

CCST Council Meeting

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CCST Executive Director

May 7, 2014



Summary of CCST Activities

- ✧ S&T Policy Fellows & Alumni Fellows
- ✧ California's Energy Future – Policy
- ✧ California's Water Future
- ✧ BLM project (hydraulic fracturing)
- ✧ Senate Bill 4
- ✧ STEM Education & Cal TAC

*2013-14 Class of Fellows
(Year 5)*



Left to Right: : Nathan Phillips, Brandon Gaytán, Alexis Erwin, Sarah Brady, Brie Lindsey, Toni Lee, Karen Morrison, David Ernest Garcia, Alia Schoen, Colin Murphy



Fellows Activities

- ✧ Staffing legislative hearings
- ✧ Testifying
- ✧ Analyzing legislation
- ✧ Staffing bills for Members
- ✧ Negotiating amendments to legislative members
- ✧ Meeting with constituents
- ✧ Dealing with the press
- ✧ Making vote recommendations

Friday seminars have brought Fellows together with speakers to further their professional development, including:

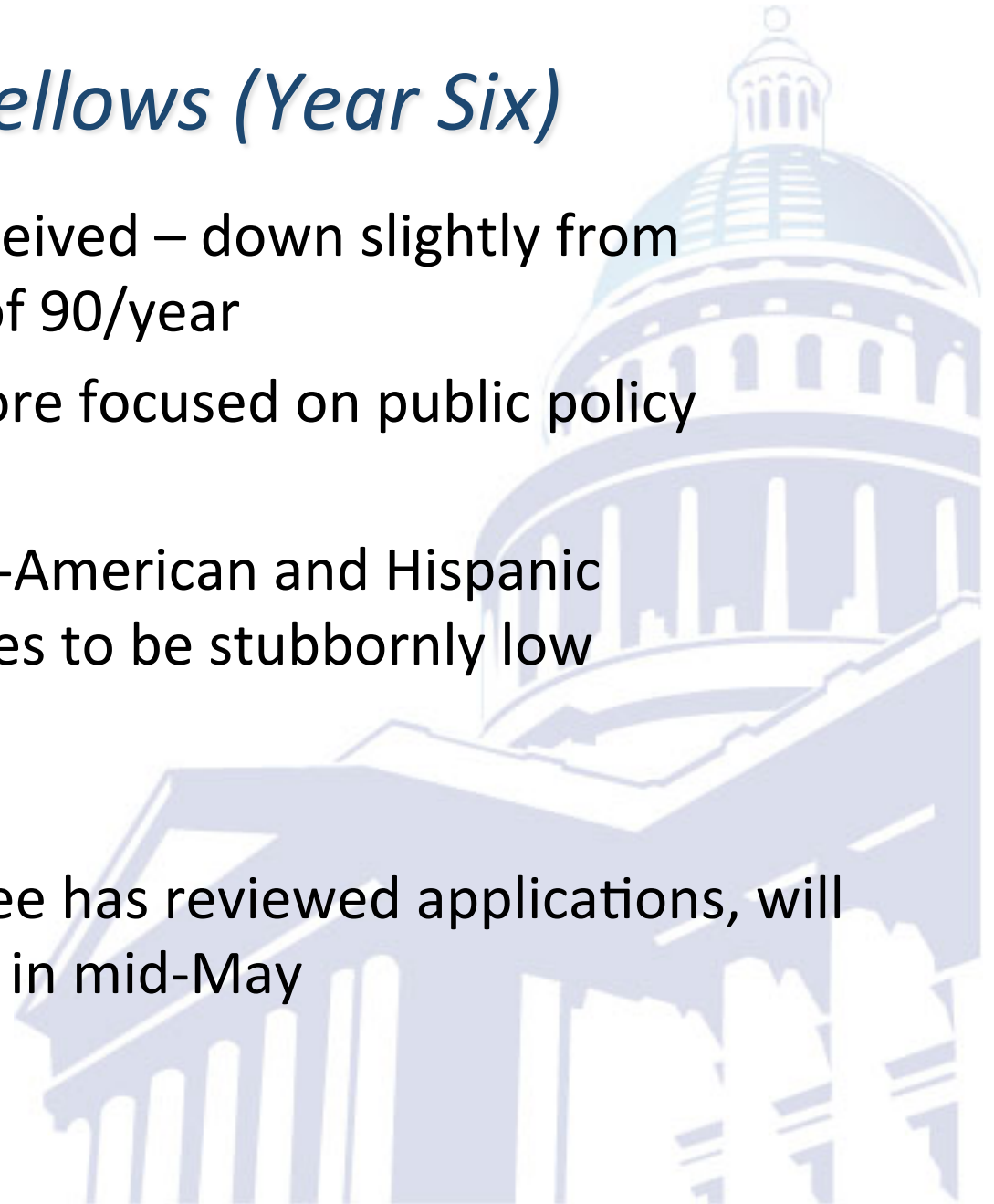
- ✧ Secretary Matt Rodriquez & Deputy Secretary Dr. Gina Solomon, Cal EPA
- ✧ Secretary John Laird, Natural Resources Agency
- ✧ Secretary Diana Dooley, Health & Human Services
- ✧ Secretary Karen Ross, Dept. of Food and Agriculture
- ✧ Director Caroll Mortensen, Cal Recycle

