The meeting teleconference will begin shortly

Listen to the meeting by using your computer or tablet speakers or by calling (877) 853-5247 using meeting ID 831-755-936-63

View the live meeting presentation at https://us04web.zoom.us/j/684456030

Public comments, suggestions or questions regarding technical issues may be emailed to comments@sbvmwd.com

Please use the chat feature in the Zoom toolbar to let the moderator know that you would like to make a comment during the meeting.

Your microphone will be muted during the meeting to reduce background noise. Click on the microphone icon to unmute your microphone if needed.
Call to Order

Board of Directors Workshop - Policy
Thursday, May 14, 2020

Chairperson – Director Longville
Vice-Chair – Director Kielhold
Introductions

Following the introduction of Directors and District staff, participants may use this time to state their name and agency/affiliation in order to be included in the formal record of attendees.
Public Comment

Any person may address the Board on matters within its jurisdiction.

• Please use the chat feature on the Zoom toolbar or digitally raise your hand to let the moderator know you would like to make a comment.
Summary of Previous Meeting (Pg. 3)

Board of Directors Workshop – Policy – April 9, 2020
Recognizing and Addressing the Potential for Long-Term Drought in California

Staff Recommendation
Receive and file.
What is drought?

Science. Vol 368, Issue 6488, 17 April 2020
Empty reservoir, Lake Cachuma near Santa Barbara
Drought Bucket Model Equation

\[ P - E = \frac{dS}{dt} + R_o + G_w \]

Precipitation – Evapotranspiration = Soil Moisture Storage + Runoff + Groundwater

How do we know the value of these variables in the future? Can we predict drought?
Climate Conditions Drive Weather Patterns

- Carbon dioxide is a **greenhouse gas**: a gas that absorbs and radiates heat
- Increased levels in CO$_2$ atmosphere increases global temperature (Heat)
- Increased Heat Causes Increased Evapotranspiration which changes Precipitation Patterns (weather) around the Globe
- Drought Arises from Condition of **Shortage of Precipitation** or **Excess Evapotranspiration**.
The annual rate of increase in atmospheric carbon dioxide over the past 60 years is about 100 times faster than previous natural increases (@ end of the last ice age 11,000-17,000 years ago).

The last time the atmospheric CO₂ amounts were this high was more than 3 million years ago, when temperature was 2°–3°C (3.6°–5.4°F) higher.
CO₂ levels are High and Rising.

Q: What does this mean for humans? A: Weather will become more extreme and variable.

- Increased intensity and duration of heat waves
- Longer, drier, periods in some areas with longer wet periods in others
- Increased frequency and intensity of wildfire
- Increased duration and frequency of hurricanes and monsoons
- Increased ocean temperature, which influences weather patterns
- Melting polar ice, sea level rise
Weather vs. Climate

- Weather refers to atmospheric conditions that occur locally over short periods of time. Ex: rain, snow, clouds, winds, floods or thunderstorms.

- Climate refers to the long-term regional or even global average of temperature, humidity and rainfall patterns over seasons, years or decades.

- Climate is a driver of Global Weather Patterns.
Changes in Precipitation Patterns

- General circulation of atmosphere delivers moisture from the oceans to land.
- Large atmospheric disruptions caused by ocean temperatures and currents (e.g. El Niño, La Niña)
- Hotter temperatures demand more from land surface
- Drought indices depict unprecedented drying throughout much of US
- Megadrought Lasting Decades Is 99% Certain in American Southwest
- Climate history is embedded in long tree-ring chronologies.

- Narrow rings in trees of semiarid climates indicate hot, dry summers.

- Megadroughts were extremely rare phenomena occurring only once or twice per millennium.

