



MAAS
ENERGY WORKS

California Dairy Digesters: Current Activities

"Renewable Energy that Works"

Design



Permits



Grants & Finance



Construction

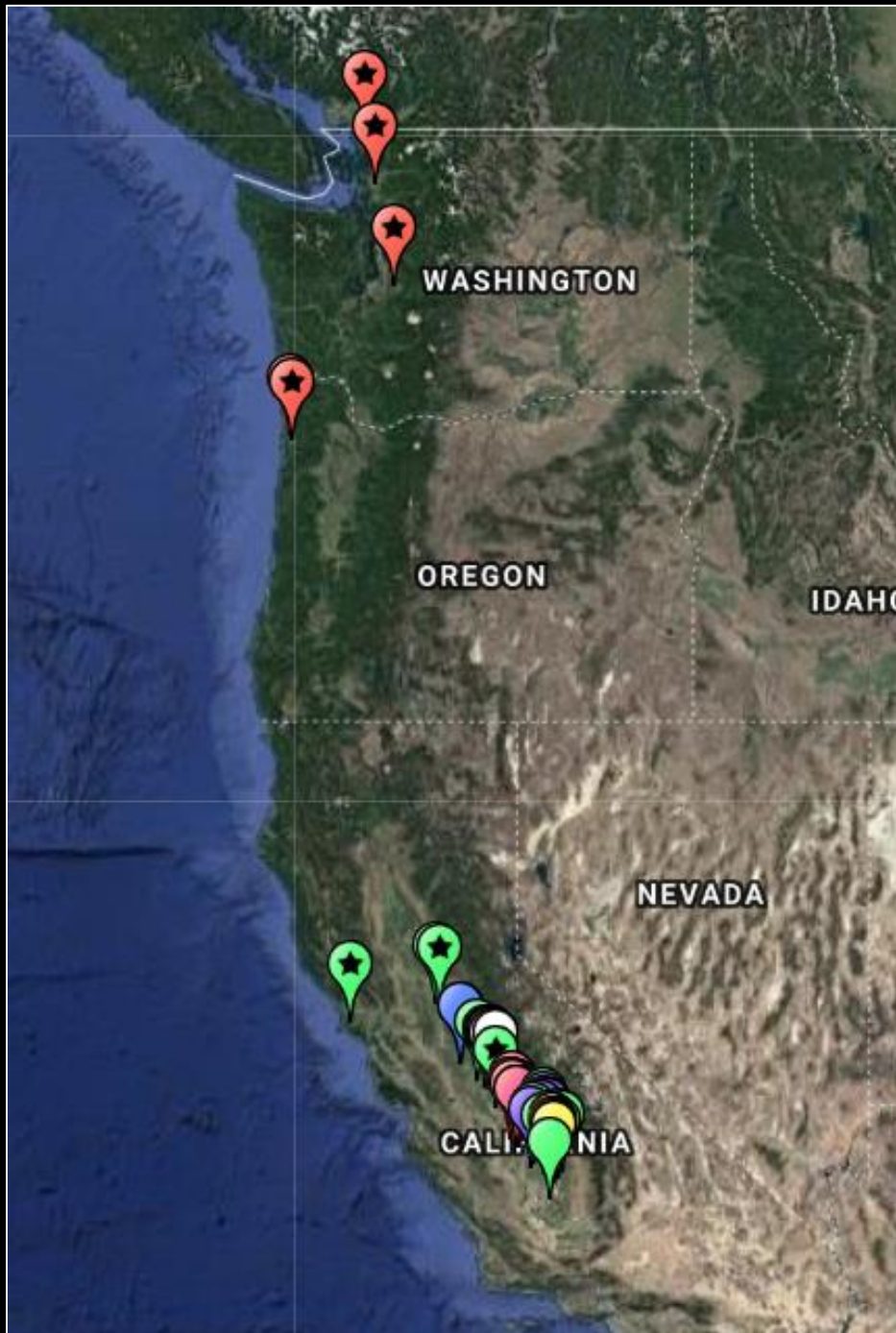


Operations



Marketing & Credits





Digesters Built in California

All Others

Lakeview Farms Dairy, West Star North Dairy, Carlos Echeverria & Sons Dairy
Feb 2018

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Van Beek Bros. Dairy, Dec 2018
Cornerstone Dairy, Dec 2018
Vander Poel Dairy, Dec 2018
Van der Eyk Dairy, Nov 2018
Legacy Ranch, Nov 2018
Circle A Dairy, Aug 2018