Notable Fellow accomplishments include:

- ✧ Providing expert testimony to Senate Environmental Quality Committee & Joint Committee on Fisheries and Aquaculture
- ✧ Serving as press aide for a member of Assembly leadership
- ✧ Recognition of a Fellow by her Assemblymember during a legislative hearing for coming up with the idea for the bill that the Assemblymember was presenting

2014-15 Fellows (Year Six)

- ✧ 74 applications received – down slightly from previous average of 90/year
- ✧ New applicants more focused on public policy issues
- ✧ Number of African-American and Hispanic applicants continues to be stubbornly low
- ✧ Selection committee has reviewed applications, will be interviewing 30 in mid-May



Alumni Fellows

- ✧ Doug Brown continues to coordinate \$20K grant to support development & operation of a formal S&T Policy Fellows Alumni Network
- ✧ Mission statement adopted, business plan being reviewed, newsletter begun
- ✧ Feb 2015: target date for event in State Capitol

MISSION STATEMENT

The California Science & Technology Policy Fellows Alumni Network builds and maintains relationships among past program participants, current fellows, policymakers, and other policy fellowship programs. The group harnesses the power of the alumni network to enhance and sustain the contributions of current and former fellows in the public policy arena and society at large.

California's Energy Future

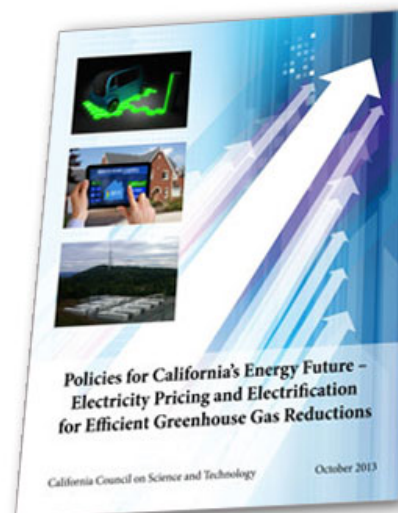


- ✧ Reports continue to generate interest
- ✧ CEF project chairman Jane Long regularly asked to comment on study in media
- ✧ Session at Feb. AAAS conference to focused on issues

CALIFORNIA'S ENERGY FUTURE POLICY

California Council on
Science and Technology 

- **Electricity Pricing:** Published Oct 2013
- **Scaling Up Advanced Biofuels:** In review



- **Carbon Capture and Storage:** Jane Long leading an effort funded by Bipartisan Policy Center; pro-bono student support from EDF and Boalt Law School
- **Tools for choosing an emission-free electricity portfolio:** \$25K seed grant from Heising-Simons; workshop held in July to define issues related to five factors: build out rate, cost, reliability and system issues, water/land use, policy requirements. Workshop report in preparation.

California's Water Future

Report released on April 9

Road map of innovations in science and technology to improve management of California's water system over multi-year cycles of drought and surplus

