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CALIFORNIA COUNCIL ON SCIENCE AND TECHNOLOGY
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EXECUTIVE DIRECTOR

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RECENT ACTIONS

- Projects:
 - Viability of natural gas storage facilities
 - Biomethane heating values
 - California Freight Action Plan
 - SB 1281 – Water produced during oil and gas drilling
 - Water information systems
 - Makerspace
- Reset for CalTAC
- Lab Affiliates
- Fellows:
 - 2016 outgoing class
 - 2017 incoming class
 - Alumni
 - State replication
 - Sustainability
- Communications and public relations

VIABILITY OF NATURAL GAS STORAGE FACILITIES



Governor proclaimed a state of emergency on 1/6/16 related to Aliso Canyon natural gas storage facilities leak.

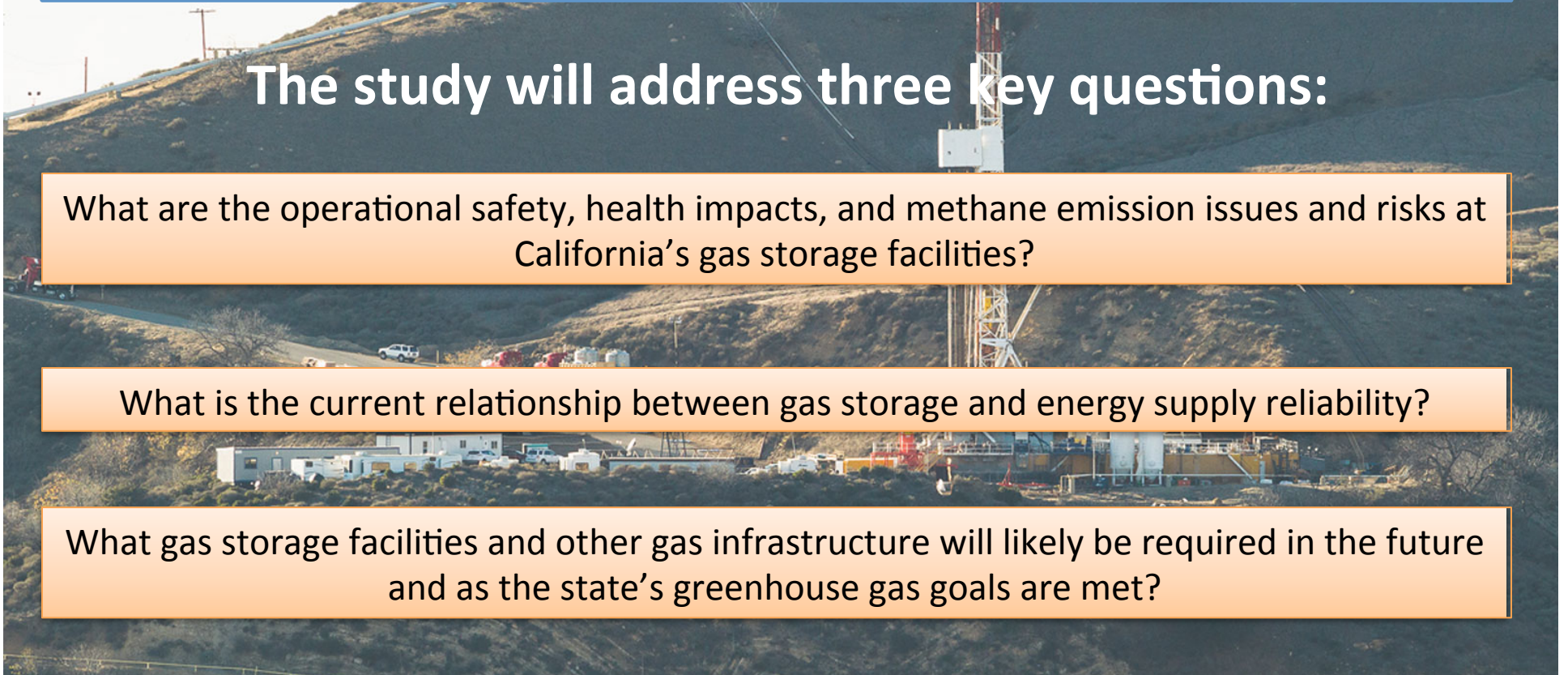
To address the issue, CPUC, State Energy Resources Conservation and Development Commission, State Air Resources Board, and Division of Oil, Gas, and Geothermal Resources within Dept. of Conservation asked CCST to undertake an up-to-date, technical assessment of the 13 natural gas storage fields in California.