GJ TeVelde Ranch, June 2017
Philip Verwey Farms #1, May 2017

Philip Verwey Farms #2, Oct 2016
Open Sky Ranch, Aug 2016

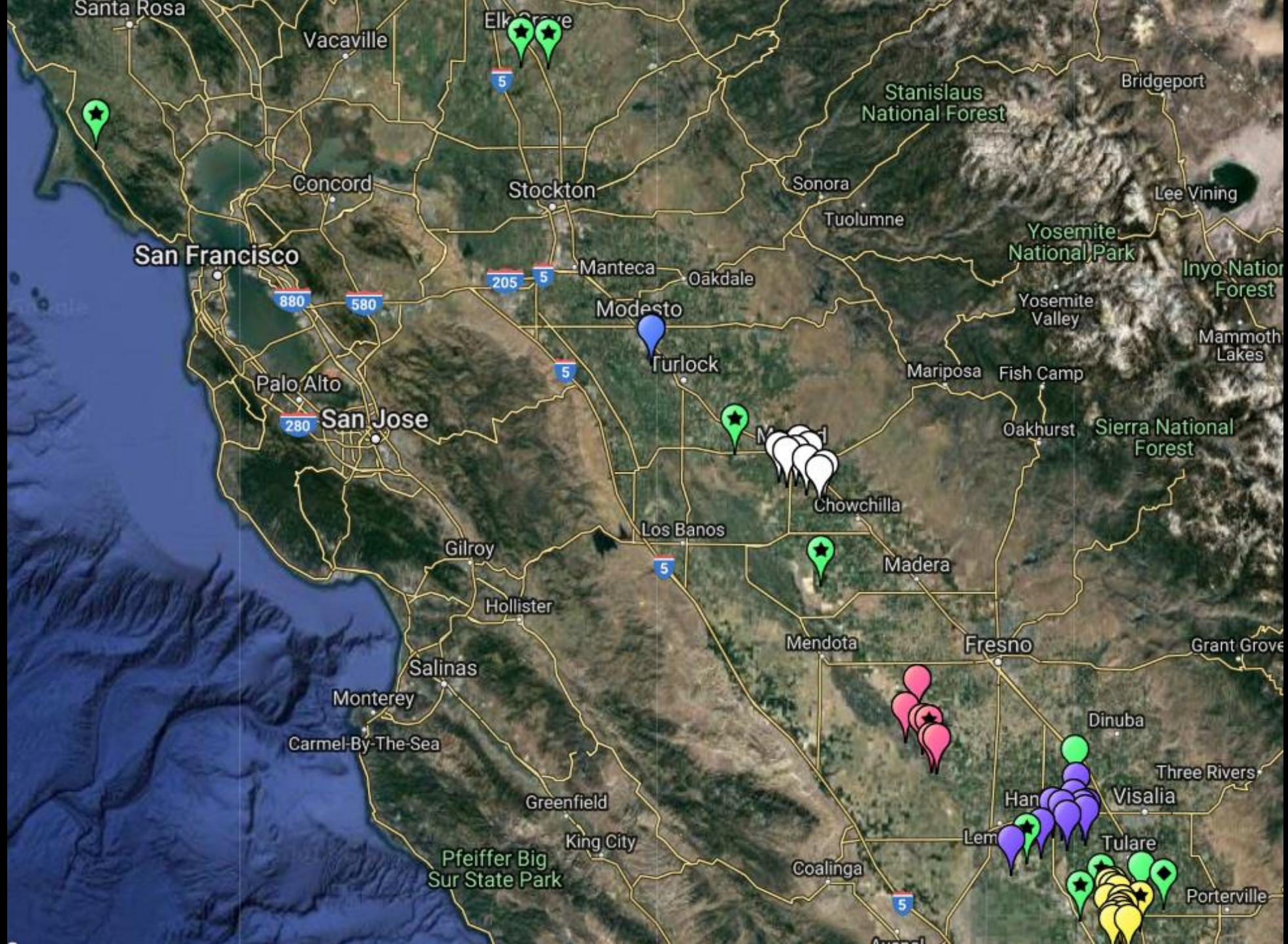
Van Steyn Dairy, Sept 2015

ABEC #1 Bidart - Old River
Dec 2014

Pacific Rim Dairy, Nov 2014
Pixley Biogas (Calgren Ethanol), Sept 2014

New Hope Dairy, July 2013
Shut Down, June 2016
Acquired by MEW Sept 2018

Van Warmerdam Dairy, May 2013



Electricity Projects

Electrical Model



- Sell Electricity on 20-Year fixed price BioMAT Contract for 18.7 cents per kWh

- Sell AB-32 Cap and Trade Carbon Credits for \$13 Per metric ton

- Total Revenues: ~\$300 per Milk cow per year (fixed)

