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 979 215 700

View the live meeting presentation at https://sbvmwd.zoom.us/j/979215700
PASSCODE: 3802020

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 or use the digital "raise hand" b function in Zoom.



Please mute your microphone during the meeting to reduce background noise. Click on the microphone icon to unmute your microphone if needed.



NOTICE REGARDING (COVID-19)

Before we begin, the record will reflect that pursuant to the provisions of Executive Order N-29-20 issued by Governor Gavin Newsom on March 19, 2020, this meeting will be conducted by teleconference only.



Call to Order

Board of Directors Workshop - Resources Thursday, August 5, 2021

Chairperson – Director Hayes Vice-Chair – Director Harrison



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 – Resources – July 1, 2021



Discussion Item 4.1 (Pg. 9)

Bob Tincher, PE, MS - Chief Water Resources Officer/Deputy GM

Updated Cost Estimate for Sites Reservoir

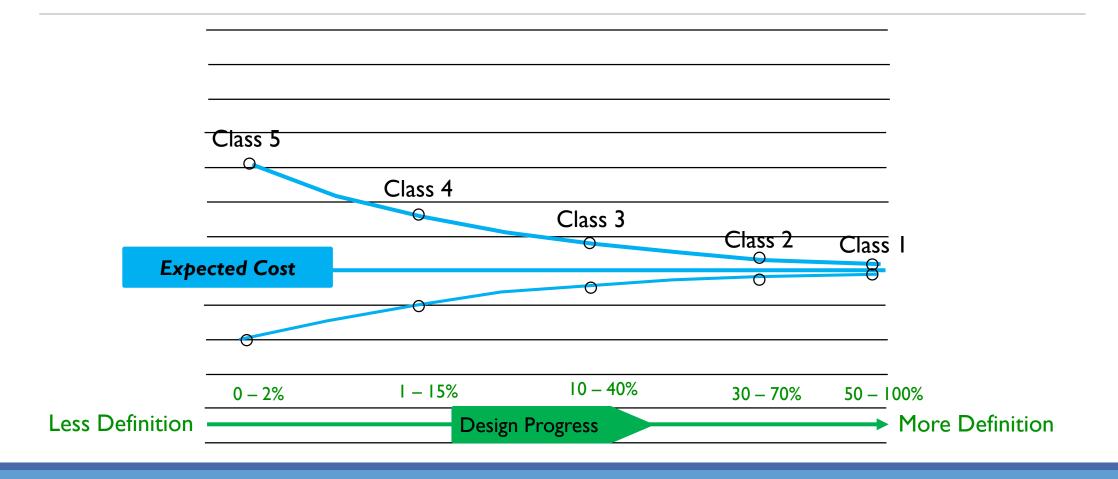
Staff Recommendation

Receive and File



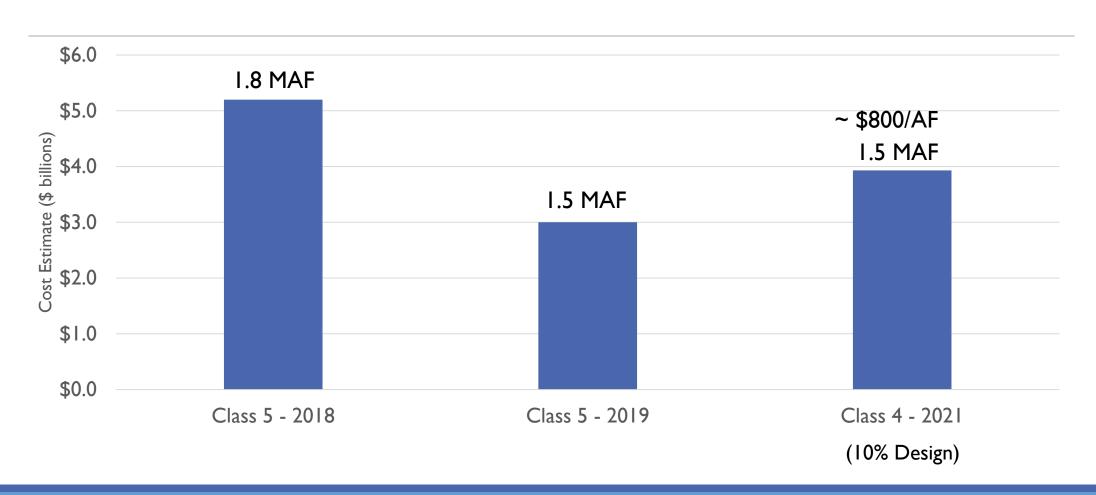


Cost Estimate – Refinement Over Time



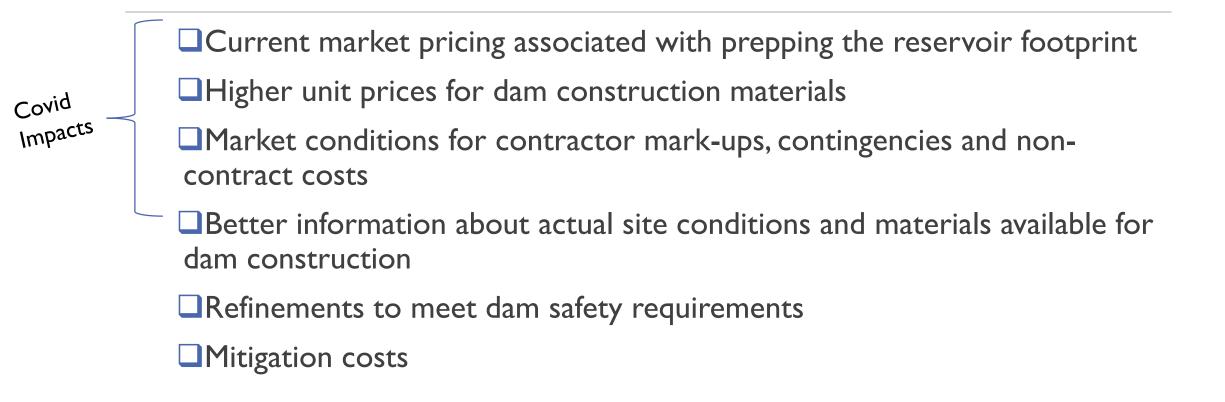


Sites Cost Estimate Changes, Over Time



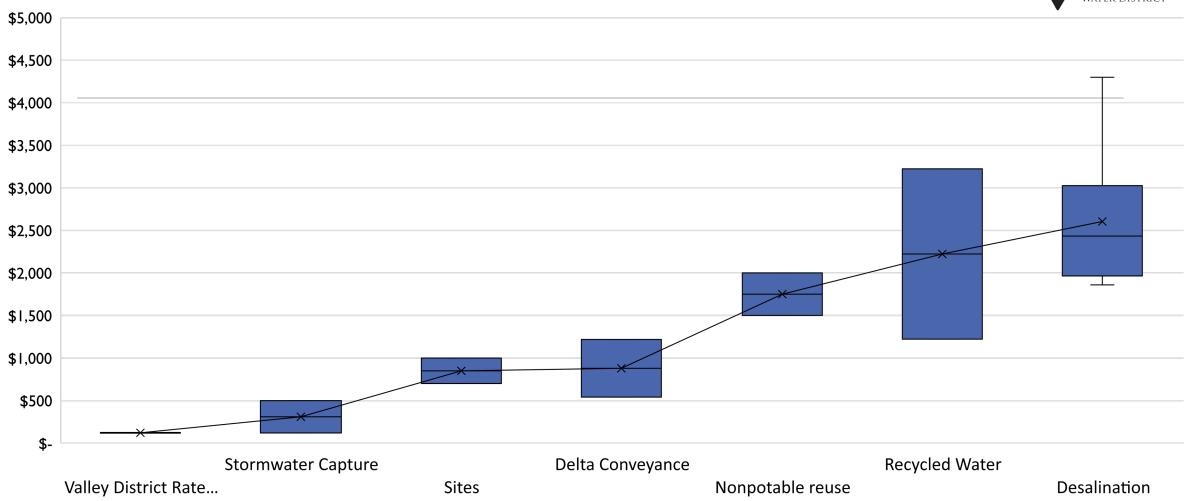


Factors Contributing to Change in Cost Estimate



New Water Supply Costs, \$/acre-foot





<u>CA Water Fix vs. Alternative Supplies</u>, Metropolitan Water District of Southern California, 8/10/17 <u>Executive Summary The Cost of Alternative Water Supply and Efficiency Options in California</u>, Pacific Institute, October 2016



