

**Tuolumne County Resource Conservation District  
Board of Directors - MEETING AGENDA  
September 21st, 2022 5:30pm**

**Call to Order**

**Roll Call:** Stuart Crook, Stephen Dietrich, Kirk Ford, Maiya Morrison, Jim Phelan, Mike Sardella, Galen Weston

**Public Comment**

*(5 minutes per item maximum) We would like to welcome the members of the public who have taken the time to bring their concerns to this meeting. Any member of the public may address the Board relating to any matter within the Board's jurisdiction. This need not be related to any item on the agenda; however, the Board cannot act on an item unless it was noticed on the agenda.*

**Business**

1. Introduction to Motherlode Prescribed Burn Association Coordinator. .
2. Discussion and action related to Strategic Growth Council Climate Grant Application with Amador, Calaveras, and Alpine Counties.
3. Discussion and action related to Twain Harte Water Quality Monitoring Plan.
4. Discussion and action related to MOU with Yosemite Clean Energy.
5. Discussion and action related to Minutes for August 2022 Board Meeting.
6. Discussion and action related to TCRCD Grant Program Updates.
  - RCPP Forestry Program and CARCD Forestry PACE Program
  - Twain Harte Community Stormwater Enhancement Project
  - CAL Fire Fire Prevention Grant - Pine Mountain Lake Fuel Reduction Project
  - Mother Lode PBA Coordination
  - TStan IRWM Administration
  - Pending Project Proposals

**NRCS Update**

**District Manager Update**

**Correspondence and Announcements**

**Other Matters at the Discretion of the Chair**

**Adjournment**

*In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact District Manager Lindsay Mattos at (209) 559-9066. Notification 48 hours prior to the meeting will enable the TCRCD to make reasonable arrangements to ensure accessibility to this meeting (28CFR35.102-35.104 ADA Title II)*

**Tuolumne County Resource Conservation District  
Board of Directors - MEETING MINUTES  
July 20th, 2022**

**Call to Order:** 5:40pm

**Roll Call:** Stuart Crook, Jim Phelan, Mike Sardella, Kirk Ford, Galen Weston

**Guests:** Sherri Brennan, Craig Konklin

**Public Comment:** No Comment.

**Business**

1. Presentation on Tuolumne Fire Safe Council Research Project by Craig Konklin. Discussion by board about creating a guide for landowners.
2. Discussion and action related to MOU for Energy Project by Yosemite Clean Energy. Item presented by S. Brennan, discussion, include a CEQA component. Direction to have district manager work with YCE on a draft for September.
3. Discussion and action related to Minutes for June and July 2022 Board Meeting. Motion by director Dietrich, seconded by director Phelan, June minutes pass unanimously. Motion by director Crook, second by director Phelan, motion pass unanimously.
4. Discussion and action related to TCRCDC Grant Program Updates.

L. Mattos provided an update on each grant, currently no pending project proposals.

**NRCS Update** - No additional report

**District Manager Update** - No additional report.

**Correspondence and Announcements** - none.

**Other Matters at the Discretion of the Chair** - none.

**Adjournment:** 7:45pm

***Twain Harte Water Quality Monitoring Plan***

Prepared by Lindsay Mattos, District Manager  
Tuolumne County Resource Conservation District

September 2022

Adopted by TCRCB Board \_\_\_\_\_

## Project Background

The Twain Harte Water Quality Monitoring Plan has been developed specifically for the *Twain Harte Community Stormwater Enhancement Project*, a collaborative effort to plan for and implement hydrologically-connected stormwater treatments. The project will add nature-based low impact development (LID) treatments, like vegetated bioswales and permeable pavement, in an effort to work towards reestablishing the natural hydrograph.

