

The graphic features a background of abstract, flowing blue and teal brushstrokes that resemble water currents. The text is overlaid on this background.

# BAY AREA CONFLUENCE

A call to action for urban water resilience

**November 10, 2016**

**hosted by the Association of Bay Area Governments**

On November 10<sup>th</sup> cities, counties, public and private utilities, and regional experts came together to discuss local and regional opportunities to connect around sweet spots of shared interest. The event continues the work of the Association of Bay Area Governments' Regional Planning Subcommittee on Infrastructure in strengthening collaboration around critical infrastructure solutions. Hour long panels amongst local government and utility leaders focused discussion on three challenges of mutual interest:

- Bay Area water reliability: tackling challenges in the face of growth and climate change
- Water after an earthquake: what happens after two days, two weeks, two years?
- Talking amongst ourselves: forming a Regional Lifelines Council

The Bay Area Confluence brought together leaders from different institutions to share their perspective on the challenge as well as collaborative ways forward. Three keynotes provided external advice from water, collaboration, and resilience experts.

**This document provides summaries of thoughts, ideas, and statements shared by the invited speakers.**

## Oakland Resilience and a Call to Regional Action

(1:00) Libby Schaaf, *Mayor, City of Oakland*

In 2014 Oakland, along with Berkeley and San Francisco, was awarded a Rockefeller grant to build city resilience. This year all three cities have released Resilience Strategies which recognize unique and common challenges each city faces. The strategies extend beyond physically preparing for the next earthquake or flooding and also address chronic stresses like trust in government that stymie effective governance.

The City of Oakland is a believer in regional government and collaboration. Challenges like drought, sea level rise, earthquakes, housing affordability, and social equity extend beyond municipal boundaries. On the heels of the recent election it is clear that local and regional action will continue to be the scale at which tough challenges are addressed. Fortunately, we live in a region where residents reached into pocketbooks to meet our housing and infrastructure challenges head on.



In the **last election** the Bay Area showed we were willing to reach into our pocketbooks to **build resilience at the local and regional level**. – Libby Schaaf

## A Regional Approach to the Bay Area's Water Challenges

(1:15) Dr. David Sedlak, Professor, UC Berkeley

The Bay Area Confluence meeting builds on the 2015 ABAG General Assembly where there was a call to host a *Five Taps Summit* where regional plans would be laid for collaboration to solve the long term regional water security challenge.

The Bay Area has long relied on imported and local water supplies and just in the past decade begun to turn to other sources in preparation for a warmer and more variable future. Stormwater capture, reuse, and desalination coupled with conservation can be sequenced over the next thirty plus years to change the region's existing water supply portfolio.

Investments to address the long term stress of providing water in normal and dry years are also likely to change the resilience of water supply after acute shocks. As agencies like SFPUC advance distributed water reuse technology to address overall water supply and quality challenges there are likely inherent resilience benefits that may exist in situations like those after earthquakes.



**Business as usual won't solve our water challenges.** It is essential we build partnerships and regional collaboration. It won't be easy. – David Sedlak

Plan Bay Area recognizes the need to connect transportation and land use planning. Need to **connect land use and water.** – David Sedlak

Business as usual won't address these challenges over the long run. Regional collaboration, while difficult, is essential to future solutions. ABAG and the cities it represent greatly influence the water demand based on the land use patterns they employ. To drive this collaboration utilities and city and county elected officials need to join together.

### Links to Presentations

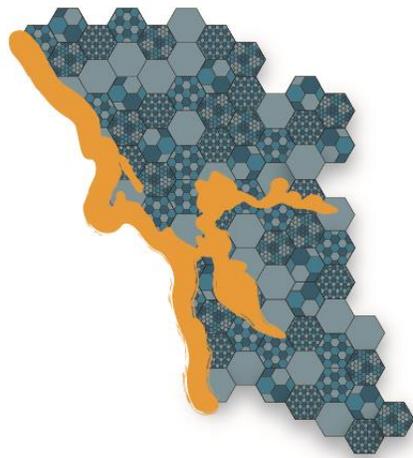
David's TED talk on avoiding drought: [http://www.ted.com/talks/david\\_sedlak\\_4\\_ways\\_we\\_can\\_avoid\\_a\\_catastrophic\\_drought](http://www.ted.com/talks/david_sedlak_4_ways_we_can_avoid_a_catastrophic_drought)