Director Comments and Discussion



Paul Kielhold
President



June Hayes
Vice President



T. Milford Harrison Treasurer



Gil J. Botello
Director



Susan Longville
Director

Staff Recommendation

Receive and File



Discussion Item 4.2 (Pg. 14)

Joanna Gibson, MS – Executive Director Upper SAR HCP Program

Presentation on 2019 Section 6 Habitat Conservation Planning Grant: Development of the Upper Santa Ana River HCP Long Term Monitoring and Adaptive Management Program

Staff Recommendation

Receive and file.



Upper SAR HCP Long-Term Management Plan

- Requirement of Incidental Take Permit (ITP)
- Need for robust, landscape-scale plan:
 - Planning Area (863,000 acres)
 - Multiple habitat types, species
 - Track and verify estimated impacts and conservation benefits from predictive tools (modeling)
 - Require expertise from multi-disciplinary team
- Planning Assistance funding, Section 6 Cooperative Endangered Species Act Conservation Fund.
 - Planning assistance funds can only be used pre-HCP finalization



Comprehensive Adaptive Management and Monitoring Plan (CAMMP)

- 2019 Application for Planning Assistance Funds
- Objective:
 - Develop a long-term monitoring and adaptive management program
 - Landscape-scale, strategic approach to verify and track project effects, conservation benefits identified using predictive tools
 - Hydrology
 - Sediment transport
 - Surface Groundwater interaction
 - Fully integrated monitoring and adaptive management: management driven by monitoring data



Comprehensive Adaptive Management and Monitoring Plan (CAMMP)

- Tasks
 - Task I: Development of Integrated Strategy
 - Task 2: Development of the Long-Term Monitoring and Adaptive Management Plan ~
 CAMMP
 - Task 3: Develop database and web-based reporting platform

Year	Program Component	Grant Amount		Matching Funds	
2014	HCP Development	\$	635,345.00	\$	965,969.00
2015	Native Fishes Surveys	\$	119,963.00	\$	238,636.00
2017	SAR Integrated Model	\$	996,621.00	\$	904,783.00
2019	Long-Term Monitoring & Managment Program	\$	875,000.00	\$	875,000.00
	TOTAL	\$	2,626,929.00	\$	2,984,388.00

- Awarded grant term:
 - August I 2020 August I, 2021

FINAL • FEBRUARY 2021

Upper Santa Ana River Habitat Conservation Plan Comprehensive Adaptive Management and Monitoring Program Strategy









PREPARED FOR

San Bernardino Valley Municipal Water District 380 East Vanderbilt Way San Bernardino, CA 92408

PREPARED BY

Stillwater Sciences 555 5th Street, 35th Floor Los Angeles, CA 90013

ICF 980 9th

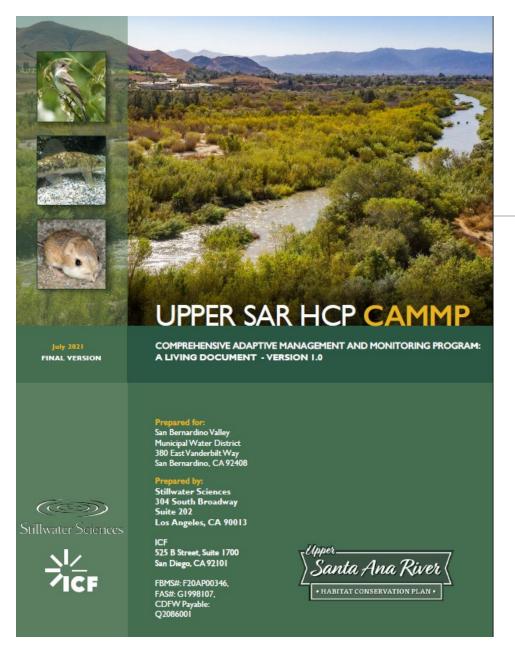
980 9th St, Suite 1200 / ICF Sacramento, CA 95814