Complements DWR's California Water Action Plan



Science and Technology Innovation for California's Water Future

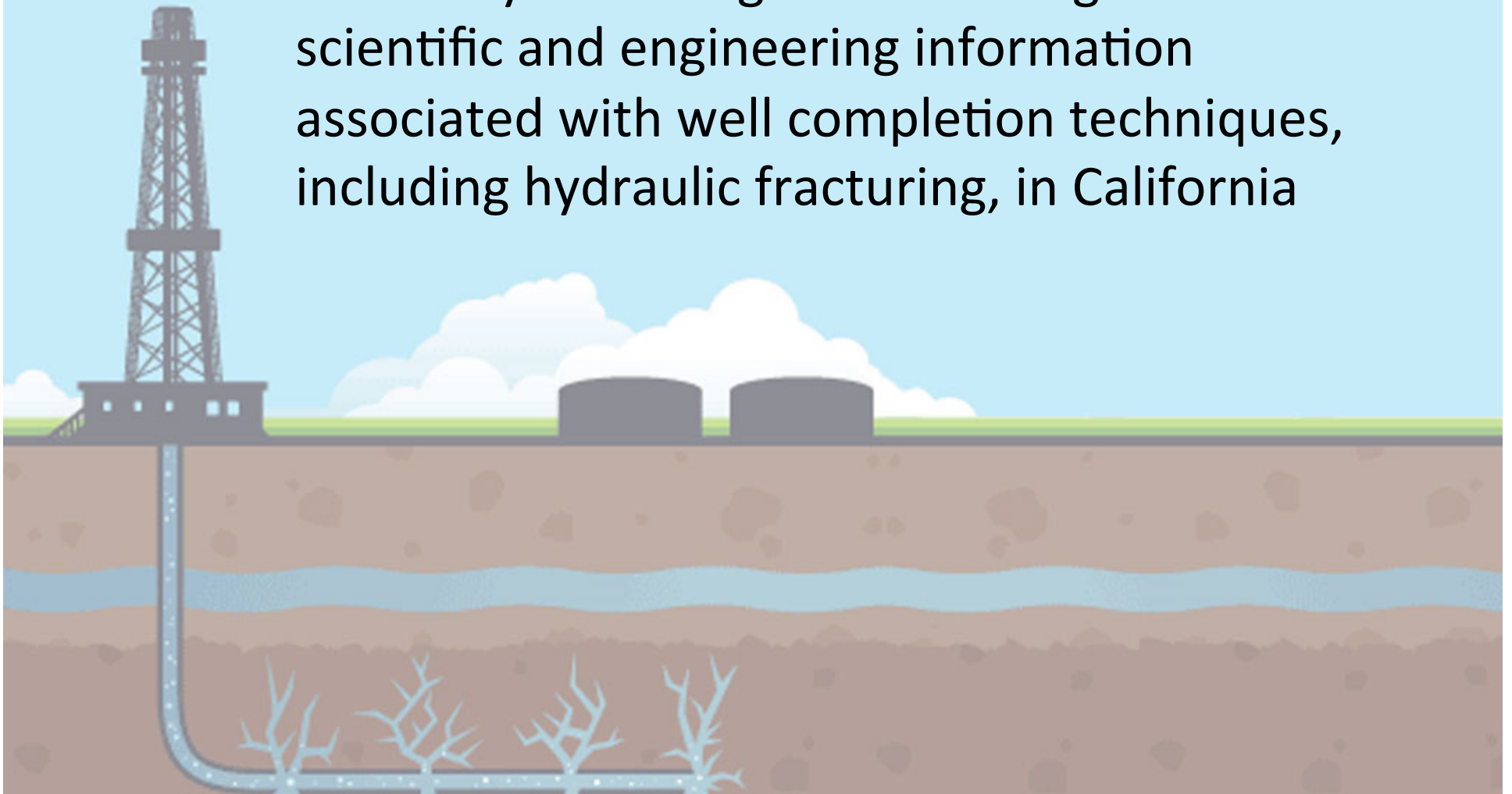
- ✧ Report provides a series of overall recommendations, along with specific near-term actions and recommendations specific to each area of the water cycle as outlined in the report
- ✧ Modest but positive media coverage
- ✧ Next steps include prioritizing near-term recommendations and presenting results to policymakers in Sacramento

Recommended Near-Term Actions

- ✧ Developing and implementing a comprehensive integrated statewide water information system
- ✧ Encouraging metering of all water usage
- ✧ Expanding use of high-efficiency plumbing/appliances/landscapes
- ✧ Identifying high-impact actions to restore and protect watersheds
- ✧ Increasing storm water capture and groundwater recharge
- ✧ Increasing nitrate reduction and desalination technologies

Review of Well Stimulation Technologies

At request of Bureau of Land Management, CCST is synthesizing and assessing the available scientific and engineering information associated with well completion techniques, including hydraulic fracturing, in California



Review of Well Stimulation Technologies

- ✧ Review relies on published information and available data
- ✧ No policy recommendations
- ✧ Three major questions addressed:
 1. *What is past, current, and potential future practice in well stimulation technologies?*
 2. *Where might these technologies allow expanded production of oil onshore in CA?*
 3. *What are potential direct environmental hazards of these specific technologies?*