The project is located in the Twain Harte Creek watershed and the water quality of the watershed will be monitored by the TCRCD's Stream Team. The TCRCD will establish two monitoring locations along Twain Harte Creek that will be monitored once a month for the following parameters; temperature, pH, electrical conductivity, dissolved oxygen, and turbidity. This watershed scale monitoring will be done from start to completion of the grant. Monitoring data will be posted on the TCRCD website as well as submitted to CEDEN.

The project is located in the Tuolumne River watershed along Twain Harte Creek which is a 303d listed impaired waterbody. Twain Harte creek was listed in 2014 for indicator bacteria and pH and is scheduled to have a Total Maximum Daily Load (TMDL) completed in 2027. Twain Harte Creek is a tributary to Sullivan Creek which is also on the 303d list for indicator bacteria and a TMDL to be completed in 2027.

Monitoring conducted prior to the start of this project was completed by the TCRCD citizen science water quality monitoring program, Stream Team, which had two monitoring locations in the Twain Harte area. The sites are located on Twain Harte Creek at Eproson Park and below Twain Harte Lake on Longeway Road. Data is collected from monitoring sites once a month with the following parameters; temperature (C°), pH, electrical conductivity (EC[ $\mu\text{S}/\text{cm}$ ]), dissolved oxygen (% ppm), and turbidity data (FNU). Once collected data is uploaded to an interactive google map on the TCRCD website. Additionally, the Central Sierra Environmental Resource Center has had a monitoring location at Eproson Park and has collected data on E.Coli and Fecal Coliform.

### Objectives

The project area currently experiences flooding and water quality problems associated with its high water table, impervious surfaces, steep surrounding topography, and aging stormwater infrastructure. The project will work synergistically with improvements to the local storm drain infrastructure to not only reduce local flooding impacts, but also protect and improve water quality in Twain Harte Creek. Project benefits are not limited to the project area. Twain Harte Creek is a tributary of Sullivan Creek and Phoenix Lake. As such, the project will provide multiple downstream benefits. Phoenix Lake is the Tuolumne Utility District's (TUD) primary storage facility for drinking water that serves downstream disadvantaged communities including Sonora, Jamestown, and Columbia. Implementation of this project will reduce sediment and pathogen loads from upstream of this critical water storage facility and help to reduce future maintenance cost.

### Geographical Setting

< insert map >

## **Preparing to Monitor**

TCRCD staff will ensure all meters are properly calibrated before volunteer use. *See TCRCD Water Quality Monitoring Manual for detailed instructions.*

### ***Field Equipment Checklist***

- Data sheet, clipboard and pen or pencil
- Complete Hanna monitoring kit
- Thermometer
- Camera or phone (for picture surveys)
- Towel or paper towels

### ***Safety Precautions***

Volunteer safety is the highest priority of the TCRCD. If at any point you feel unsafe, uncomfortable or unable to properly monitor your sample location, please remove yourself from the situation and let a staff member know your concerns.

*As you approach your monitoring site and prepare to monitor:*

- Make sure you have a safe and out of the way space to park. Be wary of passing traffic. If you are sampling from a bridge, make sure you have a safety vest on.
- Do not walk on or park on or near unstable stream banks. Approach freshly flooded areas with caution.
- To reduce any risk to the sample with contamination or disturbance of the sediment, stay out of the water course.
- Never cross private property without the permission of the landowner. If a site is located on private property, TCRCD has received permission for our monitoring activities. If a site is located near private property, ie you must enter the property to access the public site, TCRCD has received permission for this access. Please remain respectful of the landowner's privacy.
- Be aware of the likely presence of poison oak, ticks and other health hazards. If you cannot access a site due to poison oak or another hazard, let a TCRCD staff person know so that we can adjust the site.
- Never drink the water in a stream. Be careful to avoid contamination of your personal water bottle.
- Do not monitor if stream appears to be severely polluted. Contact a TCRCD staff person if this is the case.