California-based Manufacturing Maas Motor Works



Pipeline Fuel Clusters

Fuels Model



- Clean, compress and deliver biogas to a CNG Station for use as vehicle fuel
- Natural Gas Revenue
- LCFS Carbon Credit Revenue
- RIN CNG Revenue
- Total Revenue ~ \$1,000 per milk cow per year (not fixed, shared)

Calgren Dairy Fuels

12 Dairies

~80,000 Animals
~\$40,000,000

Sousa & Sousa Dairy
Awarded for 2018 CDFA Grant
Construction 20% Completed

Pixley Dairy
Awarded 2017 CDFA Grant
Construction 5% Complete

Circle A Dairy
Awarded 2017 CDFA Grant
Project Online

Legacy Ranch
Awarded 2017 CDFA Grant
Construction 90% Complete

K&M Visser
Awarded 2017 CDFA Grant
Construction 20% Complete

4 K Dairy
Awarded for 2018 CDFA Grant
Construction 20% Complete

Riverview Dairy
Awarded for 2018 CDFA Grant
Construction 10% Complete

Calgren Dairy Fuels
SCG Pipeline Injection Point &
Onsite Biogas Use

Robert Van Der Eyk
Awarded 2017 CDFA Grant
Construction 95% Complete

Bar VP Dairy
Awarded for 2018 CDFA Grant
Construction 40% Complete

General Notes

CONFIDENTIAL

Constructed Pipeline

Proposed Pipeline



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Firm Address

3711 Meadowview Dr.
Redding, CA, 96002

Project Name and Address