David's 2015 talk on transitioning from imported water: <https://vimeo.com/140828351>

## Bay Area water reliability: tackling challenges in the face of growth and climate change

(1:30) Laura Tam, SPUR (Moderator), *Sustainability Policy Director, SPUR*  
Norma Camacho, *Interim CEO, Santa Clara Valley Water District*  
Kerrie Romanow, *Environmental Services Director, City of San José*  
Miriam Chion, *Planning & Research Director, ABAG*

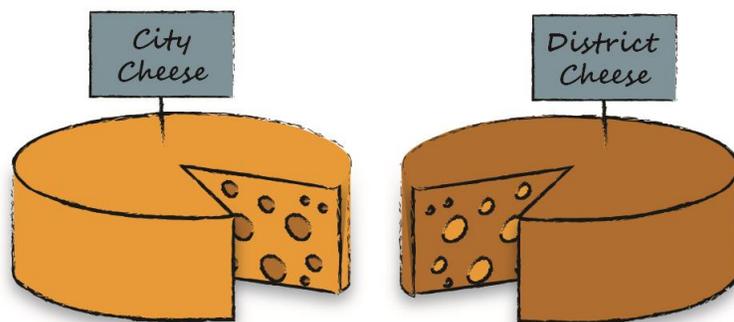
The region is forecast to grow by two million people over the next 25 years. The pattern of development to support the growth will not only have transportation implications, but there are also direct carbon and water impacts. Simultaneously, climate change is going to tax the system we rely on to support our region.



**The Bay Area's development pattern shapes water demand for the region.** – Laura Tam

### Connecting with one another

There are examples of strong collaboration across the region as cities, water districts, sanitation districts, and flood protection agencies have come together to plan and implement projects; however, there is a need to more *sincerely* connect to ensure one another's perspectives are considered from the beginning rather than as an afterthought. To more effectively connect, more work is needed to educate one another and develop a common language to talk through the challenges and opportunities.



Santa Clara Valley Water District has begun to share some of our cheese with cities to move initiatives forward, and they in return have shared some of their cheese with us. We have to build relationships that allow us to **share resources toward a common goal.** – Norma Camacho

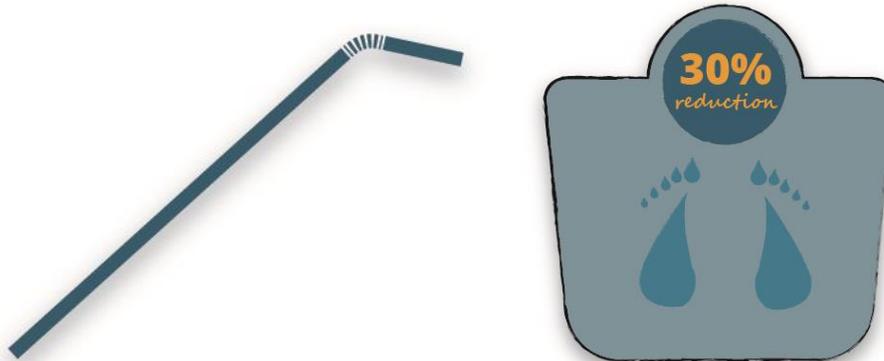
SCVWD is working with cities to develop model ordinances. As cities we don't have the same technical skills as our water district. **We rely on their technical knowledge to support city decision making.** – Kerrie Romanow

In the first round of Plan Bay Area and again in the most recent update, many stakeholders have pushed for the plan to address water availability. ABAG has engaged in exciting collaborations that are happening between the water districts, and event's like the Confluence are all an effort to support conversations between city and county governments and utility institutions.

We've heard from Plan Bay Area conversations that **we need to address our resilience and water challenges.** – Miriam Chion

### Connecting with the public

The conversations can't only exist within the institutions. Engaging the public and making them aware of the challenges whether it's water or economic development is key if we're going to be able to address the tough challenges. The region needs to develop an effective and consistent regional message on water.



