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Fish Friendly Farming®
Environmental Certification**

Soil Moisture Meters

Goal: Fine tune the frequency of irrigation with improved soil moisture monitoring

Grant funding: North Coast Resource Partnership also called the North Coast Integrated Regional Water Management Program (IRWMP), Ca. Dept. of Water Resources

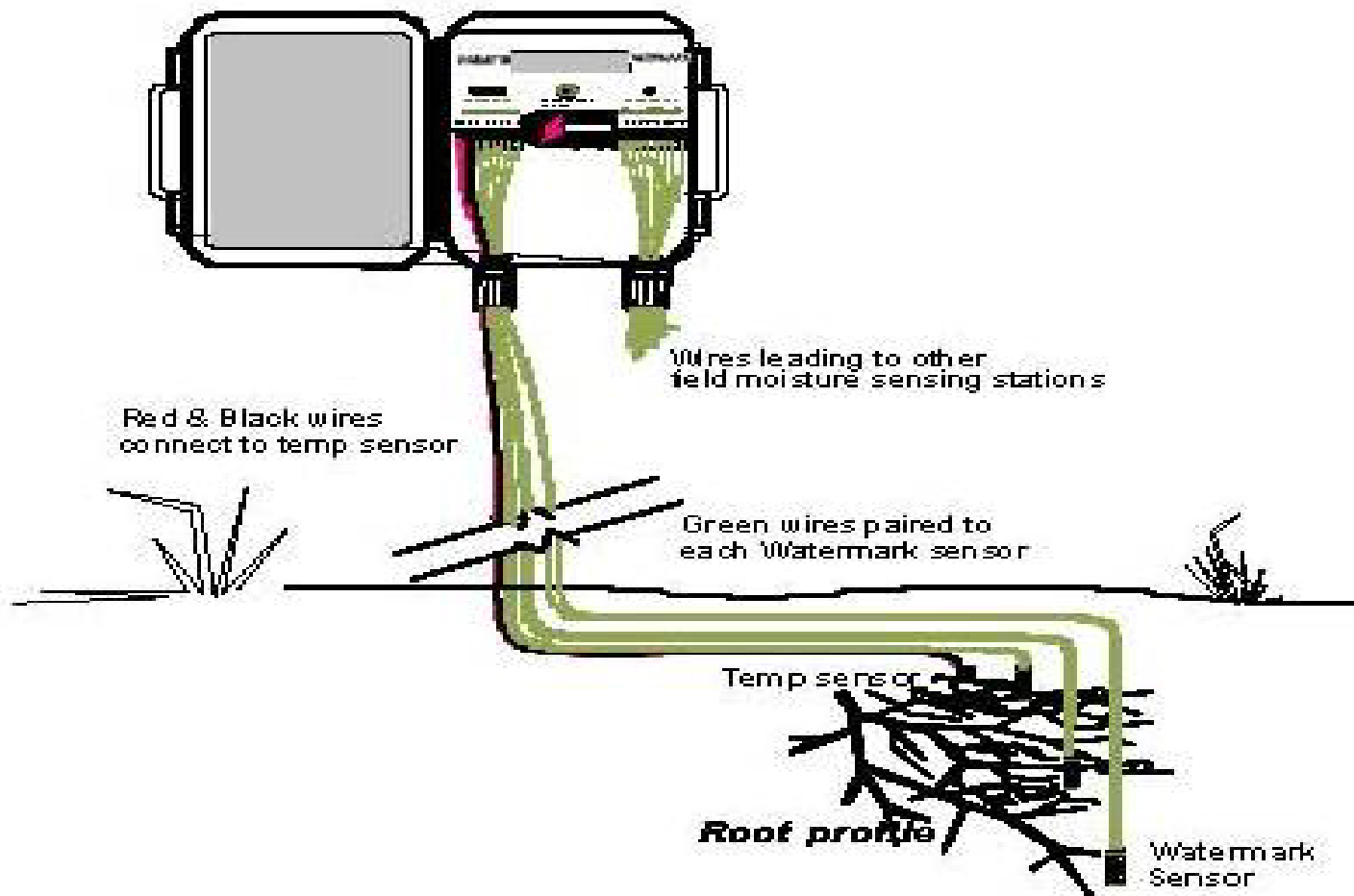
Funding allows for 100 continuous recording soil moisture meter systems to be installed in vineyards and technical assistance to growers in using recorded data

Funding can only be used in the Russian River and Navarro River watersheds



Most vineyards use drip irrigation the most efficient type of irrigation system

Annual irrigation amounts 0.3-0.6 acre-feet/acre/year in the Russian River



1. Sensor placement depth is a function of crop rooting depth.
2. Install sensors in active root zone.
3. Program Monitor with appropriate sensor reading interval.
4. Install Watermark sensors or Irrrometer Model R5U tensiometers as necessary or specified.
5. Download Monitor to display graphs of soil moisture history on computer.

Process

Sign up to be in program

We will prepare site maps and work with grower to determine where to install system

We will work with grower to install system

Workbook – includes needed information including keeping irrigation records and testing efficiency of irrigation system

We will work with growers to download data from data loggers

Group meetings - discuss data and how to interpret it

Assistance from NRCS, UC Cooperative Extension

Workshop

Provide an overview of soil moisture monitoring

Provide an opportunity to sign up for the program

Dr. Larry Williams – University of California, Davis

Overview of vineyard irrigation management and the use of soil moisture monitoring techniques to understand soil moisture dynamics

Jacob Moreno – Irrrometer Company

Overview of products: Watermark sensors, data loggers and compatibility with weather station technology

Mark Holler - Camalie Vineyards

Using Watermark sensors to reduce irrigation; wireless data transmission technology

Al White- Parducci and Husch Vineyards

Personal experience using Watermark sensors

Dr. Erica Lundquist- Natural Resource Conservation Service

The role of soil moisture monitoring in agricultural water conservation

Paula Whealen- Principal Water Rights Specialist, Wagner and Bonsignore Engineers

State Water Resources Control Board Regulations for Measuring and Reporting Water Use

CERTIFIED



**FISH
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Enrollment is open for Fish
Friendly Farming

Please take a sign up form with
you and fax or email it to us