision rates into relatively weak bedrock units combined to produce a high incidence of landsliding adjacent to stream channels. Land-use activities accelerated sediment delivery and accounted for the remaining sedimentation. The sediment source analysis conducted by Pacific Watershed Associates for EPA, found that the mid-domain yielded the lowest percentage (16%) of sediment delivery associated with management activities (roads/skid trails and timber harvest) compared to 36% in the lower basin and 20% in the upper basin.

The seed for YES germinated during the development of the Van Duzen River TMDL when a group of cattle ranchers/non-industrial timber landowners allowed the EPA to conduct an assessment of the watershed within their private landholdings. An opportunity created by threat of governmental regulation empowered YES; its members proactively engaged in a process that brought unlikely partners together. In spite of their differing beliefs, YES and EPA were able to work collaboratively on the TMDL for the Van Duzen River.

Data collected by Pacific Watershed Associates, with the help of landowners, identified roads, rather than cattle grazing and associated activities, as the largest, single-most controllable source of sediment. This finding was consistent with the understanding of the ranchers, and added to their confidence that they could continue to build on their relationship with public agencies.

As part of the TMDL development, narratives from locals within the watershed were collected and assembled (The Yager/Van Duzen Historical Narratives, Moore 1999). With funding provided by the Humboldt County Resource Conservation District and EPA, this project not only provided an important historical and cultural context for the development of the TMDL, it provided an opportunity for agencies and landholders to listen, to share, and to build a level of trust with one another as individuals. The EPA, under the guidance of Chris Heppe, further encouraged collaboration between landowners and public agencies to conduct watershed assessments and to pool resources in order to implement conservation measures.

A photograph of a man wearing a cowboy hat and a blue shirt, riding a light-colored horse. He is holding a lasso. The background shows a green field with some trees and a fence. The image is partially obscured by a green silhouette of tall grasses in the foreground.

“Multiple homesteads on all of the ranches were mentioned. Many of the pastures were named for the families that homesteaded them. Most striking is the rigorous life that the homesteaders lived” —(Moore, 1999).

WORKING TOGETHER IS PROGRESS

“It’s always a good idea to form friendships with your neighbors whether you live in a watershed or in an apartment complex. As my old boss said to me one day, “Some day you’re going to need them.” Of course, that’s not the main reason,” Mel Shuman, YES member. “It brings us together more as a community with common goals,” Gloria and Graham Cottrell, YES members.

Since its inception, YES has collaborated with various agencies including: the Environmental Protection Agency; U.S. Fish and Wildlife Service Partners for Fish and Wildlife Program; California Department of Fish and Game; Natural Resource Conservation Service; State Water Resources Control Board, as well as the North Coast Regional Water Quality Control Board; University of California Cooperative Extension; the Humboldt County Resource Conservation District; Humboldt County, and employed the firms of Pacific Watershed Associates, and SHN Consulting Engineers and Geologists to assess and mitigate major sediment transport, and to evaluate water quality standards in the mid-domain.

After the EPA established the TMDL for the Van Duzen River, YES obtained funding from The California Department of Fish and Game and the State Water Resources Control Board to conduct an assessment of ranch roads. This assessment, completed by PWA in 2003, led to an inventory of 420 miles of ranch roads within 80,000 acres of land owned by YES members. Approximately 1,000 sediment delivery sites were identified on these ranch roads. Since that time, YES has systematically sought funding to mitigate road-related sediment delivery mechanisms.

YES has participated in a variety of workshops over the years that have served to inform its members, partners, and the general public about land management practices that affect the Van Duzen watershed, and other watersheds with similar attributes. YES members have learned that land practices of the past, particularly those related to road building and logging, did contribute to sediment impairment and degradation of the watershed. They value the scientific process of collecting data that accurately describe their environment and resources. They have actively participated in the data-collecting process, and have used this data to make informed decisions related to their land management. In turn, improvements made on the landscape have contributed to the economic sustainability of a unique, rural community.