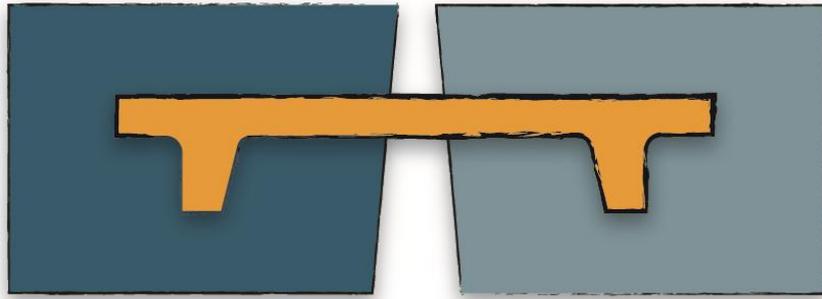
We need to communicate to the region that **it isn't just Southern California that imports it's water.** The Bay Area imports two-thirds of its supply; **our straw is somewhere else.** – Norma Camacho

San Jose reduced water by 30% in drought. **Should we stay on our water diet?** How do we make permanent change? How do we communicate water efficiency as effectively as energy efficiency? – Kerrie Romanow

We need to collectively engage. Our institutions have extensive and robust knowledge. **We need to connect with the public.** – Miriam Chion

## Building collective support for change

For any transformative regulatory changes building a coalition beyond a single sector will likely be necessary, and building broad support for pilot initiatives will be key for robust innovations to find the backing needed. To achieve big wins the region will have to develop a method of working through the existing fragmentation of decisions and resources.



There are many areas of fragmentation within the region – we need to **turn any fragmentation into bridges of collaboration.** – Miriam Chion

To make **transformative changes** we will **need regulatory support** to move forward. – Norma Camacho

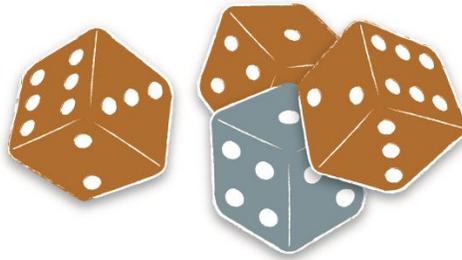
To bring innovation to scale, need **pilot projects** to be so successful that adoption of the innovation becomes common sense. – Kerrie Romanow

To drive **adoption of new technologies** the water community **needs better economic levers** like solar received to make distributed water systems pencil out. – Kerrie Romanow

## Water service after an earthquake: what happens after two days, two weeks, two years?

(2:20) David Rabbitt (Moderator), *Supervisor, Sonoma County*  
Jill Techel, *Mayor, City of Napa*  
Mike Ambrose, *Regulatory Manager, East Bay Municipal Utility District*  
Timothy Burroughs, *Chief Resilience Officer, City of Berkeley*

The Bay Area is earthquake country. When the earthquake ruptures, infrastructure systems are some of the most fragile because a single break can cause widespread outages, and because many buried systems will require weeks and months to repair.



There is a 72% chance of at least one M6.7 or greater earthquake occurring in the region over the next 30 years. **Are you prepared to roll the dice?** – Supervisor David Rabbitt

### Past and future Bay Area earthquakes.

In the 2014 Napa earthquake water was arguably the biggest challenge. Rapid restoration of the system was made possible because (1) mutual aid from other un-impacted Bay Area districts were able to support repair, (2) there was no immediate damage to the transmission system, (3) the wastewater treatment system received just under a critical amount of wine (that had spilled in the quake) – a little more wine and the microbes that make the system work would have shut down for a long period.



**Water was probably the biggest challenge after the earthquake.** We had 120 main breaks. – Mayor Jill Techel

The wastewater system received a huge amount of wine that had spilled in the quake. **The bugs that make the system work got drunk** and almost brought the system down. It took 24 hours for the system to stabilize. – Mayor Jill Techel

Ahead of the next earthquake, cities and districts alike have analyzed risks, adopted policies, and implemented multi-million, and even multi-billion dollar upgrades across the region. Equally important there are emerging conversations among utilities and districts to clarify what might happen after future earthquakes, and the respective roles and responsibilities of the different institutions. In 2016 East Bay Municipal Utility District and City of Berkeley have begun sharing expectations and plans with one another which is leading to a process of clarifying roles before, during, and after the next earthquake.