Stillwater Sciences



CAMMPTEAM

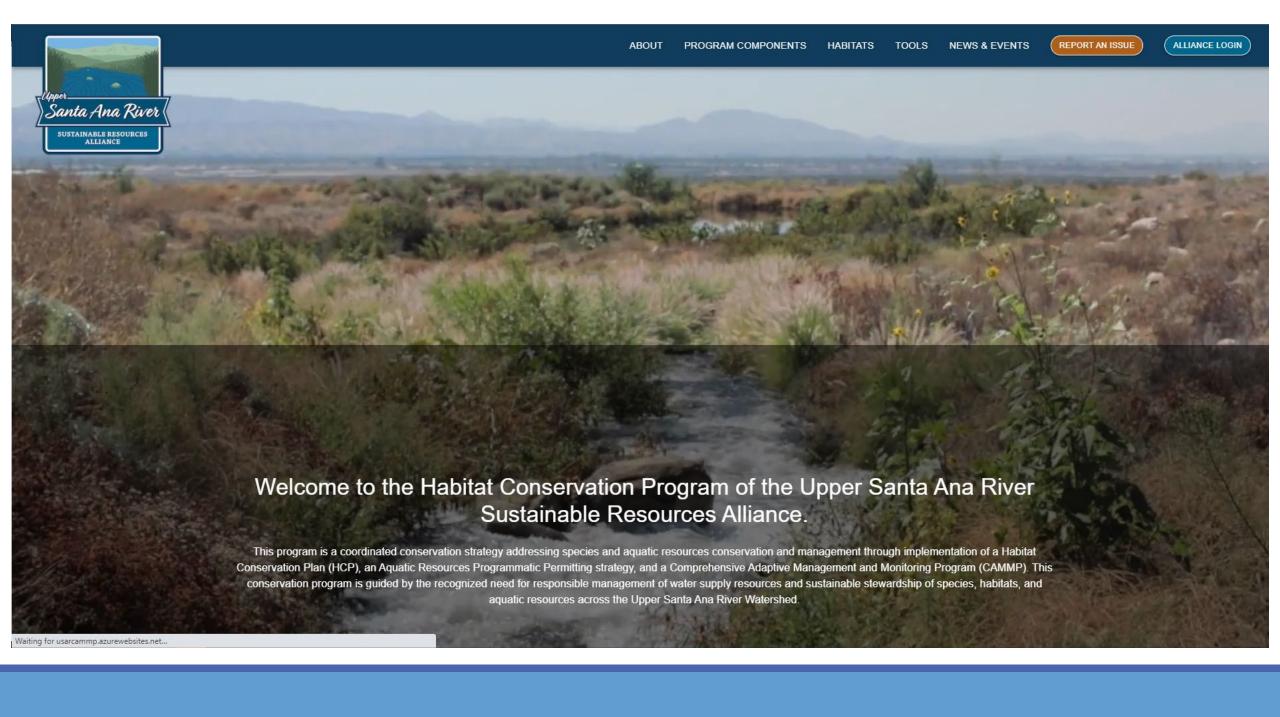
- Stillwater Sciences
- ICF
- Balleau Groundwater
- Blue Octal
- California Botanic Garden
- Geoscience
- San Diego Zoo
- SAWA
- UC Riverside
- USGS
- Western Foundation of Vertebrate Biology





CAMMP

- Preserve stewardship, monitoring, management
- Physical processes monitoring and management
- Habitat monitoring and management
- Species monitoring and management
- Covered Activity consistency