“Graham is not one to stick a branding iron on a calf or rope a critter or climb on a horse. He, on the other hand has been an environmental steward for the land for the 50 plus years that I have known him. By that I mean upgrading a road to mitigate sediment delivery, improve road structure and promote proper drainage,” —Gloria Cottrell, YES Member.



Graham Cottrell

As a result of meaningful relationships with its partners, YES has reached audiences from the young to the very old through its public outreach efforts. The group has hosted UCCE water quality workshops aimed at identifying controllable sources of sediment. They have presented annually at the Redwood Environmental Education Fair at College of the Redwoods informing elementary and junior high school students about the work of its watershed group, the benefits of environmental stewardship, and the role cattle ranching and grazing play in the history and economy of their community. In the spring of 2011, YES was invited to present at an Osher Lifelong Learning Institute course taught through Humboldt State University entitled, Humboldt Environmental Forum: Rivers of Humboldt County.

Beyond the local level, YES has presented its model of working together, and its accomplishments nationally at Private Lands Day meetings held in Montana, Colorado, Kansas, and South Dakota. Attended by private landowner groups from the western states, federal agency staff from Washington D.C., and Congressional staff, this opportunity has provided YES with a forum to share its successes with a wider audience.

STAYING TOGETHER IS SUCCESS

“As for me, stewardship involves the moral responsibility for the careful and conservative use of the natural resource under my care and to meter out such renewable resource as to produce an end product with as little detriment to the environment as possible.” —Martin Gift, YES member.

YES is governed by a Board of Directors. Committees carry out goals related to watershed stewardship, education/community outreach, funding/staffing, membership, and restoration efforts. A strategic plan (updated January, 2011) guides the work of YES and identifies the group’s mission, history, core values, vision, challenges, and future directions.

At an individual level, each YES member/ranch property implements resource management practices related to range and livestock management, the protection of riparian areas and watercourses, and ranch roads.

Range and Livestock Management

- Grazing systems allow for controlled harvest of forage to maintain the vigor of the range, animal health and productivity, and soil condition
- Herding and rotating practices distribute livestock to improve range and cattle productivity
- Placement of fencing plays a key role in cattle distribution
- Livestock health programs include the inoculation of calves, evaluation and vaccination of mature animals, and routine worming to reduce pathogens.



Road before restoration on Barnwell's Chalk Mountain Ranch.



Road after restoration on Barnwell's Chalk Mountain Ranch.