**We're talking with EBMUD to determine how our city can take pressure off of EBMUD so their resources can fix the system after an earthquake.** – Timothy Burroughs

**We want to expand partnerships with other cities and counties we serve. To address this challenge collaboration is needed.** – Mike Ambrose

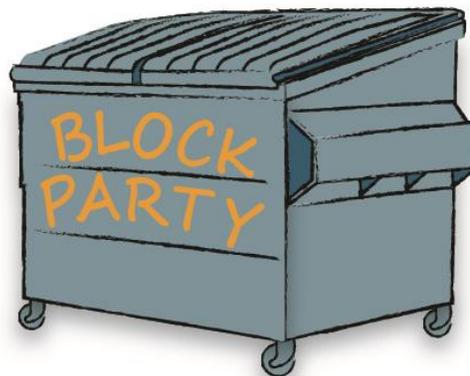
### Communication before and after an earthquake

Building robust forms of communication and social ties is important both before and after an earthquake. Response and recovery are more successful when everyone has access to information, enabling informed decisions and plans. More can be done on the front end to set expectations with communities. Many people have heard they should store 72 hours or 3-7 days of water, but need to a better job of communicating what happens after the first week.

**Need to talk about how to message with communities about what to expect after the first 7 days. We need to share information about what happens after day 7.** – Mike Ambrose

**Residents were calmer because they had access to the information. Clear communication is important.** – Jill Techel

It isn't just about connecting institutions to their residents and customers – it's about connecting neighbors to neighbors and building social ties. After past disasters, strong social networks are directly correlated to a stronger recovery. Cities like Berkeley are using creative multi-benefit opportunities to help build social ties.



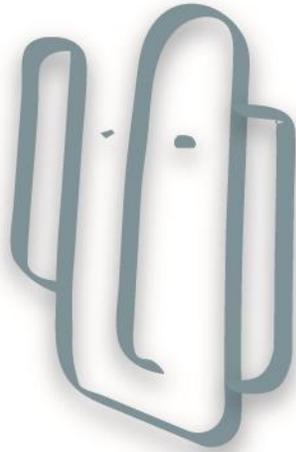
In Berkeley, the city provides **free dumpsters** [to toss tough to dispose items] to neighborhoods that **organize a block party** – all in an effort **to build community ties** so people have more robust networks when they need them. – Timothy Burroughs

## Cultivating Bay Area Opportunity Makers

(3:30) Kare Anderson, *Columnist and Consultant*

The trigger that pulls us in is often **a vignette, an example, an opening story** -- the specific detail proves a general conclusion but not the reverse. – Kare Anderson

To build stronger regional institutional leaders, we need to bolster how we as individuals connect with one another – and that can start with a few actionable insights. It starts with your face.



**Develop a genial face.** If we're going to connect with people, we have to seem approachable, and we have to listen. – Kare Anderson

We can also design situations where we're more likely to connect.

- We can sit in circles or side by side rather than across from one another in a more confrontational and power based position.
- We can detach from our phone if for no other reason than preventing screen face. When someone looks up from their phone their face will typically project boredom, dismissiveness, or worse emotions.



**Brevity is very hard – steps across a pond. If you pull someone in with one thing they're more likely to listen to the next thing. So sequencing is very important.** – Kare Anderson

The more we can pull people in, the more successful we'll be. As communicators we need to be succinct and specific.

- Shut up sooner. When you're grounded in a conversation, and you're succinct, and you listen closely, and have a thread to the conversation, which is increasingly rare, you can listen closely and brevity matters a lot.
- Specificity gives you greater self-clarity, increases the chance someone will understand but not miss understand you, build credibility and memorability.
- When we are willing to choose our main message and get concrete then we're much more likely to pull people in.
- Curse of knowledge – when we know a lot we take longer to get to the point. It's hard to figure out the one key point that will motivate people

We need to work to build connections that are reciprocal and healthy.

- Deep relationships with unexpected allies around strong sweet spots of mutual benefit is the biggest source of adventure. It gives you luck and opportunity.
- The best thing you can do for another person is -- Tell them about a talent that you see in them that they may not be aware that they have.
- The capacity to bring out the better side in other people means they're more likely to see and support you.

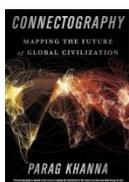
As a region we should think about the unexpected people that no one would ever think would care about water. We should say to them "This is why I think it would interest you," and, "This is an idea I had? Do you have a better one?" We need to pull in new unexpected allies.