- Megadrought of late 1500s worst multidecadal drought in 1200 years

- Second worst event: 2000 – 2018 in American Southwest

Annual tree-ring sequence reveals reduced growth of a Douglas fir in California during the late 16th-century megadrought.
Maps of megadrought risk for the American Southwest under different levels of warming, and the required increase in precipitation to compensate for that warming. (A to C)

Citation: Relative impacts of mitigation, temperature, and precipitation on 21st-century megadrought risk in the American Southwest
BY TOBY R. AULT, JUSTIN S. MANKIN, BENJAMIN I. COOK, JASON E. SMERDON
SCIENCE ADVANCES05 OCT 2016 : E1600873
Climate change alters the balance of moisture throughout the world.

“If you are a water resource manager and you remember just one thing from this review, it should be this --- cutting CO2 emissions reduces drought risk.” Toby Ault, Essentials of Drought.
Maintaining and restoring groundwater levels are becoming even more important as surface flow from precipitation and snow melt become less dependable with climate change.

- Recharge is only one part of the equation and is variable due to weather patterns (in both Northern and Southern California)
- Reduced demand (groundwater pumping) must be part of the solution.
- Innovation and progressive whole-basin management is key.
Protect our Headwater Supply:

- Forests provide water to 90 per cent of the world’s most populous cities.

- Forests also provide other essential water services like drinking water, flood control, hydroelectricity, fishing and recreational opportunities.

- When rainstorms follow large and severe wildfires, they tend to flush ash, nutrients, heavy metals and toxins, and sediments into streams and rivers.
Invest in Science & Planning:

RAND STUDY:

- Part I: Estimated Future Demand in 2018 Study
  - Evaluated drivers of demand (population, water use, behavior etc.)
  - If temperature and population growth increase to high end of estimated range then demand could reach estimated supply
  - If WUE is not included, plausible demand could slightly exceed current supply projection with our “Reliability Factor”, in abnormal (i.e. dry) years.

- Part II: Examining Supplies incorporating Climate Change
  - Exaggerating historical droughts to increase their duration and intensity.
  - Modeling a 10-year drought, 20-year drought, and a 30-year drought.
  - Applying change factors from climate models to the drought periods to scale them up and down in terms of intensity
Statewide Strategies & Collaboration:

- Climate pressures affect all aspects of California water management:
  - warming temperatures,
  - shrinking snowpack,
  - shorter and more intense wet seasons
  - volatile precipitation
  - rising seas.

- The water grid is not prepared to handle a more volatile climate.

- Strategic investments can reduce the impacts from droughts and floods (increased storage and transmission facilities)

- Rethinking infrastructure operations can also help reduce climate change impacts.

- Reliable sources of funding are needed to make the water system climate-ready


Staff Recommendation
Receive and file.
Discussion Item 5.1 (Pg. 10)

Cindy Saks, Deputy General Manager – Administration

PFM Asset Management Market Update

Staff Recommendation
Receive and file.
Market Update

Market Update Week of May 4, 2020

Prepared by the PFM Asset Management LLC
Due to Relaxed Social Distancing, U.S. Death Projections Rise

**Total Deaths**

*Total COVID-19 deaths projected to August 4, 2020 in the U.S.: 134,475*

**Deaths per day**

*Peak count of daily deaths was on April 15, 2020 with 2,693 COVID-19 deaths*

Initial Jobless Claims Exceed 30 Million

Initial Jobless Claims

 Thousands

0 1,000 2,000 3,000 4,000 5,000 6,000 7,000 8,000


3/27/2020 6,867
4/3/2020 6,615
4/10/2020 5,237
4/17/2020 4,442
4/24/2020 3,839
3/20/2020 3,307

30,307,000

Total Jobless Claims since the week ended March 20

Previous all-time high

Peak during the Great Recession

Source: Bloomberg, as of 5/04/2020. Data is seasonally adjusted.
Q1 U.S. GDP Falls 4.8% as COVID-19 Lockdown Weighs on Growth

U.S. GDP Contributors and Detractors

Personal Consumption, Fixed Investment, Private Inventories, Net Exports, Gov’t Expenditures

Q1 U.S. GDP Falls 4.8% as COVID-19 Lockdown Weighs on Growth

Source: Bureau of Economic Analysis.