## **Monitoring Basics**

## **Water Quality Parameters Tested**

The TCRCO will monitor five core parameters of water quality. They are dissolved oxygen, temperature, pH, conductivity and turbidity. Physical observations are also reported including canopy cover, water color, odor, significant rainfall, algae abundance, and streamflow. *Ideal ranges are taken from Testing the Waters: Chemical and Physical Vital Signs of a River by Sharon Behar. Montpelier, VT: River Watch Network, 1997.*

### **Dissolved Oxygen (DO)**

Dissolved oxygen is one of the most important water quality indicators for aquatic life. Oxygen is produced by plants during photosynthesis and consumed by both plants and animals during respiration. Oxygen is also introduced into a water body from the air through agitation or wave action. The expected levels vary widely depending on the depth of the sample, the time of day and the season. Since plants are dependent on the availability of light, DO producing processes typically only occur near the surface or in shallow, clear waters. As temperatures rise and fall over a 24 hour period, oxygen does also, with more being produced through photosynthesis during the afternoon.

A large drop in DO could be the result of the introduction of organic matter such as leaf litter, grass clippings, sewage, animal manure etc., which require large amounts of oxygen for decomposition by bacteria. Different types of fish and other aquatic organisms are individually tolerant to different levels of DO. When oxygen levels fall below about 3-5 mg/L and remain at this low level, over time, aquatic organisms may have trouble successfully reproducing, feeding or surviving. If dissolved oxygen concentrations drop below a certain level, fish mortality rates will rise. Sensitive freshwater fish like salmon can't even reproduce at levels below 6 mg/L

The DO test measures the amount of oxygen dissolved in the water. The amount of dissolved oxygen water is capable of holding is directly related to temperature. Dissolved oxygen is measured in milligrams per liter (mg/L).

Ideal ranges:

0-2 mg/L: not enough oxygen to support life.

2-4 mg/L: only a few fish and aquatic insects can survive.

4-7 mg/L: good for many aquatic animals, low for cold water fish

7-11 mg/L: very good for most stream fish

### **Temperature**

The temperature of water has extremely important ecological consequences. In general, increasing water temperature results in greater biological activity and more rapid growth. Temperature is also an important influence on water chemistry. Rates of chemical reactions also

generally increase with increasing temperature. Temperature is also a regulator of the solubility of gases and minerals (solids)- or how much of these minerals can be dissolved in water. The solubility of important gases, such as oxygen and carbon dioxide increases as temperature decreases.

Ideal Temperature: 48°F or 8.8 °C

## **pH**

A pH test measures the alkalinity or acidity concentration of a solution on a scale of 0 to 14 standard units (SU). A pH of 7 is neutral (hydrogen ion (H<sup>+</sup>) and hydroxide ion (OH<sup>-</sup>) concentrations are equal), below 7 is acidic (more H<sup>+</sup> than OH<sup>-</sup>), and above 7 is basic or alkaline (more OH<sup>-</sup> than H<sup>+</sup>). Human activities such as accidental spills, agricultural runoff (pesticides, fertilizers, animal wastes), and sewer overflows and septic system failures may change the pH. Buffering capacity is the water's ability to resist changes in pH. It is critical to aquatic life. Limestone soils act to neutralize these acids and often result in a more basic pH. While many insect larvae and young fish are sensitive to a low pH (acid), extreme values on either end of the scale can be lethal to most organisms. (LCRA)

Ideal pH: 6.5 to 8.5

## **Conductivity**

Conductivity is the ability of water to conduct an electrical current. Dissolved ions in the water are conductors. The major positively charged ions are sodium (Na<sup>+</sup>) calcium (Ca<sup>2+</sup>) potassium (K<sup>+</sup>) and magnesium (Mg<sup>2+</sup>). The major negatively charged ions are chloride (Cl<sup>-</sup>) sulfate (SO<sub>4</sub><sup>2-</sup>) carbonate (CO<sub>3</sub><sup>2-</sup>) bicarbonate (HCO<sub>3</sub><sup>-</sup>). Salinity is a measure of the amount of salts or ions in the water. Because dissolved ions increase salinity as well as conductivity, the two values are related. Measuring conductivity is important for water quality because it can indicate groundwater seepage or a sewage leak.

