



Implementing Committee

March 19, 2020



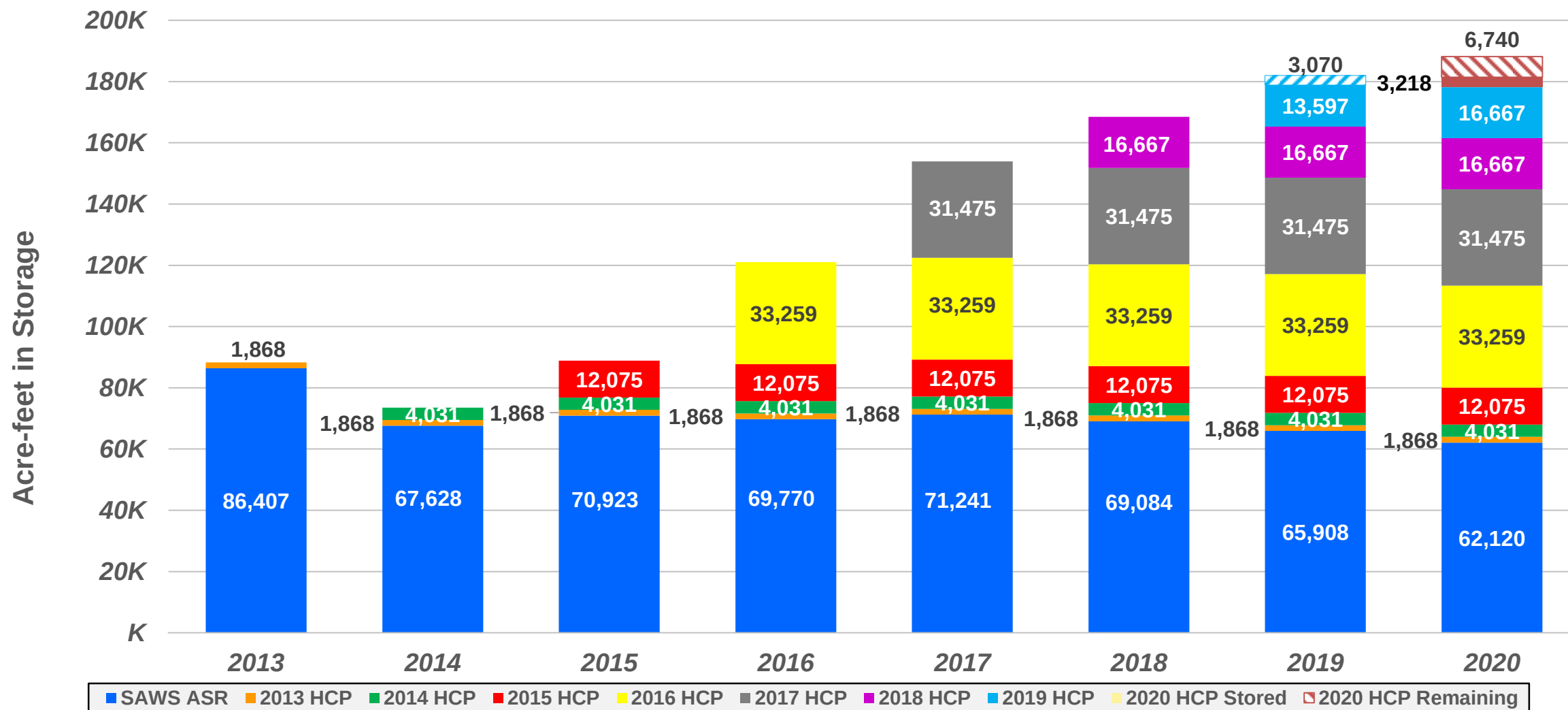
Hydrologic update



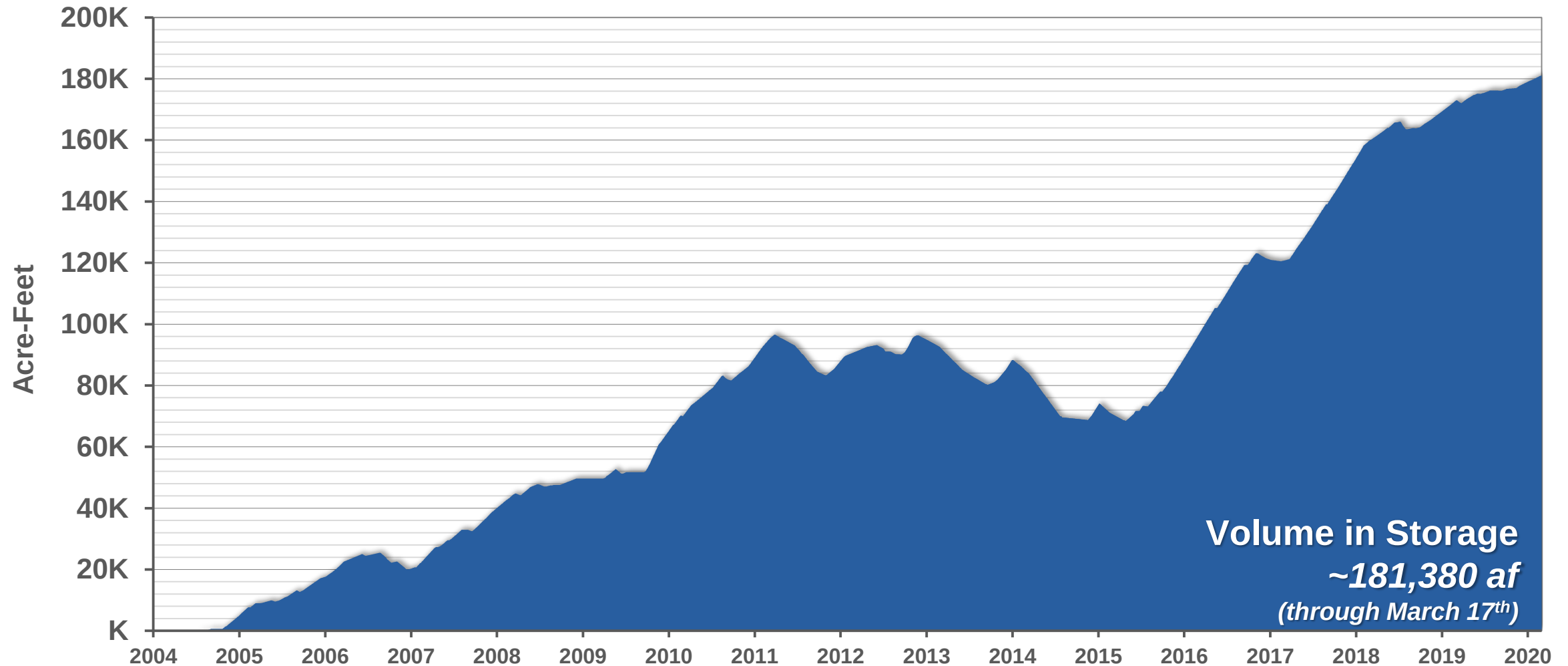


ASR Update

EAHCP ASR Recharge

