History

- As long as people have tried to live in California’s arid regions, they have found moving and storing water to be essential for survival.

- Spanish missionaries and military colonizers built some of the first aqueducts in the state to capture and move water from fairly modest rivers, such as the Los Angeles River, to their missions to support their communities.

- After California became a state, much of the land in the San Joaquin Valley was initially used for ranching, but with the discovery of high-quality soil, and a new railroad offering access to markets all over the nation, there occurred a shift to farming.
History

• The enactment of the Wright Act of 1887 allowed farmers to create irrigation districts, which issued general obligation bonds to build infrastructure and then assess water delivery and property tax fees to pay off the value and interest of those bonds.

• Because of such districts, smaller scale farming was able to survive the early 20th Century in the Central Valley.
History

• Private or cooperative canal companies were established in the late 19th and early 20th centuries to supply water to farmers on land distant from natural water sources.

• Water was distributed according to priorities established under the doctrine of appropriative rights.

• By the 1920s, it was clear that even with irrigation districts, region-wide agriculture was unsustainable.
History

- Irrigation districts had trouble selling bonds to raise capital, and too many growers still relied on underground aquifers with rapidly falling water tables.
- In response, the state designed a plan to construct a large dam to capture much of the annual flow of the Sacramento River, build canals to ship the river’s water out of the San Joaquin-Sacramento River Delta and send it to farmers throughout much of the Central Valley.
History

• Ultimately, it fell to the federal government’s Bureau of Reclamation to build this system, now called the Central Valley Project (CVP), which expanded it to include another large dam on the San Joaquin River.

• Water captured behind Shasta and Friant dams was shipped to Valley farmers through the Delta-Mendota, Friant-Kern, and Madera canals making relatively sustainable agriculture possible.

• The state followed with its own massive infrastructure project centered around Oroville Dam on the Feather River and the California Aqueduct.
History

• The CVP and State Water Project (SWP), and their joint expansion with the San Luis Unit in the 1960s, were funded to a large extent by general obligation bonds and congressional appropriations with requirements that beneficiaries gradually repay the costs.

• By the 1970s, state and federal funding for water infrastructure development began to dry up.
History

• Today, it is questionable whether the federal government will follow through with their efforts to store more water by raising Shasta Dam on the Sacramento River.

• Coupled with the state’s decision not to fund the building of a new dam for more storage on the San Joaquin River at Temperance Flat, coupled with a new emphasis on building and preserving groundwater supplies, the infrastructure focus has turned back to local water agencies and utilities.
History

• The 2014 State Groundwater Management Act (SGMA) only accelerates this shift in priorities.

• Unfortunately, it is much harder for local agencies to coordinate the building of large infrastructure projects, nor do most have the financial resources to pay for them.

• The user fees that many local water agencies have tried to rely on for support are inadequate to finance the maintenance and repair of the aging infrastructure they already have.
History

• In California, most water infrastructure is funded by local government agencies, but restrictions placed in the state constitution by voters, most notably Propositions 13 and 218, place severe limits on their ability to fund the maintenance of existing structures or build anything new.

• For local water agencies to be able to cope with the future, which climate change makes even more unpredictable, some form of broad, equitable, and sustainable funding mechanism and governance structure needs to be developed.
History

• California’s Little Hoover Commission in 2010 said that without a radical re-design at the local level, the state has no hope of solving its water problems.

• Funding for building and maintaining water infrastructure, big and small, will most likely have to be raised by public agencies now and into the future.

• The question is how do they do that?
General Obligation And Revenue Bonds

• Funding for building and maintaining water infrastructure, big and small, will most likely have to be raised by public agencies now and into the future by issuing “general obligation bonds.”

• These investments provide public agencies with the capital they need to build infrastructure projects.

• Government backed bonds have always been popular with investors because the interest income is guaranteed and, very often, tax-exempt.
General Obligation And Revenue Bonds

• This has benefitted the public sector as well, because bonds can be issued at lower interest rates, sometimes as low as 4%, and still attract investors.