Most streams range between 50 to 1500 µS/cm. Freshwater streams ideally should have a conductivity between 150 to 500 µS/cm to support diverse aquatic life

## **Turbidity**

Turbidity is the measure of relative clarity of a liquid. It is an optical characteristic of water and is an expression of the amount of light that is scattered by material in the water when a light is shined through the water sample. The higher the intensity of scattered light, the higher the turbidity. Material that causes water to be turbid include clay, silt, finely divided inorganic and organic matter, algae, soluble colored organic compounds, and plankton and other microscopic

organisms. Turbidity is measured by shining a light through the water and is reported in Formazin Nephelometric Unit (FNU).

High concentrations of particulate matter affect light penetration and productivity, recreational values, and habitat quality, and cause lakes to fill in faster. In streams, increased sedimentation and siltation can occur, which can result in harm to habitat areas for fish and other aquatic life. Particles also provide attachment places for other pollutants, notably metals and bacteria. For this reason, turbidity readings can be used as an indicator of potential pollution in a water body. (USGS, 2015)

### **Data Uses**

The data collected from each sample site will not be used for regulatory purposes or to influence decision making. The results will be used to inform local agencies of potential water quality issues, provide monitoring reports for the Twain Harte project, and to increase advocacy for the watershed and local tributaries near testing sites. An online map with real time data will be made available to the public and will be updated periodically to reflect trends in water quality.

### **Sampling Frequency**

It is necessary to collect water quality information for at least 12 consecutive months in order to witness the seasonal influence on water quality. TCRCO would like to have each location sampled during the water year from October to May on the first Saturday of every month and during the summer if water is present.

### **Field Observations**

In addition to the meter measurements, a complete water quality assessment must also take into consideration visual field observations. Record the presence of the following notable conditions on your monitoring sheet.

Algae cover – Look first at the water surface. Next, assess the algae coverage on the substrate. (The substrate is the bottom of the stream or lake.) Estimate the total coverage on substrate and surface by imagining a quadrant placed over the immediate monitoring area. If you cannot see the substrate, you may note this in the comment section. Don't mistake aquatic plants for algae. Aquatic macrophytes, plants with vascular tissue, have roots, stems, and leaves. Any examples observed should be included in the comments section.

Apparent Water Color (in stream) – View the water at your site in its natural setting, and select the most appropriate choice. It may help as a reference to compare the apparent water color to the surrounding vegetation (especially when distinguishing between “light green” and “dark green”).

Actual Water Color – Collect a water sample in a clean glass beaker and view it against a white background. Record the most appropriate choice.

Water Surface – Select the most predominant water surface condition that applies to your site. If more than one descriptor is evident note that in the “Comments” section. For instance, there may be scum (small particles of decaying matter, debris or pollen) and larger pieces of debris overall on the surface and there may be a sheen or foam near the shoreline or on the edges of the stream.

Water Conditions- If water is clearly exceeding the stream banks at a non regular intensity, it is most likely flooding.

Canopy Cover- Note the canopy coverage of the entire waterway of site you are monitoring, not just directly overhead.

Water Odor - When you determine actual water color in the beaker, check water odor by wafting your hand over the sample towards you.

Aquatic Life- Record the presence of visible macroinvertebrates and larger species. Benthic macroinvertebrates (also known as "benthos") are small animals living among stones, logs, sediments and aquatic plants on the bottom of streams, rivers and lakes. They are large enough to see with the naked eye (macro) and have no backbone (invertebrate).

### **Using the Multiparameter Meter**

Upon reaching your sampling site, try to find a reasonably flat and ideally shaded spot to place all monitoring equipment.