The study will address three key questions:

What are the operational safety, health impacts, and methane emission issues and risks at California's gas storage facilities?


What is the current relationship between gas storage and energy supply reliability?

What gas storage facilities and other gas infrastructure will likely be required in the future and as the state's greenhouse gas goals are met?



BIOMETHANE HEATING VALUES

SB 840 requests CCST to complete a study analyzing minimum heating value and maximum siloxane specifications for the delivery of biomethane to public gas pipelines and their impacts to cost, volume, equipment operation, and safety.



CPUC is the lead agency and we are working with them to contract this project. Once contracted, CCST will have nine months to complete the study. We will send out a call for nominations of experts in the near future.

CALIFORNIA SUSTAINABLE FREIGHT ACTION PLAN



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The team working on California's Sustainable Freight Action Plan (GoBiz) has reached out to CCST for input.

We have been asked to help “convene stakeholders to identify and deploy strategies that consider commercial viability and promote the competitiveness of California’s statewide and local freight transport system, develop tools and share data to analyze benefits and impacts of actions including costs, and implement a quantitative metric to track progress.”

WATER PRODUCED DURING OIL AND GAS DRILLING



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CCST's report to satisfy the requirements of SB 4 recommended that the state collect data on water in the petroleum industry in general. SB 1281 has started the important work of increasing knowledge of water use, production, storage, treatment, and disposal in the oil and gas industries.

CCST has proposed an early assessment of the SB 1281 data collection.

PHASE I

The State is instituting the mandated data reporting. In parallel with the State, CCST will identify important questions on the water life cycle in California's oil and gas production and a description of the data required to answer the questions.

PHASE II

Would carry out an early and preliminary assessment of the SB 1281 data set along with other data to determine whether the questions in Phase I can be answered and identify new questions that may arise through the preliminary data assessment.



