



Yuba Water Agency: Improving forest health and watershed resilience

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Overview:

- Yuba Water's Mission
- Need for forest management
- Our Innovative Watershed Resilience Program
 - North Yuba Forest Partnership
 - Forest Resilience Bonds
 - Additional forest health efforts



Yuba Water Agency's mission areas



Flood Risk Reduction



Sustainable Water Supply



Hydropower Generation

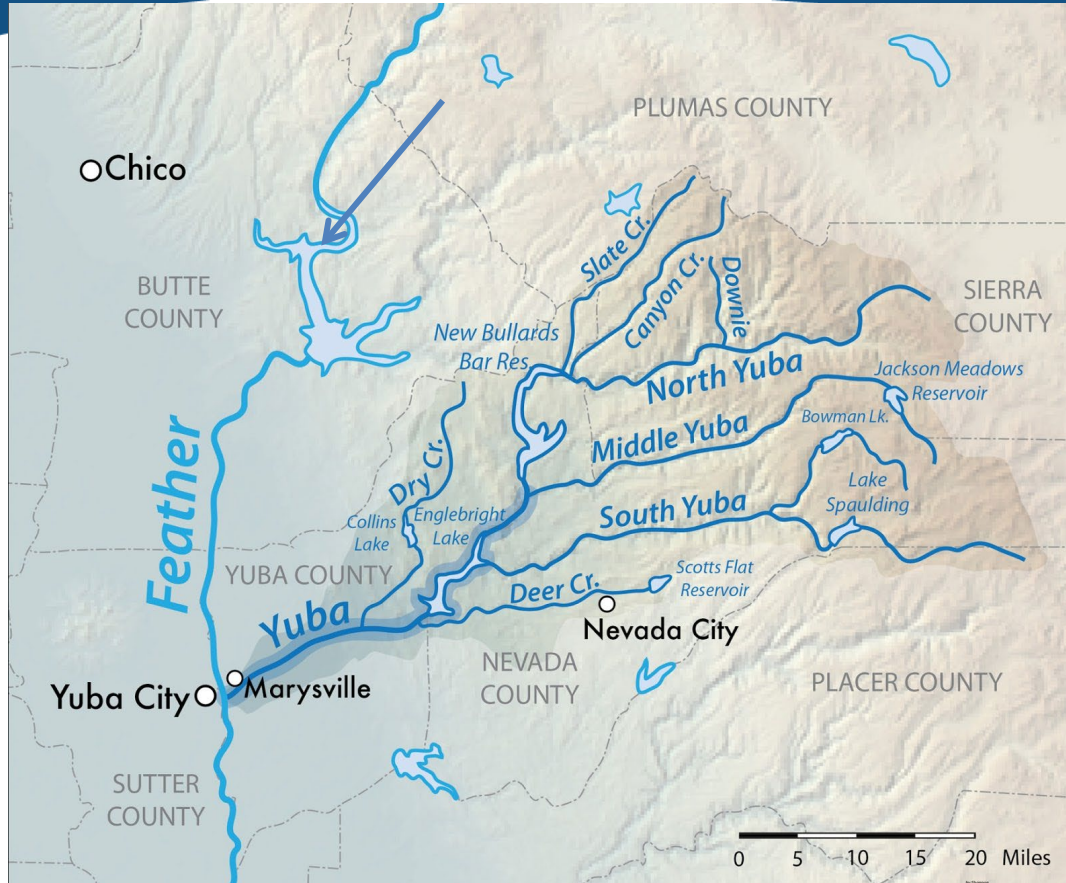


Fisheries Protection
and Enhancement

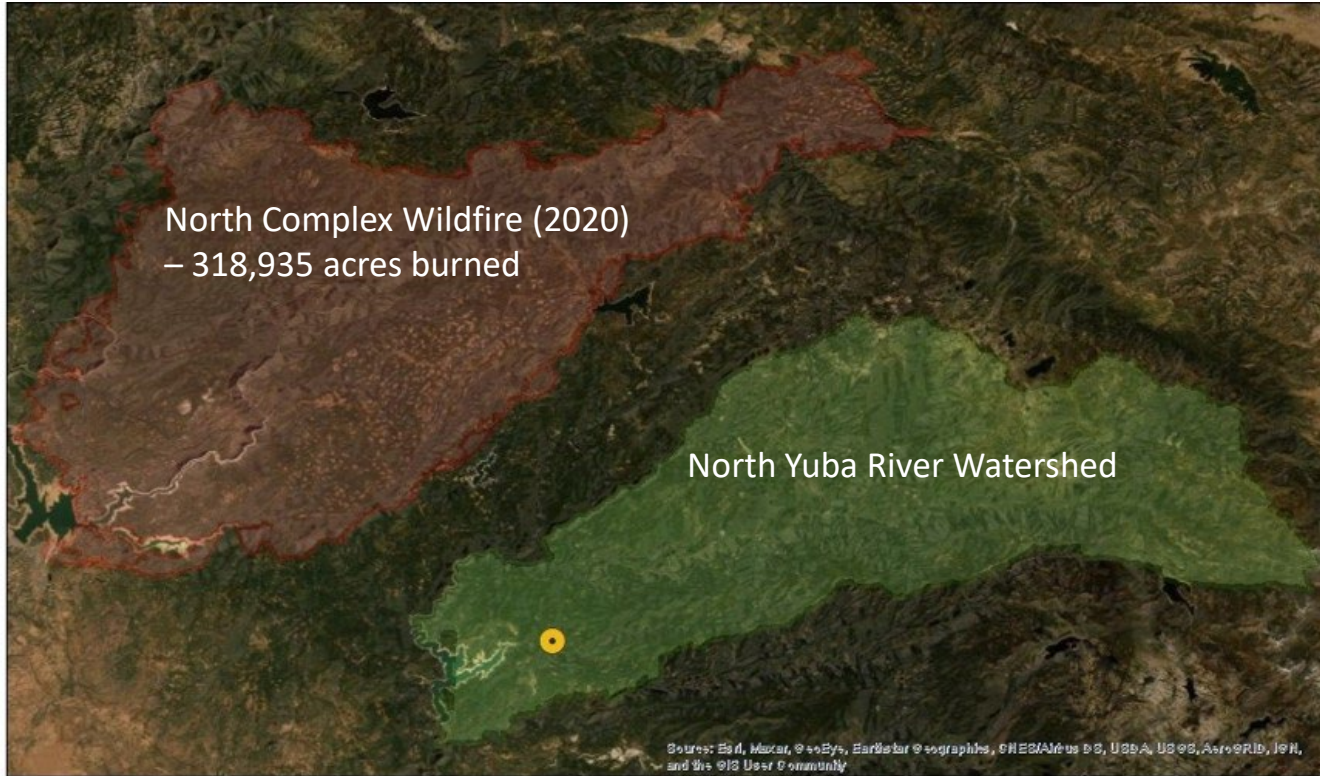


Recreation at New
Bullards Bar

The Yuba River watershed



Why do we need forest restoration?



