

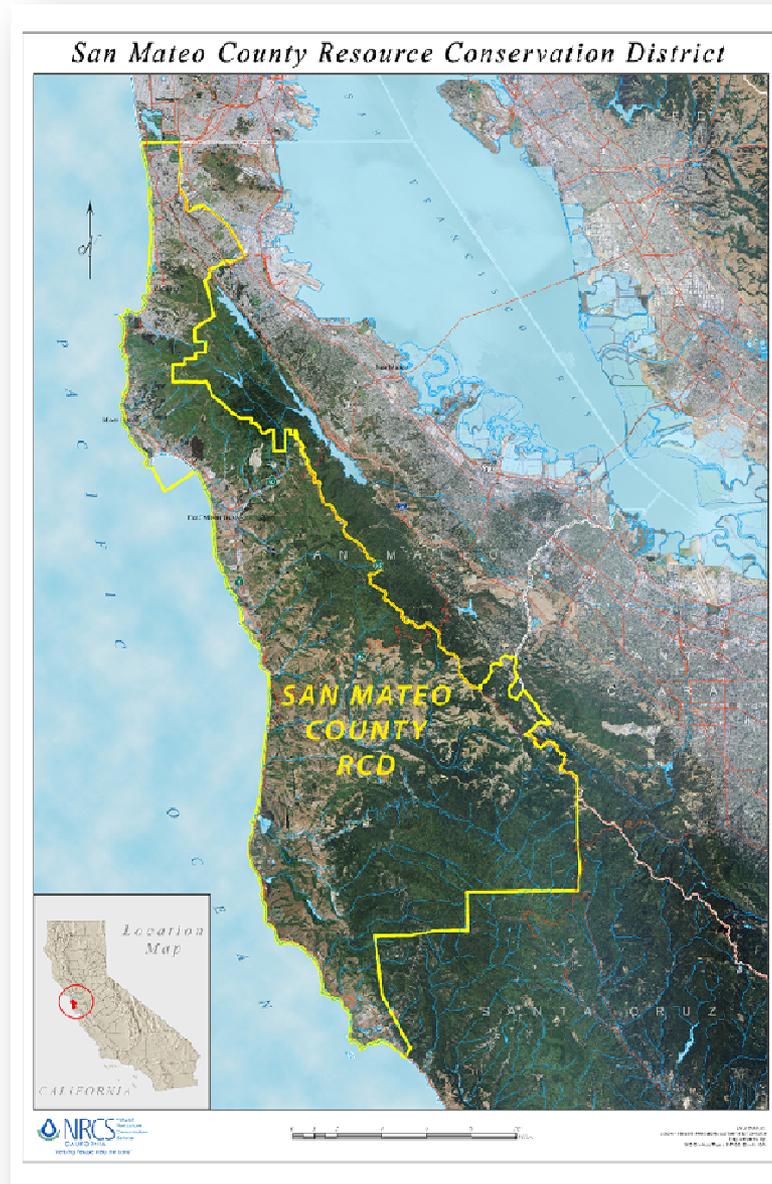
Irrigation Evaluations and Efficiency



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Presentation to the Town of Colma and Cemeteries
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About the RCD



About Bill Power

- Bill Power of Power Services Inc. (PSI) has been testing pumps and irrigation system since 1991 and has tested over 34,000 pumps and 5500 irrigation systems.
- PSI has tested irrigation systems at cemeteries for the San Benito County Water District and pumps for the Santa Clara Mission Cemetery.



Irrigation Efficiency

- Reducing **wasted** irrigation water as opposed to restricting use
- Match water use to water need
- How? Conduct an irrigation evaluation and implement recommendations



Irrigation Evaluation

- Assess irrigation system design, installation and management
- Assess efficiency of existing system
- Recommend steps to achieve efficiency and the amount of water and money that could be saved

Example Recommendations

- Infrastructure
 - Change sprinkler, nozzle or pipe sizes
 - Fix leaks or plugs
 - Change type, size, or location of pump
 - Change sprinkler spacing
- Management
 - Apply more or less water
 - Change frequency or time of water application

Benefits to Cemeteries

- Water savings = Energy Savings = Cost Savings
- Supports business model, maintains existing landscaping
- Protects regional water resources and the environment
- Triple bottom line
 - Financial
 - Environmental
 - Social



How the Program Works

- \$2,000-\$3,000 per evaluation
- Cemetery supplies information about irrigation system
- Irrigation specialist compiles relevant information (rainfall, wind, plant water requirement, etc.)
- On-site evaluation (~4 hours)
- Results and recommendations
 - In written report
 - Discussed with cemetery owner/manager

Information We Will Need From You

- Water source
- Flow meter?
- Annual amount of water applied
- Irrigation schedule and plan
- PG&E bills

On-Site Evaluation

- Discuss additional info with the owner/manager as needed
- Distribution uniformity analysis (DU)
 - Pressure and flow rate of pump and sprinklers
 - Test water overlap between sprinklers
- Pump efficiency test
- CIMIS data comparison

What We Will Provide

- Results
 - % efficiency of pump
 - DU%
 - Irrigation Efficiency
- Recommendations
 - Infrastructure changes
 - Changes in management
- Discussion of Next steps
 - How to implement
 - Potential funding sources

Thank you!



Questions?