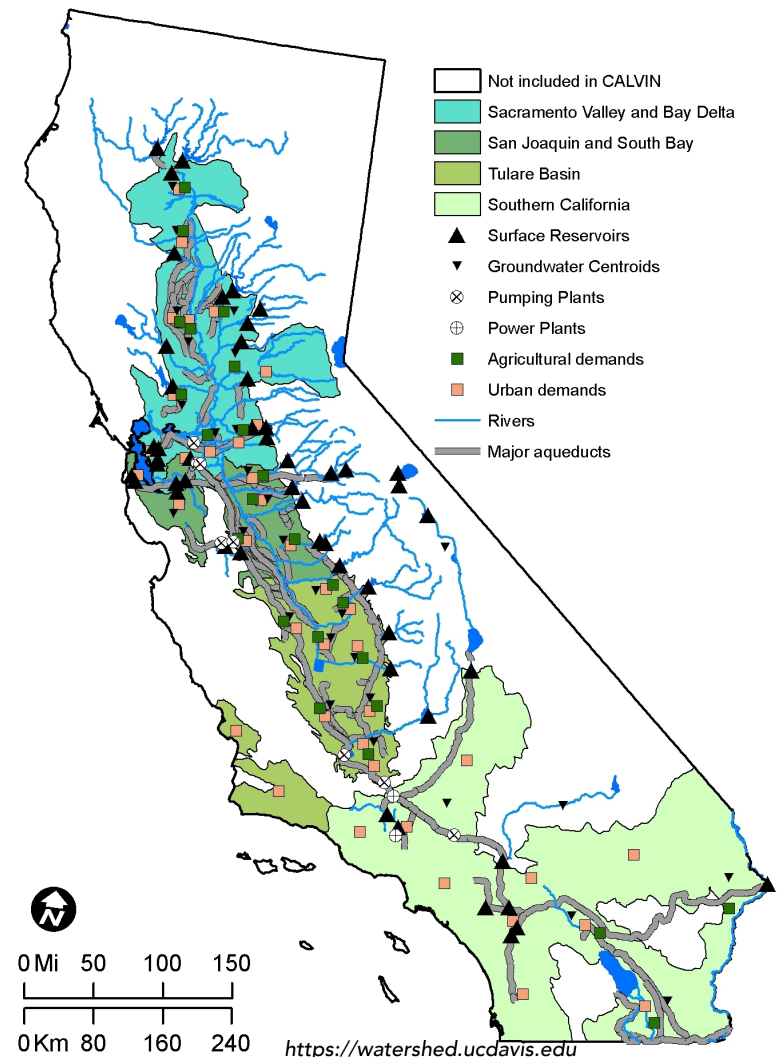
WATER INFORMATION SYSTEMS

CCST is partnering with the Department of Water Resources (DWR) to identify possible pathways to improve data access and utility.

As a first step, we've assembled a workshop design team including CCST Council members, Laboratory Affiliates, Board Members, and DWR staff.

CCST has also hired two graduate students from UC Riverside to produce a white paper to compile recommendations from studies, workshops, symposia, etc. from the last five years.

The white paper will be used as a jumping off point for a workshop or series of workshops in February 2017.



The CCCCO is setting up a network of maker spaces at community college campuses, using CCST's report to inform its design.

CCST has been contracted to continue its work with the CCC Maker Initiative through 2019.

CCST conducted a series of symposia in June 2016 to convene stakeholders and experts and help build the network. 37 colleges participated.

CCST will attend the 1st International Symposium on Academic Makerspaces in November at MIT.



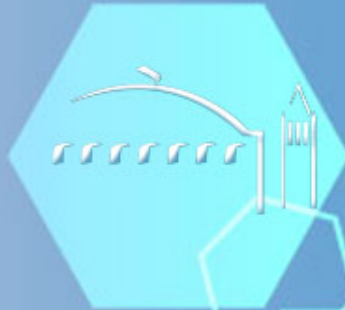


Thanks to a generous donation from the **Moore Foundation** and **Sempra Energy**, CalTAC has undergone a reset and started to focus on:

- Creating stronger ties with the National Academies Teacher Advisory Council – planning joint activities on STEM teacher shortages and bringing the voice of excellent teachers to policy makers.
- Expanding the Makerspace work with the CCCCO to the K-12 sector, thereby looking at the continuum of maker experiences.
- Creating a social media presence beginning in late 2016. For CalTAC, we will work on rebranding efforts and web content similar to those created for the Fellows program.

LABORATORY AFFILIATES

The Laboratory Affiliates are working with CCST to gather data for a report on the impact of the Labs in California. The goal is to present the report directly to elected representatives early next year as part of a coordinated effort across the labs to increase their visibility in Sacramento.





SCIENCE & TECHNOLOGY POLICY FELLOWS

SCIENCE & TECHNOLOGY INFORMING POLICY

Year Seven Fellowship ending October 30th.
The Year Seven Fellows have staffed and analyzed
over a hundred bills and hearings.

This was a delightful class who dove headfirst into the
world of science policy and politics!

All have decided to stay in policy in one way or
another.





SCIENCE & TECHNOLOGY POLICY FELLOWS

SCIENCE & TECHNOLOGY INFORMING POLICY

*Six have already
accepted
employment in new
positions:*

- **Erin Arms** - AAAS Fellow, NIAID - Office of Communications and Government Relations
- **Emily Berry** - Assemblymember Cooley, Legislative Aid
- **Dan Brumbaugh** - Associate Researcher at UCSC's Institute of Marine Sciences and a Consultant to The Nature Conservancy on the Northern Caribbean Program
- **Sarah Carvill** - UC Santa Cruz, Lecturer in Environmental Studies
- **Esha Mathew** - Assemblymember Medina, Legislative Aid
- **Gabby Nepomuceno** – Department of Toxic Substance Control as a member of the Strategic Program Development team