Legend

0 5 10 Miles



Historical comparison

Yosemite Valley



1899



1994

Gruell 2001

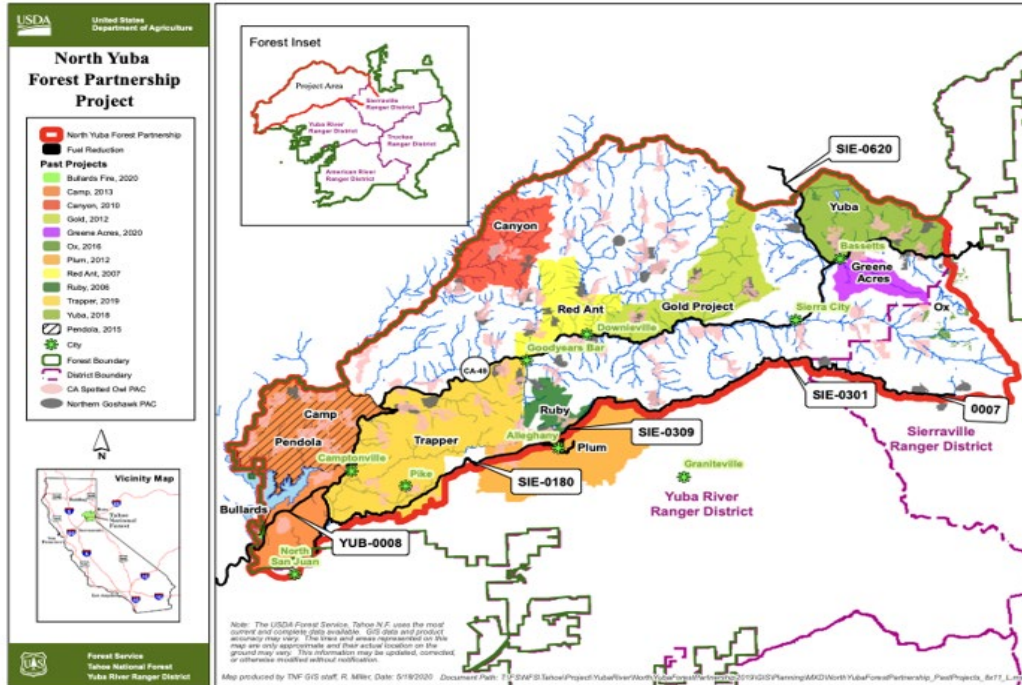
Yuba Water's Watershed Resilience Program

- Yuba Water created the Watershed Resilience Program in 2018 to **reduce risk of catastrophic wildfire, protect local communities and safeguard water supply**
 - Objective to build collaborative projects within Yuba County and Yuba River watershed that support these goals
- In 2020 we created the Yuba Water Community Impact Grant Program to **invest \$10 million per year in projects that further Yuba Water's missions and programs** (including the Watershed Resilience Program)
 - To date we have invested \$26 M in Watershed Resilience projects, which have leveraged \$182 M in external funding



North Yuba Forest Partnership

Working together to expedite forest health work across the North Yuba River watershed



Forest Resilience Bonds and Blue Forest

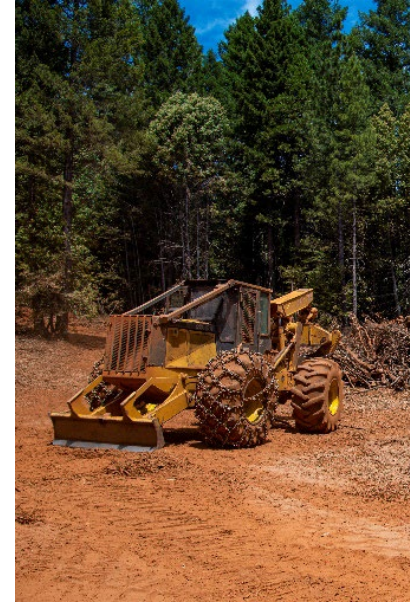


- First-ever Forest Resilience Bond piloted by Yuba Water and Blue Forest in 2018 with 15,000-acre Yuba 1 Project
 - Yuba Water contributes over 4 years \$1.5 M to leverage \$3 M
- Then in 2022 the 26,000-acre Yuba 2 Project was funded via second Forest Resilience Bond
 - Yuba Water contributes over 10-years \$6 M to leverage \$18 M
- Yuba Water's investments in these innovative FRBs led to the NYFP MOU
 - Pivotal to increasing pace and scale of this work (20,142.6 acres treated since 2018)
 - attracts local implementation contractors and local workforce development
 - demonstrated NYFP's ability to get work done—which directly led to \$130 million in new Federal funding for our watershed in 2023

