

Redwood Futures

Mendocino County Watershed Restoration Project

RedwoodFutures is a regional effort, but individual projects are being developed in specific locations. In Mendocino County a RedwoodFutures group has developed a watershed restoration project specifically aimed at restoring forest and aquatic ecosystems as well as the economies that they support in Mendocino County.

Project Justification:

Watershed restoration is a bridge to creating a vibrant resource based economy in Mendocino County and the Redwood Region. Studies show that investment in restoration creates twice as many jobs per million dollars invested as any other investment. Through improving forest and stream health and enhancing the future capacity of our natural resources, we will be building a sustainable resource based economy that will create jobs, increase tax revenue and protect ecosystems in perpetuity. In the past, limited funding has supported restoration activities throughout the County through groups such as Trout Unlimited, The Mendocino County Resource Conservation District, private landowners and a few watershed councils/ coalitions. In many areas however, there are currently no proactive restoration efforts. Redwood Futures Mendocino County Watershed Restoration Project (MCWRP) will provide the necessary support to jumpstart watershed restoration work throughout the County. To this end, Redwood Futures has identified three areas of focus:

- 1) Currently, there is no comprehensive record of watershed conditions and restoration projects in Mendocino County. In order to understand the current state of County watersheds, provide regional baseline data and identify priority restoration areas MCWRP will conduct countywide GIS mapping. This map and database will be made available to all stakeholders and will be updated as new information is obtained and restoration projects are completed.
- 2) While GIS mapping will identify baseline data and restoration hotspots, the County must have economic justification to attract restoration dollars to the area. The MCWRP will contract a study that measures the economic impact of restoration work in order to justify additional funding. The study will measure job creation, tax revenue and increases in the future value of our watersheds based on restoration work.
- 3) Once GIS and economic data are obtained, the county will be better positioned to secure funding for restoration work. However, there are currently few watershed councils/ coalitions actively engaging in large-scale restoration efforts. The MCWRP will create an umbrella watershed group that will facilitate the creation of watershed councils and strategies within

each watershed to carry out restoration. This group will disseminate strategic information from successful councils in order to learn from and build on what works in our region. The group will consist of a project coordinator/ grant writer/ facilitator to create and support watershed councils and a GIS expert who will maintain and update the countywide GIS map. The watershed umbrella group will be temporary, providing support until individual watershed councils become autonomous.

Project Description

There are three pieces of the Mendocino County Watershed Restoration Project (MCWRP), GIS Mapping, the Restoration Economy Study and the Mendocino County Umbrella Watershed Group (MCUWG). These pieces provide the necessary elements to ramp up watershed restoration efforts countywide.

GIS Mapping:

The purpose of the GIS mapping is to serve as a baseline for spatial data related to restoration throughout all watersheds in Mendocino County. Additionally, the GIS data will help identify and track on-going restoration and help highlight areas in need of restoration dollars. MCWRP is working with Shane Feirer at U.C. extension to ensure that we are integrating existing layers from restoration organizations such as RCD, NRCS, the Department of Fish and Game and Trout Unlimited, data from private landowners such as Mendocino Redwood Company and the Redwood Forest Foundation, and data from existing Watershed Councils into one coherent GIS database. The GIS map and database will include the following layers:

- Completed projects with date and description, perhaps categorized as "in-stream", "road", "culvert replacement" or such (and dollar amount spent if possible).
- Projects identified but not yet completed, again possibly identified as to type of work.
- "Core areas" as identified by the NMFS plan
- Un-paved logging or other roads
- Stream segments where ground inspection has not taken place and projects not identified ("potential project areas").
- Road segments where ground inspection has not taken place.
- Timber harvests with dates.
- Landholdings.
- Areas covered by active watershed coalitions.
- Fish monitoring stations.
- Fish count results with dates of observations.
- Various other monitoring data such as water quality, temperature, etc
- Endangered species and wildlife
- Major Landslides and landslide prone areas

- Man made and natural barriers
- Population
- Land cover
- Stream diversion
- Water flows (or at least gage I.D)
- People associated with watershed projects and contact information

Restoration Economy Study:

The purpose of the Restoration Economy Study is to understand the economic impact of restoration work in the County. MCWRP will measure basic economic indicators such as the dollar amount spent in each watershed in Mendocino County on restoration projects over time, job creation by type, and job creation per dollar of investment in restoration. MCWRP will then attempt to measure percent change in the value of our forest, fishing and tourism industries based on past and projected restoration work. The restoration economy study will in essence provide an estimate for the benefit of restoration work in the County in terms of both jobs and improved ecosystem services and will consist of the following steps:

- 1) Identify currently available data and sources in Mendocino County
- 2) Choose the economic indicators that will be measured in the study; this will include but is not limited to the following indicators:
 - a. Total restoration dollars spent in the County annually
 - b. Total dollar estimate of the remaining work to be done / annual economic impact of remaining work
 - c. Total annual job creation resulting from restoration activities
 - d. An annual tally of the number of restoration jobs broken down by type of profession
 - e. Average salary by type of restoration profession
 - f. The percent change in the value of our forest, fishing and tourism industries based on past and projected restoration work
- 3) Solicit the appropriate economic data from all identified sources
- 4) Create a study that shows the economic impact of restoration projects in the County

Mendocino County Umbrella Watershed Group (MCUWG):

The purpose of the MCUWG is to support the implementation of restoration projects countywide. MCUWB will consist of two full time employees for two years whose primary responsibility will be to support existing watershed restoration groups and assist in creating new groups and strategies where none exist; assist in grant writing for restoration projects particularly in areas with little existing capacity to do so; identify areas with the greatest restoration potential and help focus financial

resources to these areas; disseminate information about successful watershed restoration efforts collected through a number of interviews; provide continued GIS support.

The ultimate goal is to jumpstart restoration in Mendocino County. The GIS Mapping, Restoration Economy Study and MCUWG build off of each other to reach this end. For example, the baseline data provided in the GIS mapping project is essential in identifying critical areas to channel restoration dollars. The restoration economy study provides persuasive quantitative data to show funders the benefits of investing in restoration. The MCUWB insures that this data is used to it's fullest potential, and that we are integrating strategies from other successful watershed restoration efforts, such as the Mattole Restoration Council.