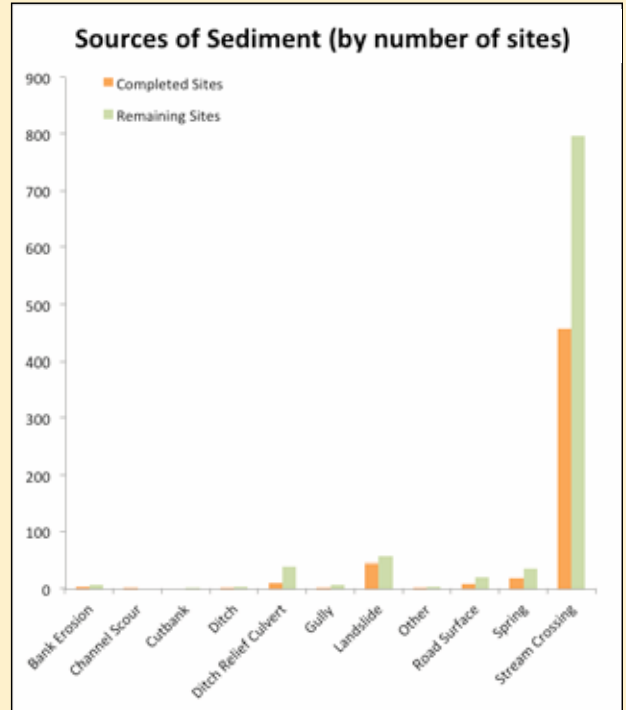
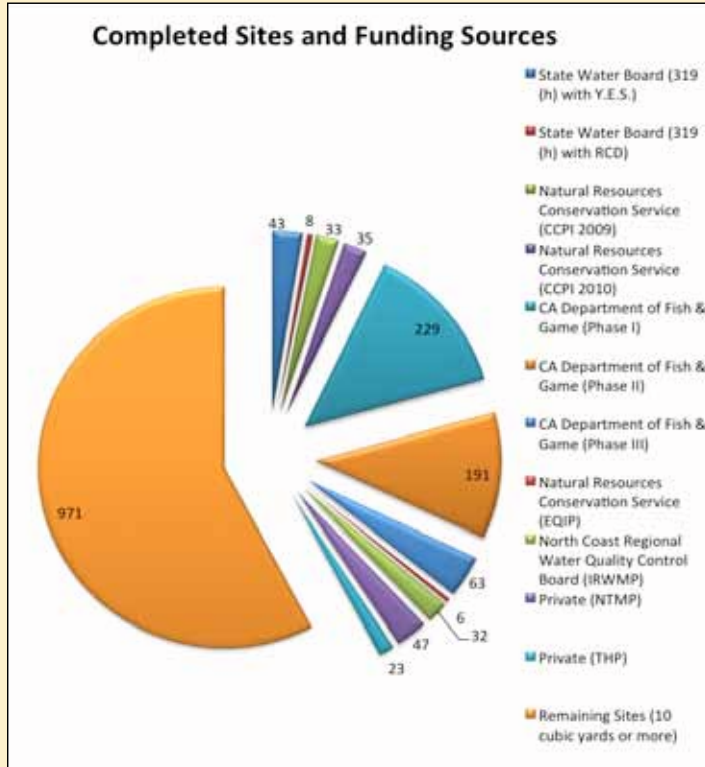
Protection of Riparian Areas and Watercourses

- Development of water systems for livestock include spring development and strategic water trough placement designed to protect riparian areas
- Placement of minerals and supplemental feeds are strategically located away from riparian areas and live watercourses

Ranch Roads

- Roads are upgraded to mitigate sediment delivery, improve road structures, and promote drainage
- YES Ranch Road Maintenance Protocols were developed that include annual inspection and maintenance
- Monitoring is implemented on all road sites that have received upgrades via photo documentation and topographic surveys

As of March, 2011, the group has received six grants to implement specific road restoration projects based on sites identified in the PWA Watershed Assessment (2003). Work is now being done to assemble data in a repository to be used for future planning and to assess the benefits of remediation work. Preliminary analysis of sediment savings is depicted in the graph below:



As stated by YES Member, Kim Lucas, “We’re only somewhat effective, as Mother Nature always has the upper hand.” Heavier than average rainfall in Spring 2011 produced new slide areas to evaluate. These new regions, along with recent upgrades in roads, require ongoing assessment of management plans. Recent photo documentation and anecdotal information related to Chinook salmon returning to the north fork of Yager Creek prompted a response from another rancher, Dina Moore, “It doesn’t prove that what we’re doing is beneficial, but it sure gives us hope that what we’re doing is having a positive effect on the land for the next generation.”

LESSONS LEARNED MOVE US FORWARD

“Yes, forty years ago, little thought would have been given to the effect of grazing and discharge of sediment into the watershed. I am guilty as charged on that account, although not wantonly abusive—more a bit ignorant. Over the years, education about the environment and what impact I, as an individual, have on protecting became clear to me that stewardship was not only an important aspect of my responsibility, but a most necessary goal. Joining YES enhanced that goal tenfold and being involved with the group has strengthened that bond between land and man for me,” Michael Mullen, YES member.