Additional Watershed Resilience efforts

CCP Biomass Utilization Infrastructure

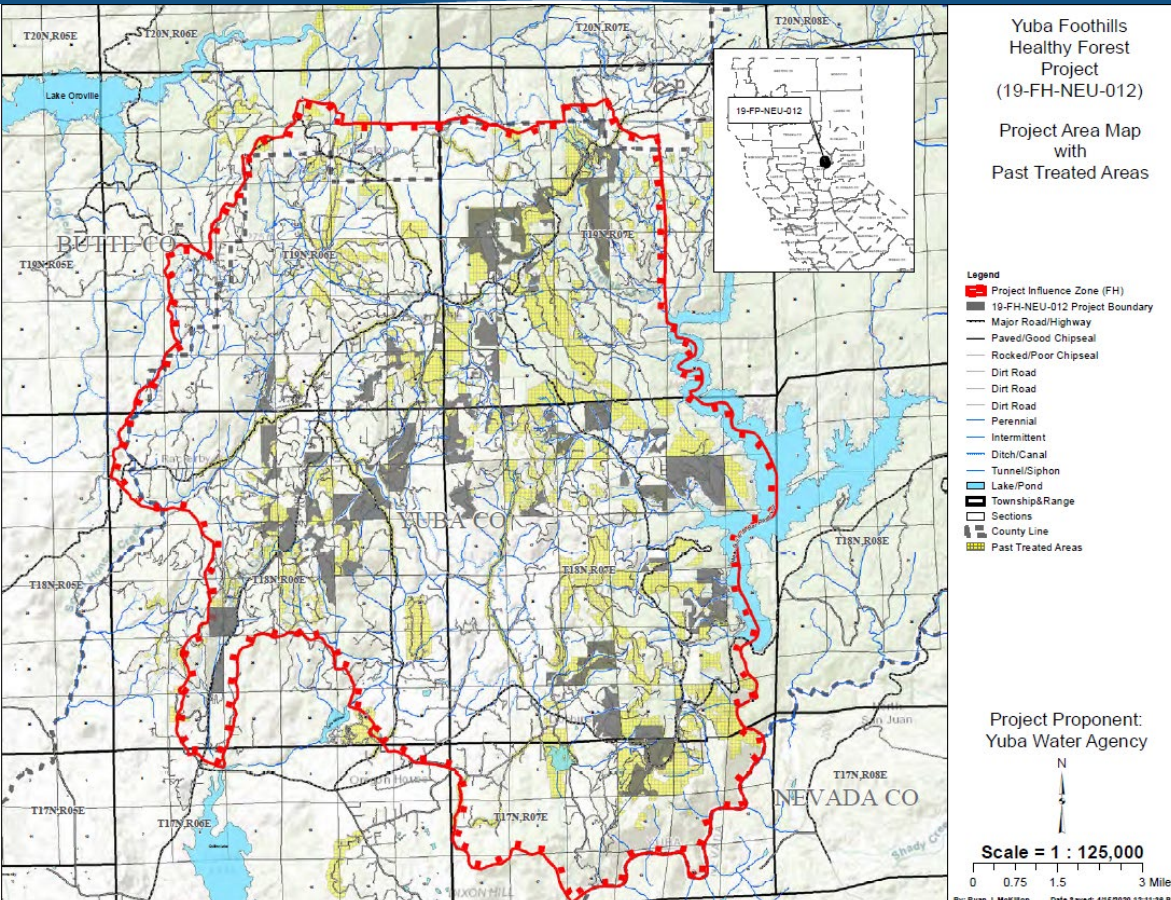
- 5 MW biomass plant and Forest Biomass and Business Center
- Nearly ready to implement (co-located sawmill and other wood product business are being planned)
- Yuba Water provided planning grants and strategic support over the last several years;
- August 2024 Yuba Water committed to supporting implementation financing with a \$7M grant and \$8.3 M low interest loan