Review of Well Stimulation Technologies

- ✧ Steering committee of 11 experts leading peer review effort
- ✧ LBNL and the Pacific Institute responsible for conducting literature review, analyzing data, and writing the report
- ✧ Report has been written and sent for peer review
- ✧ Public release anticipated during summer 2014

SB4 Well Stimulation Assessment

- ✧ Dept. of Conservation working with CCST to extend BLM study in response to legislative mandate
- ✧ Assessment of well stimulation technologies in California
- ✧ SB4 mandate overlaps with BLM study



SB 4 Assessment

- ✧ Scope similar to BLM project, with addition of applications of well stimulation in gas production and offshore wells
- ✧ Lawrence Berkeley National Laboratory contracted to work on project
- ✧ Subcontractors include Pacific Institute; Physicians, Scientists, and Engineers for Healthy Energy; Adam Brandt (Stanford); Amro Hamdoun (Scripps Institute); Donald Gautier
- ✧ Scheduled completion date: January 2015



California Teacher Advisory Council

STEM Education and Cal TAC

- ✧ Effective March 1: Angela Diaz, new Washington liaison for education, science, & technology joined CCST and began management & oversight of Cal TAC
- ✧ Cal TAC is a group of 10 active science and math teachers affiliated with CCST which provides connection between teaching community, educational experts, and policymakers



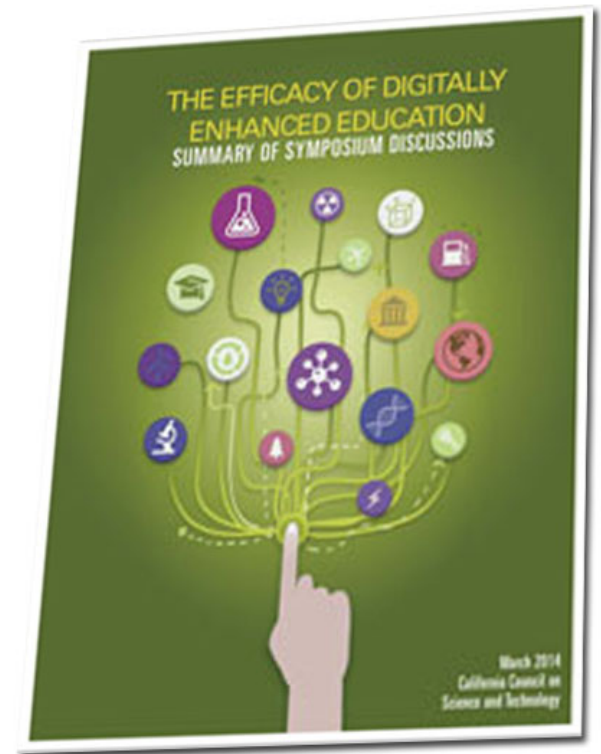
California Teacher Advisory Council

New Action Plan: 3 areas of focus

- ✧ Digitally enhanced education and meeting specific Stuart Foundation grant deliverables in July 2014
- ✧ Outreach and sustainability – expanding membership, convening workshops, exploring Cal TAC Fellows program
- ✧ Partnerships – exploring Cal TAC teachers' appointments as adjunct faculty at CSU and/or CCC

Efficacy of Digital Teaching And Learning II

- ✧ Report released on March 27, summarizing symposium in October 2013
- ✧ Report offers recommendations to decision makers on developing sound, research-based approaches to implementation of digitally enhanced education
- ✧ Cal TAC members will brief leaders in DC in June about symposium report



Joint Convocation – Cal TAC & NTAC



- ✧ February 10-11, 2014
- ✧ Convocation engaged invited stakeholders from across US in conversations about opportunities to enhance STEM learning in K-8 through strategic connections amongst formal, informal, and after-school learning communities
- ✧ Cal TAC Chair & Vice Chair to participate in NAS hosted convocations and workshops in DC



California Teacher Advisory Council

Support for Cal TAC

On April 7 Cal TAC received request from S.D. Bechtel Jr. Foundation to submit proposal expanding on request for funding to significantly expand reach and role of Cal TAC members and alumni

Bechtel proposal being prepared by Angela Diaz and Margaret Gaston; to be vetted with CCST leadership in early May for submission to Bechtel

Grant Would Enable Cal TAC to:

- ✧ **Increase** membership
- ✧ **Connect** selected Cal TAC members and alumni to education & policy communities through Cal TAC Education Policy Fellows
- ✧ **Impact** culture of teaching profession
- ✧ **Convene** state-level thought partners
- ✧ **Inform** policies
- ✧ **Strengthen** preparation and retention of STEM teachers

*For more information:
<http://www.ccst.us>*