- Remove the meter and the probe from the case and attach the probe end to the connector on the meter. Unscrew the protective cover to the sensor and remove the small translucent covering to the pH probe. (pH probe has a red base and yellow shell)
- Replace the black protective covering and turn the meter on.
- All parameters should be turned on and the meter should begin to take measurements immediately.
- To begin logging measurements with an accurate location note, enter the <Log> menu and select <Start meter log>
- Select the Lot you are currently in.
- Find a large pool of water to accommodate the probe and place the probe end in the water slowly to avoid disturbing large amounts of sediment.
- The meter log is on a three minute sample interval. While it logs samples for the next nine minutes, take your physical observation notes.

- When the meter displays 3 samples have been logged in the right corner of the screen, press <Log> and <Stop meter log> to end the sample.
- After your sample has been taken, pull the probe from the water, shake the excess water from the probe and disconnect the connector end from the meter.
- Unscrew the black protective cover from the probe and fill the translucent cap with the pH storage solution HI70300 and replace the cap on the end of the pH probe.
- Replace the protective cover, turn off the meter and place all items back in the carrying bag.

## **Sample Collection**

The meters we will be using have a completely digital readout, so we will only be requiring the bottling and handling of small samples for in house coliform testing.

The bottling procedure we will be using for coliform samples follows the USGS guidelines for Grab Sampling. Paraphrased as follows:

The sample collector should stand facing upstream and collect the water sample upstream. Avoid areas where large amounts of sediment have been disturbed or allow for settling of suspended materials. Place bottle with gloved hands at least one ft beneath the surface. If the water level is lower than one foot, place the bottle halfway between the surface and the bottom, being careful to not disturb any sediment.

Cap under the surface of the water if possible.

A bucket can be used to collect a sample if the mixed surface layer is very shallow or accessible only from a bridge. If a bucket is used, extreme care should be taken to avoid contaminating the sample with debris from the rope and bridge.

If the water level is too low to take a sample, take the air temperature and all other relevant observations and indicate in your notes the severity of the water level. Inversely, if the water level is too high or the site seems unsafe for any reason, do not hesitate to leave the area or collect only what observational samples you feel comfortable with.

## **Data Management**

Monitoring data will be managed under a Google MyMap interface. After successful completion of monitoring on the specified day, the staff person will connect all meters to a TCRCD computer and upload individual data to Excel spreadsheets. From those sheets, an assessment will be made, based on available observational data and seasonal inputs, to determine the Low, Medium or High priority of data values for the four parameters. The waypoint characters can change color to Green, Yellow or Red, respectively, based on the outcome of the assessment.

The data will be managed in a non regulatory way, with the results published in non biased fashioned. No notices or judgements will be made in relation to the quality impacts on public health unless a publicly released notice from a regulatory agency or organization determines a threat within the waterways we are monitoring.

## **Resources**

<http://water.usgs.gov/edu/turbidity.html>

[http://www.lcra.org/water/quality/colorado-river-watch-network/Documents/CRWN%20Manual\\_2012final.pdf](http://www.lcra.org/water/quality/colorado-river-watch-network/Documents/CRWN%20Manual_2012final.pdf)

[http://www.dep.wv.gov/wwe/watershed/bio\\_fish/pages/bio\\_fish.aspx](http://www.dep.wv.gov/wwe/watershed/bio_fish/pages/bio_fish.aspx)

<http://water.usgs.gov/edu/nitrogen.html>

<http://waterquality.lcra.org>

<http://www.tuolumnecounty.ca.gov/DocumentCenter/View/3199>

<http://www.fondriest.com/environmental-measurements/parameters/water-quality/dissolved-oxygen/#9>

[http://www.waterboards.ca.gov/water\\_issues/programs/tmdl/integrated2012.shtml](http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2012.shtml)  
(303D Listing)

<http://fosc.org/WQData/WQParameters.htm>

## Memorandum of Understanding

This Memorandum of Understanding (“**MOU**”) is entered into this \_\_\_\_ day of September 2022, by and among the Tuolumne County Resource Conservation District (“**TCRCD**”), a \_\_\_\_\_, and Yosemite Clean Energy, LLC, a California limited liability company (“**Yosemite**”). TCRCD and Yosemite are collectively referred to as the “**Parties**” and each individually as a “**Party**.”