Yuba Watershed Protection and Firesafe Council

- Role: Public Outreach, education and projects in the WUI
- YWA provides Annual support for Executive Director and cost share for new fire prevention grants

Yuba County Forest Health Grants: 2019 Yuba Foothills Healthy Forest Grant



Cal-Fire Awarded the Yuba Water **\$4.5 M grant** from the California Climate Investments Department of Forestry and Fire Protection Forest Health Program

- Forest health and fire risk reduction treatments on **5,400 acres in the Yuba County** foothills
- includes Plumas NF, Private Timber Companies, Boy Scouts and Yuba Water
- The Project Influence Zone of 71,244 acres and protects 2,721 structures at high risk for wildfire



Yuba Foothills Healthy Forest Grant

- Implementation started in 2020; to date have treated 4,958 acres; will complete in 2024
- Yuba Water and partners have accumulated nearly \$600,000 in cost share for project management and CEQA

Pre-thinning Treatment



Post-thinning Treatment



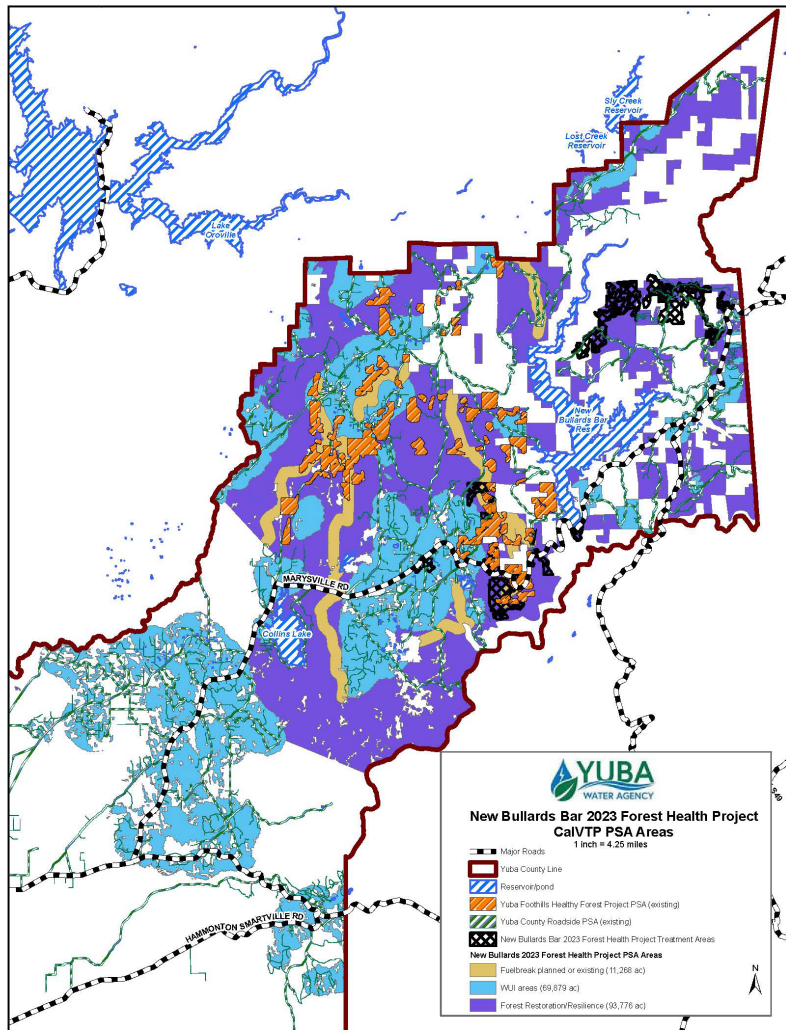
2023 New Bullards Bar Healthy Forest Grant

- Funded in 2023 provides \$7 M in new funding from Cal Fire CCI FH program
- includes the same partners as the Yuba Foothills grant with the addition of the National Forest Foundation and Tahoe National Forest (*counts as cost share for new direct federal funding for the NYFP)
- Includes ~4000 acres of fuels reduction treatments
- Includes innovative CEQA coverage for all 175,000 forested acres in Yuba County