© PFM
Congress Providing Fiscal Stimulus to the Economy

Coronavirus Aid, Relief, and Economic Security (CARES) Act

- Household payments: $301 billion
- Unemployment insurance: $250 billion
- Tax deferrals and extended deadlines: $221 billion
- Aid to states: $150 billion
- Loans to businesses: $454 billion
- Small business loans: $349 billion
- Airline, cargo carrier: $29 billion
- Public transit: $25 billion
- Economic injury disaster loans and grants: $60 billion
- Small, midsize and community lenders: $60 billion
- Hospitals and veteran’s care: $117 billion
- Paycheck Protection Program: $310 billion authorized
- Hospitals: $75 billion
- COVID-19 testing: $25 billion

Federal Reserve Broadens Tool Kit to Support Markets

- **Zero Interest Rates**
  - Cut rates by 150 bps at two emergency meetings in March

- **Asset Purchase Programs**
  - Unlimited Treasury and agency MBS purchases

- **Repurchase Agreements**
  - Increased amount and term options to primary dealers

- **Discount Window**
  - Decreased rate and extended term of loans

- **Bank Regulatory Relief**
  - Lowered reserve requirement to 0; capital & liquidity flexibility

- **Liquidity Support**
  - Funding for CP, ABS, MMFs, corporate bonds and more

- **U.S. Dollar Swap Lines**
  - Increased access to U.S. dollars to foreign central banks

- **Paycheck Protection Program**
  - Support for financial institutions issuing PPP loans

- **Main Street Lending Program**
  - Purchasing loans to small- and mid-size businesses

*Source: Federal Reserve, as of 5/04/2020.*
Powell Reiterates Commitment to Support Economy and Markets

"I would say we have a number of dimensions on which we can still provide support to the economy, as you know our credit policies are not subject to specific dollar limit. They can be expanded, and we can do new ones."

"Let me just say we are going to not be in any hurry to withdraw these measures or lift off. We are going to wait until we are quite confident that the economy is well on the road to recovery."

"We are going to be very patient, that means we are not going to be in any hurry to move rates up."

*Message: Rates likely at zero through 2021*

Source: Federal Reserve Bank, as of 4/29/20.
CBO Projections of Key Economic Variables

Real GDP (annualized rate)

Unemployment Rate

Federal Deficit

Debt Held by Public as % of GDP

Source: Congressional Budget Office, as of 5/04/2020. *Average for year. **Actual results.
Treasury Yields Fall to New Lows

2-Year Treasury Yield

10-Year Treasury Yield

Source: Bloomberg, as of 5/04/2020.
Corporate Spreads Normalize Amid Fed Stimulus

Corporate Yield Spreads
1-5 Year A-AAA (OAS)

Source: Bloomberg, as of 5/04/20. Recession period derive from the National Bureau of Economic Research (NBER) based recession indicators.
Rating Downgrades Likely to Accelerate, Focused in High Yield

Moody's Quarterly Ratings Changes

- Upgrades (IG)
- Upgrades (HY)
- Downgrades (IG)
- Downgrades (HY)
- Net

Source: Bloomberg, as of 4/29/20.
Stocks Rally But Remain Down From February Highs

S&P Price Change

Source: Bloomberg, as of 5/04/2020.

Peak-to-trough -34%
Rebound +27%

2017 close
2018 close
2019 close

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Director Comments and Discussion

Staff Recommendation
Receive and file.
Consider Establishment of Specific Committees to Facilitate District Negotiation on Key Issues

Staff Recommendation
Discuss the recommended Committees and provide direction to Staff on how to proceed.
71300. All powers, privileges, and duties of a district shall be exercised and performed by the board. (Added by Stats. 1963, Ch. 156.)

71301. Any executive, administrative, and ministerial powers may be delegated and redelegated by the board to any of the offices created by this part or by the board. (Added by Stats. 1963, Ch. 156.)