• Paying off the debt incurred by the bonds has generally sat well with government officials and most voters because of the “public good” nature of the water infrastructure built with bond revenue.
General Obligation And Revenue Bonds

• Unfortunately, general obligation bonds have proven so popular that they have arguably been over-used as a financing vehicle.

• Between 2000 and 2018, California voters approved eight general obligation bond issuances supporting water infrastructure, totaling about $24 billion.

• The rejection of a ninth bond, Proposition 3 in 2018, suggests that voters’ comfort with growing state debt because of water may be waning.
General Obligation And Revenue Bonds

• Organized environmental interests have also raised concerns that using bonds means the public is subsidizing wealthy farmers who can afford to pay more of their fair share.

• Moreover, the state has such a large debt obligation to pay now that other spending priorities and pension obligations cannot be easily met.
Financing

• Without bonds or support from the state or federal governments, there are really only four practical sources of revenue for local agencies to use for water infrastructure: fees, taxes, fines, and local bonds which are just loans that need to be paid back with interest.

• Fines are a politically unpalatable and unstable source of revenue, so the focus here is on taxes and fees, as well as ways of involving the private sector in financing.
Financing

• Given that water fees are often some of the lowest utility bills that consumers pay in the United States, there is a strong argument to be made that water pricing can be used more aggressively to rebuild infrastructure and reduce the demand for water.

• Proposition 218 limits may exist on the degree to which such user fees can be imposed, but there may also be enough flexibility in those restrictions to make it work.
Public Private Partnerships

• Public-private partnerships can be the solution to financing water infrastructure, so much so that even the California Department of Water Resources advocated such approaches in its 2013 Water Plan Update.

• While such projects involve some degree of private sector business participation, they only account for 15% of all public sector infrastructure projects.

• They are widely used in other developed nations such as Canada, Australia, Spain, Italy and the United Kingdom.

• In California, though, very few water infrastructure projects can be truly labeled as public-private partnerships, though the desalination plant built in Carlsbad is one.
Parcel Tax

• While Proposition 13 limits the assessment of taxes on the value of property, the parcel tax is a flat-tax merely assessed on the ownership of property.

• In other words, all property is assessed at the same rate (usually per square foot) regardless of how much property is owned or what is done with the property to increase its value.

• Many unincorporated rural communities have successfully used parcel taxes to fund school construction, maintain fire and police services, and even use the revenue for parks and libraries.
Parcel Tax

• A parcel tax requires the approval of two-thirds of all voters in the jurisdiction to be assessed, which can be a high bar.

• Nonetheless, between 2002 and 2012, about 700 parcel tax measures went on to local ballots and over half were passed.
California Taxes

• Generally, local taxes in California are of two types, general and special, and this affects how they are imposed and what they can be used for.

• A general tax can be imposed on people within a geographic area, provided that a majority of them have voted for it, and the revenue raised can be used for most any purpose, including infrastructure.

• The downside for public officials hoping to use this revenue for infrastructure is that its unrestricted nature may concern voters that the proceeds will be spent on other priorities.
California Taxes

• Two safeguards which have reduced concern for the public are an oversight committee and a date the tax will terminate.

• Alternatively, special taxes may be raised and used for specific projects, such as financing water infrastructure, but the voter threshold for such targeted taxes is two-thirds.
MEASURE K REVENUE PROJECTIONS

FUTURE PROJECTED REVENUE

- 2016: $52 M
- 2020: $61 M
- 2025: $77 M
- 2030: $96 M
- 2035: $120 M
- 2040: $149 M
Estimated Sales Tax Revenue 2021-50

• $3,954 B
• More realistic estimate is between $3B and $4B
## County-Wide Water Resource Projects

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<th>Project Type</th>
<th>Number of Projects</th>
<th>Yield/Benefit (KAF/YR)</th>
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Process For Implementation Of Sales Tax

• Water Advisory Commission
• Groundwater Authority
• SJAFCA
• Develop a Plan
• Move Forward?

Step 1
Advisory Water Commission
Step 2
ESJGW A
Step 3
SJAFCA
Step 4
Develop a Plan
Step 5
Move Forward?
QUESTIONS?