Cal VTP Project Specific Analysis (PSA)

- Will cover all treatments in the NBB FH grant
- Will also analyze fuel reduction treatments and mitigations of all forested acres in upper Yuba County
- Will support new projects by other partners being closer to shovel ready with only pre-treatment biological surveys being required and a notice of determination (NOD) filed for consistency with this PSA



Additional Watershed Resilience efforts:

Yuba Community College Watershed Resilience Program

- Yuba Water grant for \$700 k for Education and Workforce Development
- Certificate programs for GIS, Soil Conservation and Watershed Management

Geographic Information Systems (GIS) Certificate

Program Offered in Fall 2023

GIS and Geospatial Analysis allow students to bring geographic data, and systems to solve a wide range of problems for government, business, healthcare, insurance, law enforcement, and other industries.



Courses:

- Intro to GIS
- Spatial Analysis
- Web GIS
- Cartographic Design for GIS
- Database Design and Management
- Intro to GIS Programming

Typical GIS Employers

- Government (Federal, State, Regional)
- Utilities (Electric, Transportation)
- Environment and Natural Resources
- Public Safety
- Transportation and Navigation
- Surveying Engineering, Construction
- Health, Epidemiology, and more...





Soil Conservation Technician Certificate


This is a two-semester long, 18 units program, that will prepare students with the base knowledge and skills to join the workforce in the public sector and agriculture business. Jobs such as soil conservation technician, laboratory technician, soil conservationist, soil survey technician, etc.

Courses:

- Ecology
- Field Study and Field Methods
- Introduction to Soils
- Waters to GIS
- Wild GIS

Potential Employers

- Agriculturists
- California Risk Management
- The Nature Conservancy
- US Bureau of Land Management
- National Park Service
- Various state agencies
- Various county agencies



Field Technician- Watershed Management Certificate



This is a 24 units, two-semester long program, that will provide students with basic skills for employment in a variety of federal, state, and local environmental and water agencies, such as California Department of Water Resources, Yuba Water Agency, county, city water districts, etc.

TOTAL CREDIT HOURS:

- Assess the Program Manager in community's watershed management and its capacity to deliver effective watershed services to water consumers and stakeholders.
- Assess the local watershed from regional and local scales, and other natural influences to assess watershed's health.
- Assess the watershed's capacity to deliver watershed services to water consumers and stakeholders, while considering watershed's natural resources and the needs of the community.
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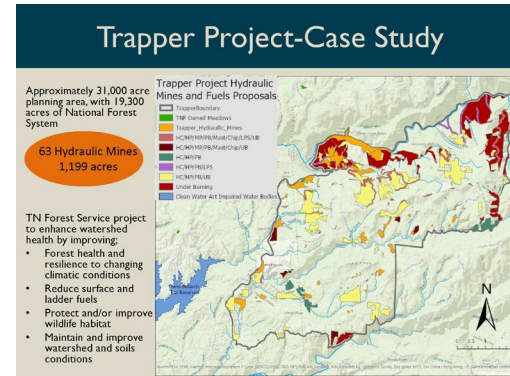
Courses:

- Study Design and Field Methods
- Water Resources and Conservation
- Issues in GIS
- Map GIS



The Sierra Fund-Meadow Restoration and Mine remediation Impact Bonds

- Partner for Bay Area Council Planning Grant
- Investigation of the benefits of hydraulic mine remediation and meadow restoration as part of Forest Health work



Watershed Resilience Program

Successes to Date:



Invested ~\$26 M to date to leverage more than \$182 M in external funds



Collaborating with 19 partners (and counting)



Helped develop and fund 14 projects in Yuba County and the upper watershed



More than 25,000 acres treated so far



Innovative planning including a NEPA EIS for all 210,000 acres of North Yuba watershed and Cal VTP CEQA for all 175,000 forested acres in Yuba County





Questions?

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