Calgren Dairy Fuels Cluster
Pixley, CA

Date

10/25/18

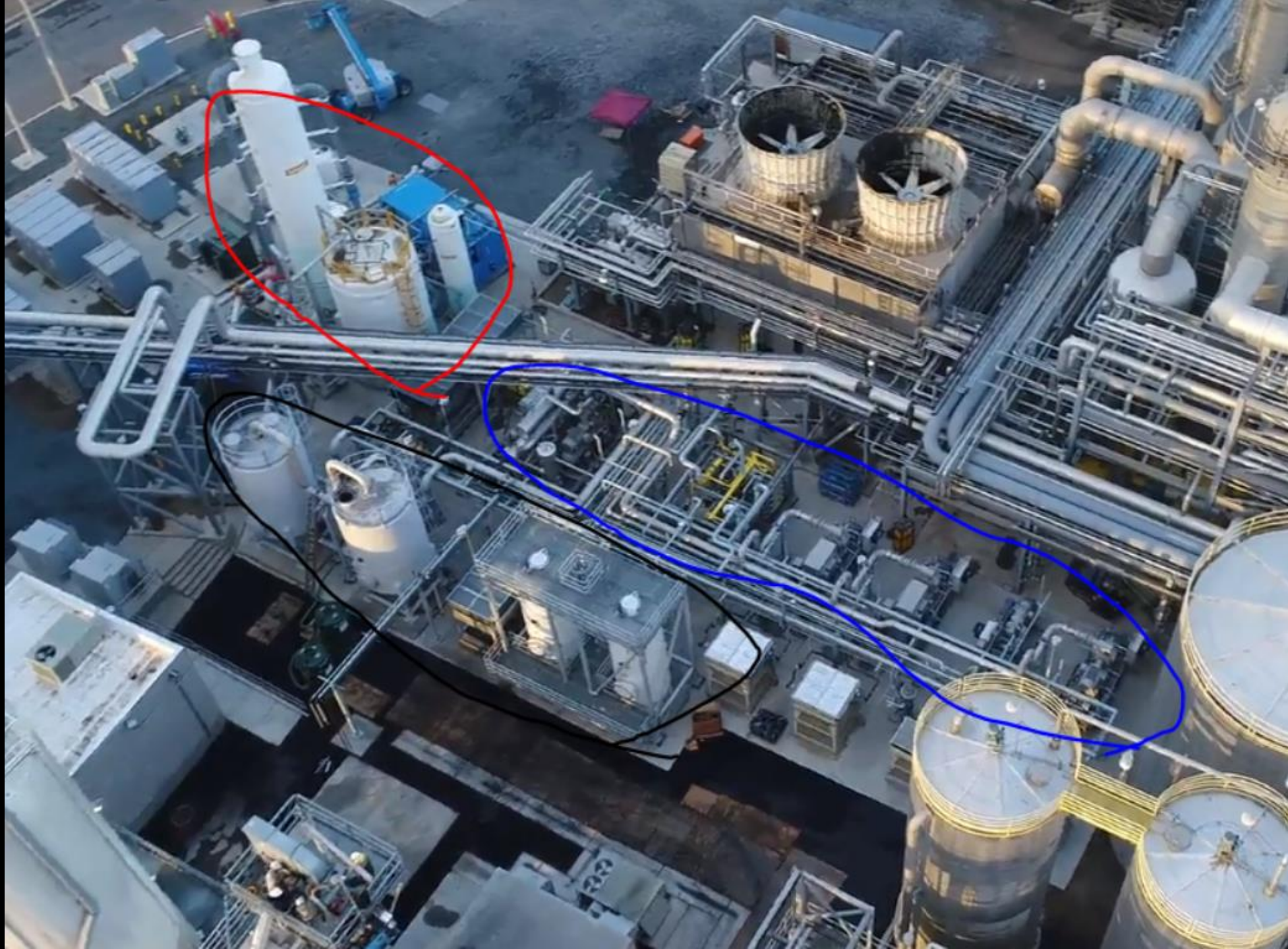
Version

Drawn By

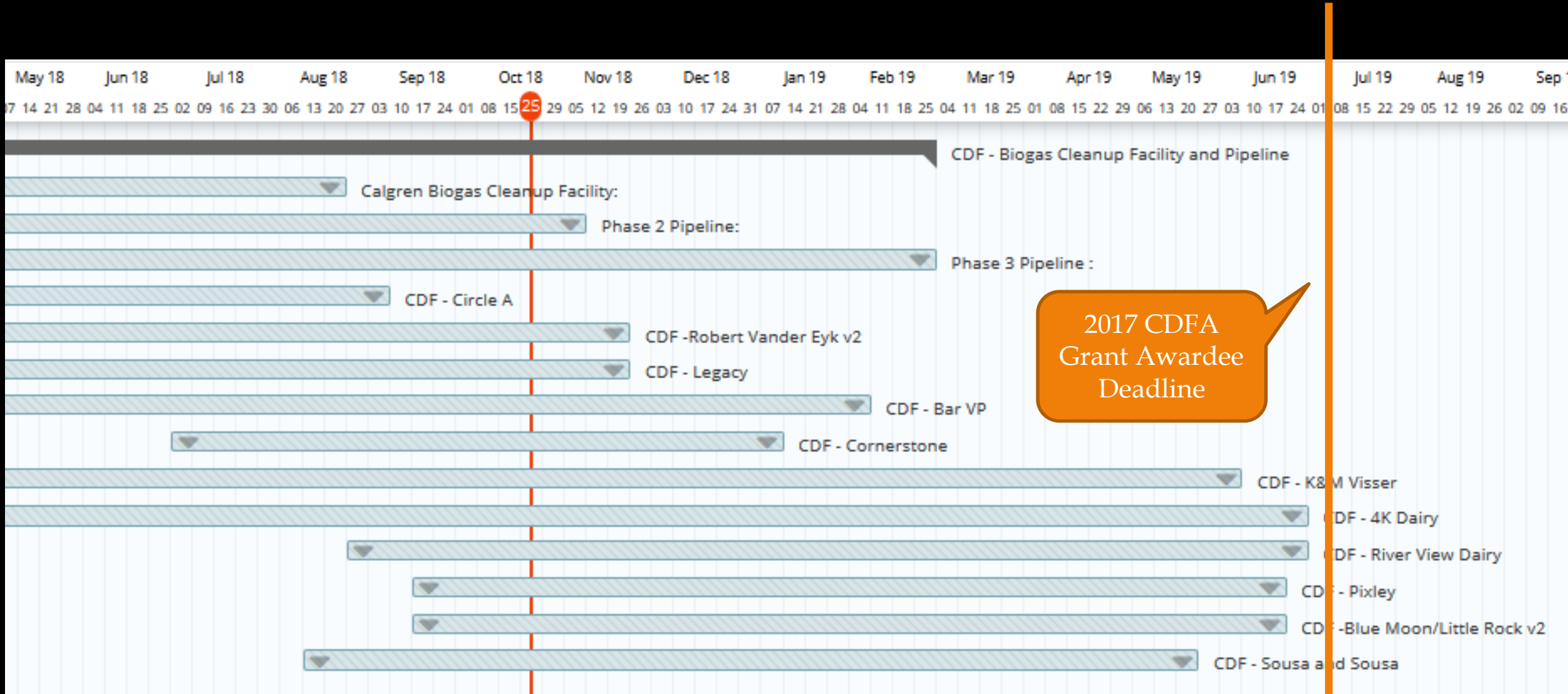
NN, BO

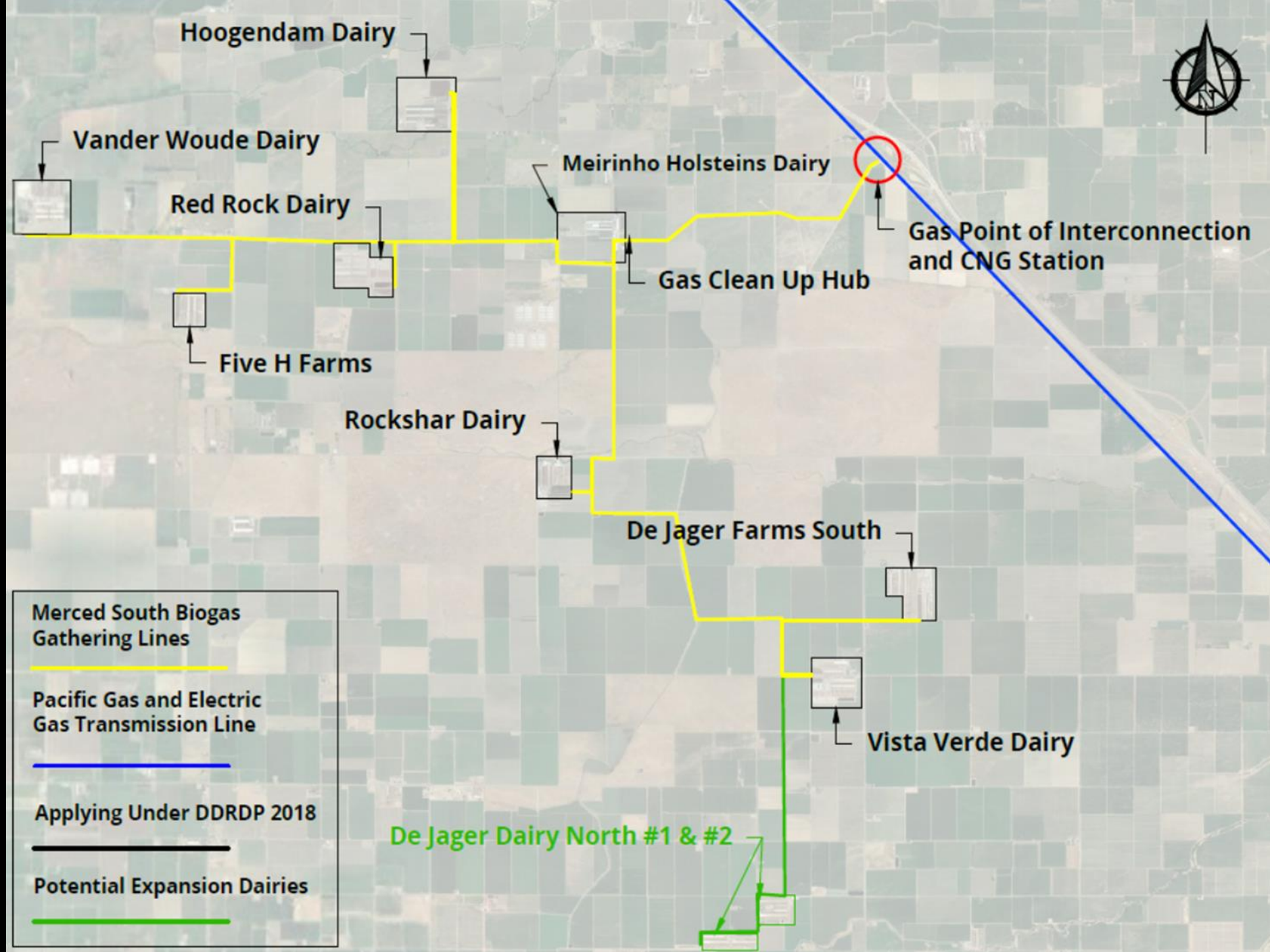
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Timeline





Final Takeaways

- Greatly Expanded Funding Available, but only for cluster fueling projects
- Growing number of developers in the market
- Digesters must be tailored to individual dairy needs
 - Operational
 - Financial



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Cow Power!

Daryl Maas

www.maasenergy.com

"Renewable Energy that Works"