### 1. **Background**

The TCRCD is a non-regulatory Special District set up to promote Natural Resource Conservation in Tuolumne County. TCRCD works with individuals, landowners, growers, ranchers, public agencies, non-profit organizations, and corporations to accomplish its goals. The TCRCD was formed in 2005 when the voters of the County overwhelmingly approved “Measure L”. Its service area is consistent with the political boundaries of Tuolumne County and includes the City of Sonora. TCRCD covers the entire 2,229 square miles of Tuolumne County, and is one of California’s 101 Resource Conservation Districts. For more information about California’s RCDs, visit the [California Association of Resource Conservation Districts](#). The District’s mission is to identify and meet the natural resource conservation needs of all the people of Tuolumne County and its future generations by providing leadership through educational, technical, and financial support for valuable, voluntary services and programs that promote conservation and sustainable agriculture, while maintaining the county’s rural heritage.

Yosemite is a renewable energy development company that provides bioenergy project development services. Using innovative leading global technologies, Yosemite transforms farm and forest wood waste into renewable, zero-emission, carbon-negative fuels for utilization in the transportation sector. Yosemite’s process, developed in collaboration with international industry leaders, converts wood waste into a synthetic gas, or “syngas”, from which renewable hydrogen or renewable natural gas can be produced. As a renewable bioenergy developer using forest waste feedstocks, Yosemite supports sustainable forest management initiatives, including forest hazardous fuels reduction and watershed improvement projects. Yosemite’s activities as a renewable energy provider using forest waste feedstocks also align with the objectives for highest end use value to support forest waste removal and restoration practices, as outlined in the California’s Wildfire and Forest Resilience Action Plan issued by the Governor’s Forest Management Task Force in January of 2021. Yosemite can also utilize agricultural wood waste, providing a sustainable solution for fruit and nut farmers who are removing orchards and can no longer open-burn their waste. The company’s vision is to provide quality low-carbon energy products that are good for people, good for the earth, and good for the economy.

TCRCD and Yosemite wish to enter this MOU to support the planning and development (the “**Project**”) of a Yosemite gasification bioenergy facility in Tuolumne County, California (the “**Facility**”), which Facility would foster the utilization of forest and farm wood waste biomass to produce green hydrogen and renewable natural gas. Specifically, The Facility will process 90,000 bone dry tons of wood waste per year, converting it to 31 tons of RNG and 13 tons of hydrogen per day. Yosemite has additional partnerships with local forest managers, farmers, investors, and developers.

The Project will be partially owned by local community members and is designed to create an economic engine to promote sustainable forest and agricultural land management in Tuolumne County and the surrounding areas. Yosemite will be responsible for raising the necessary capital

to support the construction of the Facility and will receive local input and assistance from TCRCD.

## 2. **Scope**

2.1 This MOU hereby recognizes the Parties' interest in establishing that:

A. The MOU scope of work shall be to support the development of a proposed 50-megawatt thermal plant utilizing forest and farm biomass feedstocks that are in support of TCRCD's mission and vision. The Facility shall be constructed outside Chinese Camp, CA, and the Project will be developed by Yosemite via a development consortium selected by Yosemite to design, build, commission and operate the Facility.

B. TCRCD will provide expertise, community engagement, forest and watershed expertise, and other related support as possible, and will endeavor to garner support for the Facility in the County and the surrounding community to the extent that the Project supports TCRCD's mission and vision.