In the last ten years, YES has grown from a loosely organized group of ranchers into a unified conservation coalition that has credibility in both the public and private sector. Guided by core values of fairness, care for neighbors, commitment, education, transparency, and stewardship, YES exemplifies the qualities needed for collaborative conservation groups to be successful socially, economically, and environmentally. The paradigm of this group of ranchers has changed over time. Due to their solitary independent nature, collaboration has not come naturally. Working together has taken time. The payoff has been huge and has required calculated risk-taking. The success of YES is testimony that landowners can, indeed, participate in conservation efforts by voluntarily self regulating their land use, and can maintain a sustainable rural way of life for succeeding generations. Although there are no blueprints, or hard rules, the lessons learned by YES provide effective guiding principles that will serve as a model for other communities and watersheds. Our work has not ended with our past successes, but continues as we face new challenges.

BENEFITS OF YES COLLABORATION

- Contributes to a healthy watershed
- Empowers individuals through the collective effort
- Creates infrastructure for community dialogue and projects
- Promotes stewardship among community members locally, regionally, and nationally through educational efforts
- Supports local fisheries by improving the habitat of native salmon and steelhead populations
- Ensures the viability of rural communities by obtaining grants for sediment reduction projects of over \$3,000,000
- Provides a service to the ecosystem that contributes to the effectiveness of other working groups who support ranching and the maintenance of large tracts of open spaces
- Models community-based conservation efforts for other groups of landowners locally, regionally and nationally
- Invests in the future of the local community



NRCS Field Day, Curtis Ihle and Mark Moore

PRINCIPLES AND PROCESSES THAT GUIDE US:

Each watershed is unique, as is the composition of landowners and stakeholders who inhabit its region. YES has recognized key processes and principles to be components of successful community-based conservation efforts. First, a shared goal must be identified. For YES, the goal was delineated because of the perceived threat of greater regulation. Next, individuals in the group must have a keen personal investment in the outcome of that goal. For YES, the land-owners/land managers were invested in the long-term health of the ecosystem. It is only through a shared vision for the future and strong personal investment that a productive coalition could be achieved. In addition, the particular people, place, and time contributed to the successful collaboration of YES.

PEOPLE

Any collaborative effort must begin with people. For YES, the people and their stories were first brought together in the Yager Creek/Van Duzen Historical Narratives collected at the beginning of the TMDL development. This document organized and preserved the insights and recollections of the people who have lived in the Van Duzen watershed for generations—people who are deeply attached to, and affected by the land. Their voices are heard in the quotes throughout this publication.


Moreover, the “right” people must be enlisted to contribute to the group. Individuals must demonstrate leadership/communication skills, a passion for the work the group seeks to accomplish, and an ability to share with others. These qualities engender the trust and respect of the extended community. Leadership must be encouraged and fostered; as the effort expands, so must the leadership.

PLACE

There must be a need for collaboration. Conditions in a particular place must allow for change that will mutually benefit ecosystems and communities of people. Small successes can lead to returns that will leverage future actions. Sound science based on the resources of a geographic area, and individuals with knowledge to develop plans, projects, and processes to improve the watershed are critical.

TIME

The time must be ripe for collaboration; it can't be forced. The work of community-based conservation requires hours, days, weeks, and years. Not only must the “right” people be in place, they must have the time to invest in the effort. Persistence and perseverance are necessary to build trust, to effect change, and to see results.



“His kids always said that whenever he went up to the ranch he would carefully look over each blade of grass, because he just dearly loved every bit of it. So, the ranch came into the family by someone's real love for the mountain. We are very fortunate that it has stayed in the family for so long. That kind of love for that ranch prevails throughout the younger generation. The kids have a lot of respect and love for Bridgeville,” —Rich Hunt, YES Member.

A successful collaborative process for private lands must:

- Be a grass-roots effort driven by landowners who have an historical view and a relationship with the land base
- Develop leadership within the group which is developed over time
- Identify shared problems/issues - share a common vision and strategy
- Build partnerships in the scientific community and among all stakeholders
- Educate - learn and share knowledge about the ecology and resources of the region
- Commit time to collaboration
- Start small with problems that can be easily addressed
- Observe Pareto's Principle, or the 80-20 rule (That is, focus 80% of attention on the issues upon which stakeholders can agree, and 20% of attention on issues that are more difficult. Look past differences to find common goals.)
- Develop relationships and value differing perspectives
- Realize that collaboration and consensus are not synonyms (Collaborating on a conservation goal does not require consensus.)

