



# N RIA

Experts in Floating Solar Since 2018

Sausalito, CA

Experienced Project Developer & Technology Provider

#### R&D/Product Team





ALEX MAYER
CTO | FOUNDER

- 22 years in solar: Solar City/TESLA, ABB, PVEL, NEXTracker, Enphase, GAF, SPAN
- System architecture, product design, qualification & compliance, and scale



JIMMY RAIFORD
SVP OF PRODUCT

- 10 years in renewables & solar
- Built next-gen solar cell technology at Stanford
- Product engineering & testing, solar project engineering



JASON KING
CONTROLS & TESTING ENGINEER

- 15 years in solar & cleantech
- Electrical Engineering background with experience in electronics and material science R&D



# **BECCA SUCHOWER**DESIGN ENGINEER

- 4 years in cleantech & solar
- Mechanical design, simulation, rapid prototyping, and fabrication

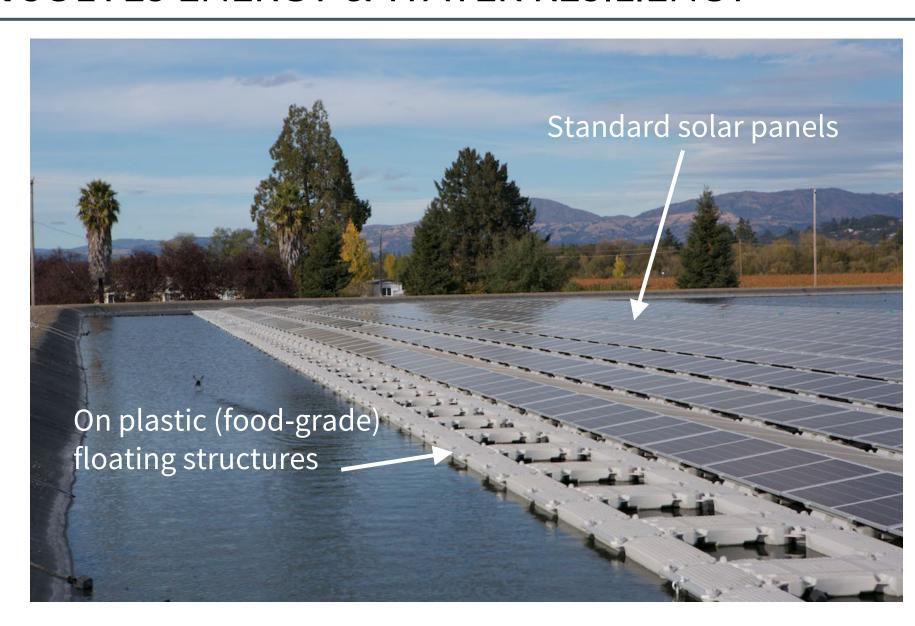
# **FLOATING SOLAR SOLVES ENERGY & WATER RESILIENCY**



10 GW installed globally

Does not compete with other land uses

Reduces algal blooms and evaporation



## **OUR PROJECTS**



## Healdsburg Wastewater Treatment Facility, CA



Largest FPV Project in the western hemisphere (when built, 2022)- 4.8 MW



Operates with fluctuating water levels including 0 ft. water level

### Urra Hydroelectric Power Plant, Colombia



Largest FPV Project in the South America (when built, 2023)- 1.5 MW



Complements the 350MW hydroelectric facility's output

## Nelson Family Vineyards, CA



150kW Floating Solar installation on irrigation pond



Upgraded electrical service at same time to support load growth

## Consolidated Mutual Water Company, CO



50kW pilot of tracker to increase energy production by >10%







Google Startups for Sustainable Development

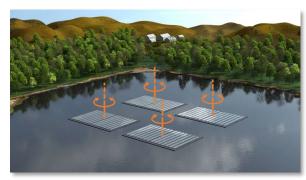
**Collaborative Effort** 

# NORIA PRODUCT PLATFORM



### **Floating Solar Tracking**

- 10-20% more energy output
- 15% lower Levelized Cost of Energy

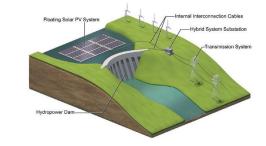




#### **Hydropower Integration**

- Optimize dispatch of complementary generating assets
- Utilize existing power grid infrastructure





#### **Power for Distributed Water Tech**

 Operate targeted equipment for water treatment & distribution (e.g., aeration, pumps)



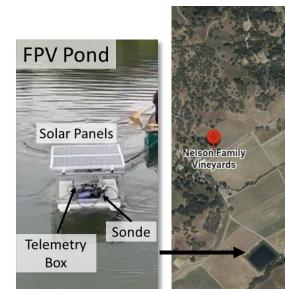


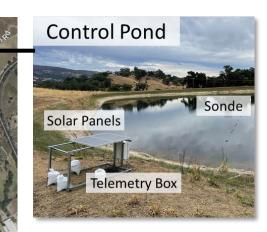
<sup>[1]</sup> LCOE = Levelized Cost of Energy
[2] Indicative of a N. California environment

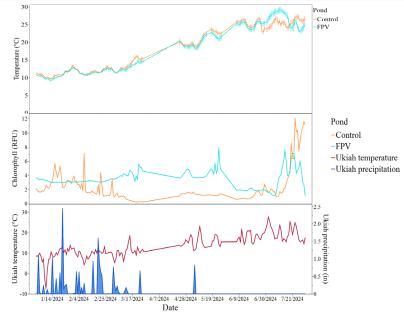
# WATER QUALITY STUDY AT NELSON FAMILY VINEYARDS



Problem	Algae has been a problem for the past 15 years, and pumps must be cleaned after 1-8 hours of operation.
Goal	Determine if FPV can improve water quality through shading to lower temperature and reduce algae growth.
Methodology	Monitor pH, Dissolved $O_2$ , and chlorophyll in the FPV pond before and after installation as well as in a control pond.
Next Steps	Add water treatment technologies powered by the FPV to further improve water quality using Noria's $\rm H_2O\&M^{@}$ technology platform.







# H<sub>2</sub>O&M<sup>®</sup>: POWER FOR DISTRIBUTED WATER TECH



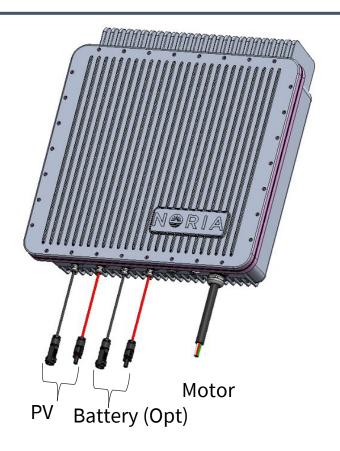
- Use solar energy floating or otherwise to power motors for your agricultural operations
- DC-coupled solution allows utilization of otherwise clipped power (~5% more usable energy¹)
- Works both on- and off-grid



Destratification | Grand Lake, OK



Aeration | Davis, CA











For more information or project development services:

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