## 3. **Project Rights and Obligations**

3.1 TCRCD will provide the following resources and services for the Project:

A. Providing expertise regarding natural resource management, ranch-land restoration and protection, fire protection in and out of the WUI;

B. Assisting Yosemite in development of a biomass supply analysis and sustainable biomass plan by, among other efforts, submitting applications for funding to complete such studies, and by networking with various groups to support completion of said analysis;

C. Providing feedback to ensure supply analysis aligns with greater soil, watershed, and forest health plans developed by TCRCD and other community partner, and agencies

D. Where there is capacity and funding assisting with the facilitation of procuring biomass for the project, including the outreach and capacity building withing the community by which to secure biomass supplier-member agreements with local community members for biomass to be utilized by the bioenergy facility;

E. Working closely with Yosemite to develop biomass procurement plans and operations to provide biomass supplies to the Facility from fire damaged timber, forest fuels hazard treatment projects, watershed improvement projects, forest logging residuals, ranchlands, and agricultural operations; while also providing support to Yosemite in related planning, scheduling, and biomass harvesting activities;

F. Consultation and review by staff of various grant applications to support the development of the Project ("Applications") to ensure that the Applications meets TCRCD's goals, objectives, and mandates, including occasionally submitting applications that require a non-business entity as an applicant;

i. Assistance drafting or advising on portions of Applications that pertain to TCRCD's expertise and interest. Relevant portions of the Applications include, but are not limited to, the following:

- (a) Tuolumne County Contact List
- (b) Letters of Support from agencies, community groups and leaders
- (c) Feedstock supply commitment
- (d) CEQA Worksheet for the Project
- (e) Environmental benefits of the Project
- (f) Localized Health Impacts

ii. Provide letters of support for the Applications, citing ways in which project will support TCRCD's mission, and ways in which TCRCD will partner with YCE.

3.2 Yosemite and the newly formed Yosemite Clean Energy Sierra, LLC ("Project LLC"), will provide the following resources and services for the Project.

- A. General planning, design, project management, construction, operations, servicing, and maintenance, jointly managed between Yosemite and its Strategic Project Partners, which may include but is not limited to: Repotec (Aichernig Engineering GmbH), Primoris (OnQuest), and other technology vendors and operations/facility managers as may be deemed necessary).
- B. Technology Licenses and/or patents that are held by Yosemite and its Affiliates that will allow the Project LLC the rights to use the appropriate technologies to construct the planned bioenergy facility;
- C. Contracting of all engineering, procurement, construction & management (EPCM) for the Project;
- D. Financing of the Project including equity, debt, grants, and potential New Market Tax Credits;
- E. Conducting a long-term study of feedstock availability;
- F. Working closely with TCRCD to develop biomass procurement plans and operations to provide biomass supplies to the Facility from fire damaged timber, forest fuels hazard treatment projects, watershed improvement projects, forest logging residuals, and support the planning and associated biomass harvesting activities;
- G. Facilitating the development of biomass feedstock agreements with various parties with support from TCRCD and others who may be a party to the development of the Project;
- H. Working with local logging and biomass companies to educate and establish biomass fuel specifications and wood quality management as part of the operational plan for the Project;
- I. Negotiate hydrogen, renewable natural gas, and heat offtake purchase agreements with third parties to secure Project financing as it deems appropriate.
- J. Apply for state and federal grants to provide additional funding for the Plant ("Applications"). Yosemite will be responsible for completion of all sections of the Applications unless otherwise specified.

#### **4. Community and Environmental Implications**

The Parties acknowledge that the Project has the potential to offer the following benefits:

- (1) improving the health and function of Sierra watersheds, including forests, ranch lands, and farms
- (2) reducing wildfire hazards and the threats of catastrophic wildfires;
- (3) significantly reducing carbon emissions through:
  - (a) forest fire hazard reduction fuels treatments;
  - (b) eliminating sawmill residuals' burning via inferior combustion alternatives, or decay;
  - (c) eliminating open burning of forestry logging slash and agricultural pruning and tree removal; and
  - (d) other forest stewardship activities that will avoid open biomass burning, that will have a positive effect upon reducing carbon emissions.
- (4) reducing greenhouse gas emissions and other pollutants by way of fuel switching to renewable fuels by utilizing biomass waste;
- (5) producing green hydrogen, and renewable natural gas;
- (6) promoting rural economic development; and
- (7) increasing local employment.