ACKNOWLEDGEMENTS

YES is grateful for the efforts of Prosperity! Plan, a regional organization that has served to enhance the sustainable economic development of Humboldt County, and to assist those of us striving to make a living wage in our rural community. It has focused resources and expertise to examine nine industry clusters, among which are our sister economic clusters of fisheries and forestry. We acknowledge the contributions each of these industries make to the unique resource-based region we call home. The key values of community, environment, people, economy, and government identified by Prosperity! Plan have helped guide the work of YES. Support for this publication provided by the U.S. Fish and Wildlife Service, Partners for Fish and Wildlife Program.

IN CLOSING

Take a moment to consider the characteristics of the magnificent maple pictured on the back of this publication. Each spring, this tree renews itself, completes another cycle, and reminds us of our commitment to the landscape in which we live. We hope our work will encourage you to consider a balanced approach to land-based conservation and move you forward on a path of thoughtful action in relation to your own unique landscape.

**Rich, Dean, Harold, and Vynal Hunt, 1974
Chute made by Dwight May**



GLOSSARY OF TERMS

- **Anadromous Fish:** Fish that are born and rear in freshwater, move to the ocean to grow and mature, and return to freshwater to reproduce. Salmon and steelhead are examples. (Weaver 94)
- **Best Management Practice (BMP):** Methods that have been determined to be the most effective, practical means of preventing or reducing pollution from non-point sources. (EPA)
- **Culvert:** A transverse drain, either a metal or plastic pipe, set beneath the road surface which drains water from the inside of the road to the outside of the road. Culverts are used to drain ditches, springs and streams across the road alignment. (Weaver 94)
- **Decommission:** To remove those elements of a road that unnaturally reroute hillslope drainage or present slope stability hazards. (Weaver 94)
- **Ditch relief Culvert:** A drainage structure or facility which will move water from an inside road ditch to an outside area, beyond the outer edge of the road fill. (Weaver 94)
- **Earthflow:** A mass movement landform and slow to rapid mass movement process characterized by downslope translation of soil and weathered rock over a discrete shear zone at the base, with most of the particles being smaller than sand. (Weaver 94)
- **Environmental Impact:** The positive or negative effect of any action upon a given area or resource. (Weaver 94)
- **Erosion:** The dislodgement of soil particles caused by wind, raindrop impact or by water flowing across the land surface. (EPA)
- **Evaluate:** To determine the significance, worth, or condition of usually by careful appraisal and study. (Merriam Webster Dictionary)
- **Ecosystem:** The interacting system of a biological community and its non-living environmental surroundings. (EPA)
- **Holistic:** Concern for complete systems and wholes, not the analysis or dissection of into parts. (Merriam Webster Dictionary)
- **Mitigation:** Measures taken to reduce adverse impacts on the environment. (EPA)
- **Restoration:** Restoring to an improved condition. (Merriam Webster Dictionary)
- **Rotational grazing:** Grazing in which animals are rotated through a series of paddocks (pastures), generally on some flexible basis.
- **Sediment:** Topsoil, sand, and minerals washed from the land into water, usually after rain or snow melt. (EPA)
- **Stewardship:** Environmental stewardship is the responsibility for environmental quality shared by all those whose actions affect the environment; an ethic that embodies cooperative planning and management of environmental resources to actively engage in the prevention of loss of habitat and facilitate its recovery in the interest of long-term sustainability.
- **Sustainability:** Creates and maintains the conditions under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic and other requirements of present and future generations. (EPA)
- **Total Maximum Daily Load (TMDL):** A calculation of the highest amount of a pollutant that a water body can receive and safely meet water quality standards set by the state, territory, or authorized tribe. (EPA)



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**Addison Lucas,
the next generation**

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