71305. The board may create any necessary offices and establish and re-establish the powers, duties, and compensation of all officers and employees.
Board Handbook
Policy Guidelines

- The Board provides policy direction and leadership for the District
- The Board exercises authority collectively as a Board
- The Board seeks to provide leadership in local, regional, state, and national issues that have relevance on the operations of the District and the communities of interest
- The President appoints all committees – standing and Ad Hoc
- The President may create a new committee or abolish an existing committee with majority approval of the Board
- Any member of the Board may propose the establishment or abolition of a committee at a Board Workshop to ascertain whether a majority of the Board agrees
- Committee The President coordinate the efforts of the committees, integrates committee work with that of the Board and defines committee relationships
Propose Specific Committees

**AD HOC COMMITTEE**
- Exists for a specific purpose
- Once that purpose or objective is achieved the Committee dissolves

**STANDING COMMITTEE**
- Longer period of service so that members can invest time and effort to build relationships and grow expertise in the subject matter. Recommended 2-year terms
Proposed Ad Hoc Committees

SAN GORGONIO PASS WATER AGENCY AND YUCAIPA VALLEY WATER DISTRICT AGREEMENT(S)

- Resolve various issues related to long-term water supply reliability and cost in the region
- Ad Hoc would facilitate Board-level discussion amongst the agencies to come to agreement on how to collaborate in the future
Ad Hoc Committees

FOREST HEADWATERS RESILIENCY PARTNERSHIP WITH THE SAN BERNARDINO NATIONAL FOREST

- Facilitate conversations with San Bernardino National Forest leadership on potential measures to protect and promote resilience of our headwaters located on the Forest

- Identify opportunities to partner on a local-state-federal level to facilitate and implement proactive forest management activities that reduce risk of catastrophic megafire and damage to the important ecosystems of the headwaters
Proposed Standing Committee

LEGISLATIVE ACTION TEAM

- Proposed as a standing Committee with a two-year term
- Members would work closely with Staff and lobbyists to establish legislative priorities
- Members would participate in meetings with legislators in the district, Sacramento, and Washington D.C., as needed
Goals

- Demonstrate District commitment to an issue early and receive Board-level feedback throughout discussions with partners and legislators
- Advance conversations more quickly and progress through negotiations
- Provide opportunities for focused discussions on complicated topics
- Promote development of strong relationships with partner agencies and elected officials
Director Comments and Discussion

Staff Recommendation
Discuss the recommended Committees and provide direction to Staff on how to proceed.
Discussion Item 5.3

Kristeen Farlow, Manager of Water Use Efficiency/External Affairs

Discuss Legislative Program Update

Staff Recommendation
Receive and file.
State Legislative Highlights

SCHEDULE

Assembly returned week of May 4
Senate returned week of May 11
Budget Deadline is June 15
Deadline to get Measures on November ballot is June 25
State Legislative Highlights (cont.)

OTHER LEGISLATION: ASSEMBLY

AB 3256 – Wildfire Prevention, Safe Drinking Water, Climate Resilience, Drought Preparation, and Flood Protection Bond Act of 2020

SENATE

SB 1052 – Water quality: municipal wastewater agencies

SB 1188 – Updates to the California Water Plan
OTHER

Estimated $54.3 billion budget deficit

Water Resilience Financing Act of 2020
Federal Legislative Highlights

TIMELINE

- Pro Forma Sessions
- Senate reconvened the week of May 4
- House has no date for return
Federal Legislative Highlights

LEGISLATION

COVID-related:

- HR 6525 – the Reopen America Act of 2020
Federal Highlights (cont.)

DRAFT BILLS FROM THE SENATE ENVIRONMENT AND PUBLIC WORKS COMMITTEE

- America’s Water Infrastructure Act of 2020
  - $17 billion
  - Goal for Army Corp of Engineers

- Drinking Water Infrastructure Act of 2020
  - $2.5 billion
Federal Highlights (cont.)

- Revised Waters of the U.S. (April 21 update)
- FUTURE Drought Act (Huffman)
- Negotiations for 2021 Appropriations
Director Comments and Discussion

Staff Recommendation
Receive and file.
Adjournment