2017 FELLOWS (YEAR 8)

- **Bao-Ngoc Nguyen** - University of Maryland, Bioengineering
- **Anna Reade** - UC San Francisco, Developmental Biology
- **Mikel Shybut** - UC Berkeley, Plant Biology
- **Julianne McCall** - Heidelberg University, Cellular & Molecular Biology
- **Mike Peterson** - UC Berkeley, Environmental Science, Policy & Management
- **Bish Paul** - University of Washington, Cell Molecular Biology
- **Kristin Warren** - Carnegie Mellon, Mechanical Engineering
- **Laura McWilliams** - University of Oregon, Chemistry
- **Jennifer Chase** - University of Michigan, Cellular & Molecular Biology



Fellows Alumni continue to excel in their careers. The Alumni Steering Committee is working to offer more career and professional development options. The Committee recently hosted a fundraising seminar, an interactive science communication event, and a trip to Healdsburg that discussed biodynamic farming. The next trip will be to UC Davis Olive Center.



SCIENCE & TECHNOLOGY POLICY FELLOWS

Currently, CCST, in partnership with the Gordon and Betty Moore Foundation and the Simons Foundation, is providing multiple grants of up to **\$25,000** to support planning processes (including landscape analyses and strategic plan development) to states that are interested in exploring the possibility of establishing a state-level science and technology policy fellowship.

We were pleased to receive full proposals from 11 states:

- Alaska
- Colorado
- Connecticut
- Idaho
- Massachusetts
- Michigan
- New Jersey
- North Carolina
- Pennsylvania
- Texas
- Washington



SCIENCE & TECHNOLOGY POLICY FELLOWS

State Replication Selection Committee members include:

- Aanika Carroll - *Gordon and Betty Moore Foundation, Program Officer*
- Erin Heath - *AAAS, Associate Director, Government Relations*
- Adam Jones - *Gordon and Betty Moore Foundation, Program Officer*
- Amber Mace - *Deputy Director, CCST*
- Mary Maxon - *Lawrence Berkley National Lab, Biosciences Principal Deputy*
- Mike Rodemeyer - *Independent Consultant on Science and Technology Policy Issues*
- Al Teich - *Director, Science and Policy Programs, AAAS (Retired)*



**KEEP
CALM
AND
FUNDRAISE
ON...**



SUSTAINABILITY

We have been working on expanding existing and building new strategic relationships with philanthropy thought leaders and donors in four key markets: San Francisco Bay Area/Silicon Valley, Los Angeles, San Diego and Santa Barbara.

Next, we will do discovery meetings with those leaders referred to us, determine interest and next steps for engaging with these new contact. As a result of meetings so far, four major gift **proposals submitted** over \$100,000; two to new prospective donors; one to donor who did not give last year but will come back; one to current donor to increase their support.



SUSTAINABILITY

New:

Morgan Family Foundation	\$100,000
David Geffen Foundation	\$100,000-\$1,000,000

Current donors:

WHH Foundation	\$100,000
Verbal commitments	\$50,000

Past donor:

San Francisco Foundation	\$100,000-\$130,000
Donor Advised Fund	

Annual giving end of year goal: \$100-125,000

If minimum amounts are given \$550,000 projected



We need your help. Who do you think would be interested in supporting our Fellows program?

1. If you gave last year – thank you, please renew your gift and consider adding a bit to it! Gifts of stock are a smart way to give, you avoid capital gains and get a deduction.
2. If you didn't give last year – please join us this year to support the CCST Science Fellows' work to help make California policies stronger with science.
3. We'd like your help meeting people – can you recommend 1-2 people who you think would like CCST and might support the program?

Under the guidance of communications consultant Ben Young Landis, CCST has made a major effort over the past 12 months to increase our brand recognition and focus our message and branding.



CCST has adopted the strategy **“California’s Policies are Stronger with Science”** as basis for all messaging



Launched new Science Fellows blog and refreshed Fellows website with new messaging strategy & content



Expanded our social media presence with launch of Facebook, Twitter, and LinkedIn accounts for CCST

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2017 MEETING DATES



FEBRUARY 15-16, 2017 (SACRAMENTO)

MAY 2-3, 2017 (LOCATION TBD)

OCTOBER 11-12, 2017 (PALO ALTO)



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