Director Comments and Discussion



Paul Kielhold
President



June Hayes
Vice President



T. Milford Harrison Treasurer



Gil J. Botello
Director



Susan Longville
Director

Staff Recommendation

Receive and file



Discussion Item 4.3 (Pg. 14)

Joanna Gibson, MS – Executive Director Upper SAR HCP Program

Consider Technical Assistance Agreement with United States Geological Survey Western Ecological Research Center for Fiscal Year 2021 - 2022

Staff Recommendation

Staff recommends the Board direct staff to place the proposed Technical Assistance Agreement with the USGS Western Ecological Research Center for FY 2021-2022 on a future Board of Director's meeting for consideration.



TAA with UGSG WERC, FY 21-22

➤ Studies and scientific review to support Upper SAR HCP (and CAMMP)

Tasks:

- I. Updated population survey for Santa Ana speckled dace
 - Expand on efforts conducted in 2020
- 2. Mountain yellow-legged frog conservation actions in SAR watershed (specifically SBNF)
 - Provide support to efforts in SBNF, within Upper HCP Planning Area
- 3. Technical support: HCP and CAMMP



TAA with UGSG WERC, FY 20-21

Tasks:

- I. Santa Ana Sucker Genetics
- 2. Draft Santa Ana Sucker Genetics Management Plan
- 3. Mountain yellow-legged Frog Translocation in SAR Watershed
- 4. Mountain Yellow-legged Frog eDNA Monitoring Technique Study
- 5. Western Spadefoot: Updated Population Survey within Upper SAR HCP Planning Area
- 6. Santa Ana Speckled Dace: Updated Population Survey within Upper SAR HCP Planning Area
- 7. Western Pond Turtle: Updated Population Survey within the Upper SAR HCP Planning Area



Task I. Updated population survey for Santa Ana Speckled Dace

- Current and historic distribution maps
- ➤ Define local distribution
 - Establish presence/absence
 - ➤ Demographics
 - ➤ Suitable habitat
 - ➤ Genetic samples
 - ➤ Threat assessment



Task 2. Mountain Yellow-legged Frog Conservation Actions

- ➤ Critically endangered
- ➤ Declined from 99% of historic range
- ➤ Nine populations in Southern California, one within HCP Planning Area
- ➤ Reintroduction from captive breeding program
- ≥2020 survey results:
 - ➤ Positive results: Ist year tadpoles, subadults, adults

- Survey types:
 - ➤ Monitoring
 - > Habitat suitability assessments
 - ➤ MYLF releases
 - ➢ One location in Upper SAR HCP Plan Area
 - ➤ Demographics
 - ➤ Distribution
 - ➤ Population size
- ➤ Additional Data Collection:
 - ➤ Disease, water quality, habitat parameters, site disturbances
 - ➤ Assessment of additional sites for potential release



Task 3. Technical Support

- > HCP and CAMMP
 - > Peer review of monitoring, adaptive management
 - > Species profiles
 - Short- and long-term monitoring techniques and methodologies
 - ➤ Data Analysis
 - Management actions
- > Regional Integration
 - Leverage existing knowledge



Fiscal Impact:

- ➤ Total Cost: \$186,093
 - USGS: \$84,000 (34%)
 - Valley District: \$122,093 (66%)
 - > HCP Partners: \$73,256 (60%)
 - Valley District: \$48,837 (40%)
- ➤Included in approved FY 21/22 budget (Line Item 6350 United States Geological Survey)

FY20-22

Total Cost: \$527,485

- ➤ USGS: \$247,815; Valley District: \$279,670
 - > HCP Partners: \$167,802; Valley District: \$111,868



Director Comments and Discussion



Paul Kielhold
President



June Hayes
Vice President



T. Milford
Harrison
Treasurer



Gil J. Botello
Director



Susan Longville
Director

Staff Recommendation

Staff recommends the Board direct staff to place the proposed Technical Assistance Agreement with the USGS Western Ecological Research Center for FY 2021-2022 on a future Board of Director's meeting for consideration.



Future Business



Adjournment