## Links to Presentations

Kare's November 10<sup>th</sup> talk: <https://www.youtube.com/watch?v=l21ZQNVi1H>

Kare's TED talk on Opportunity makers: <https://www.google.com/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=kare%20anderson%20ted> to learn how we can become opportunity makers who (1) Keep honing their top strength, (2) Become pattern seekers, the get involved in other's worlds, (3) They communicate to connect around sweet spots of shared interest.

## Book & Article Recommendations



**Connectography: mapping the future of global civilization – Parag Khanna**



**How Social Media got Weaponized: war in the digital age – The Atlantic**

## A Regional Lifelines Council for Infrastructure Resilience

(3:45) Karen Mitchoff (Moderator), *Supervisor, Contra Costa County*  
Peter Ohtaki, *Councilmember, City of Menlo Park*  
Evermary Hickey, *Director of Preparedness, Pacific Gas & Electric*  
Sarah Gambill, *Department of Homeland Security, Office of Infrastructure & Recovery*  
Arrietta Chakos, *Policy Advisor, ABAG*

In 2014, ABAG's Executive Board and the RPC supported the formation of a Regional Lifelines Council to address vulnerabilities in the region's infrastructure systems. A "lifelines council" assists stakeholders in strengthening collaboration among local governments and public and private infrastructure utilities. Modeled after the successful San Francisco Lifelines Council, the Regional Lifelines Council membership would consist of executive officers and senior-level staff representing local government, joined by utilities that provide critical infrastructure services.

Through dialogue **the Council, establishes shared goals and creates a broad framework** to coordinate strategic action to improve the resilience of the Bay Area's utility infrastructure.

– Karen Mitchoff

### Challenges and opportunity for a Regional Lifelines Council

New coordination is never easy and the RPC Infrastructure Subcommittee has been clear that a regional council should coordinate with other efforts and not exhaust individual agency resources. There is recognition of the value of this body convening the diverse institutions as an effort to organize and translate information that already exists for sharing with regional decision makers.



We can **leverage** a lot of existing information. **Need to share regionally.** – Peter Ohtaki

Need to work on and grow all the great work happening in the region and state. **We should look to tap our collective resources.** – Arrietta Chakos

Tough balance between sharing information but recognizing security concerns. **It's not a hard problem, but it is real** and must be addressed. – Evermary Hickey

A Regional Lifelines Council is **an effective way for the national agencies to connect in the region.** – Sarah Gambill

The success of a Regional Lifelines Council—its ability to catalyze action—**depends on strong collaboration between city and utility decision makers.** The regional lifelines council is an initiative with a long track of support and development. – Arrietta Chakos

## Building Regional Resilience

(4:40) Linda Langston, *Director Strategic Relations, National Association of Counties*

My political career began with the headline, **Supervisor wins election but loses home.**

– Linda Langston

Earthquakes, floods, and fires each contain special nuance, but for cities, counties, and regions the challenge is always the same. How do we invest today to be better protected and prepared for tomorrow, and how do we make progress when resources are constrained?

The Bay Area is fortunate that it has owned the fact that there will be a next earthquake. It's rare to combat our human nature to think about today, and focus on future problems. For increased action to continue to address earthquake vulnerabilities and other new resilience challenges, the Bay Area region will have to align all the actors to move a new strategy forward. That all begins with setting common and clear goals.

ABAG is hugely important because you're **developing common goals.** – Linda Langston

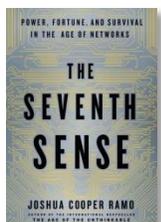
Communities that **set clear goals** will be able to better to push through the difficult challenges that they face in the aftermath after a disaster. – Linda Langston

Aligned leadership and common goals can pull communities through disasters, even when resources are constrained. In one example, a small town that had been nearly completely blown away by a disaster was able to persevere after years of effort and rebuild their community better. Despite that city only having one staff person to navigate the complex federal network of resources, the vision pushed the community forward.



They didn't realize she was the only staff, so she picked up the cat that sat on her desk and said, **"This is my staff!"** – Linda Langston

### Book & Article Recommendations



Seventh Sense: power, fortune, and survival in the age of networks – Joshua Cooper Ramo