## **5. Term**

This MOU shall be effective for five years and may be renewed by mutual written agreement.

## **6. Confidentiality and Public Announcements**

The Parties acknowledge that they may communicate "Confidential Information" to each other in order to develop the Project and Facility described in this MOU. "Confidential Information" shall mean any and all information, technical data and know-how which is disclosed by one Party, including by its officers, directors, employees, agents, representatives, and affiliates (collectively, the "Disclosing Party") to the other Party, including to its officers, directors, employees, agents, representatives, and affiliates (collectively, the "Receiving Party") verbally, electronically, visually, or in a written or other tangible form, either directly or through agents or representatives, which is either identified by the Disclosing Party as confidential or proprietary or should be reasonably understood by the Receiving Party to be confidential or proprietary.

As a result, the Parties agree to work together to ensure that Confidential Information is not disclosed to the public or third parties without the consent of Yosemite.

## **7. Indemnification**

### **7.1 YOSEMITE – TO TCRCD**

Yosemite shall indemnify, defend, and hold TCRCD, its officers, directors, agents and employees, harmless from all claims, suits, actions, or liens of any nature resulting from or arising out of its activities or those of its subcontractors, agents, or employees under this

MOU. Yosemite shall further indemnify and hold TCRCD harmless against any of Yosemite's liability for premiums, contributions, or taxes payable under any Workers' Compensation, Disability Benefits, Old Age Benefits, including FICA, or tax withholding laws. Notwithstanding the foregoing, Yosemite shall have no obligation to indemnify TCRCD should any such claims, suits, actions, losses, damages, liabilities, costs, and expenses result, in whole or in part, from acts, omissions, willful misconduct or gross negligence of TCRCD, its affiliates, officers, directors, agents and employees.

## **7.2 TCRCD – TO YOSEMITE**

TCRCD shall indemnify, defend, and hold Yosemite, its officers, directors, advisors, agents and employees, harmless from all claims, suits, actions, or liens of any nature resulting from or arising out of its activities or those of its subcontractors, agents, or employees under this MOU. TCRCD shall further indemnify and hold Yosemite harmless against any of TCRCD's liability for premiums, contributions, or taxes payable under any Workers' Compensation, Disability Benefits, Old Age Benefits, including FICA, or tax withholding laws. Notwithstanding the foregoing, TCRCD shall have no obligation to indemnify Yosemite should any such claims, suits, actions, losses, damages, liabilities, costs, and expenses result, in whole or in part, from acts, omissions, willful misconduct or gross negligence of Yosemite, its affiliates, officers, directors, agents and employees.

## **8. Notices**

Any notices, demands, invoices and other communications delivered to a party to this MOU shall be in writing and shall be validly given to the other party if personally served or deposited in the U.S. mail, certified or registered. Any party may change its address by written notice to the other party. Notices to the other party to this MOU shall be sent to the following:

**Tuolumne County Resource Conservation District**

**XX**

**Yosemite Clean Energy Sierra LLC**

Thomas Hobby  
PO Box 233  
Kingsburg, CA 93631

*Signatures on following page*

## **9. Signatures**

The Parties have executed this MOU as of the date first written above.

**TUOLUMNE COUNTY RESOURCE CONSERVATION DISTRICT**

Per: \_\_\_\_\_

Authorized Signatory

Name: XX

Position: XX

**YOSEMITE CLEAN ENERGY SIERRA LLC**

Per: \_\_\_\_\_

Authorized Signatory

Name: Thomas Hobby

Position: Managing Member