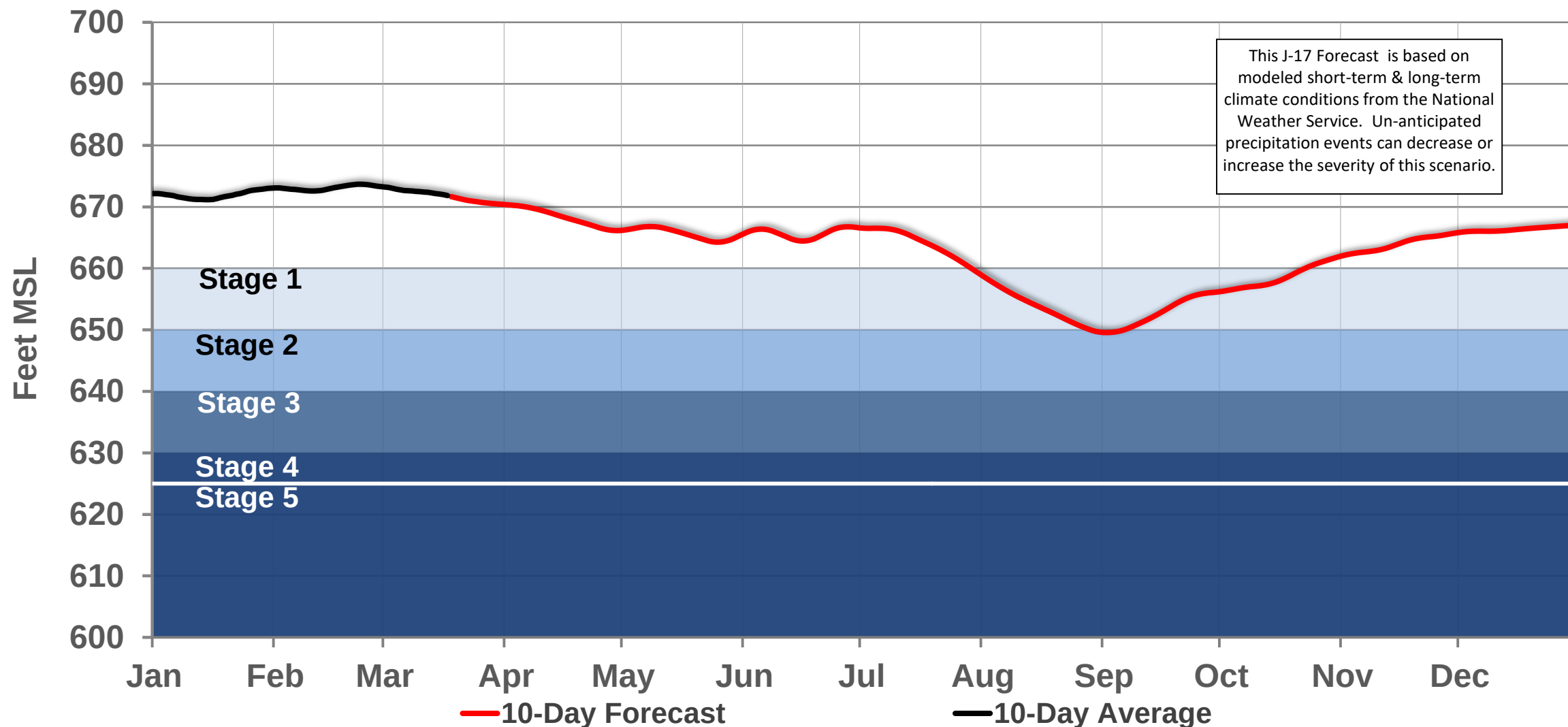


SAWS ASR Total Storage



Source: San Antonio Water System

2020 J-17 10-Day Average Forecast



Questions?



EAHCP Program Management Announcements

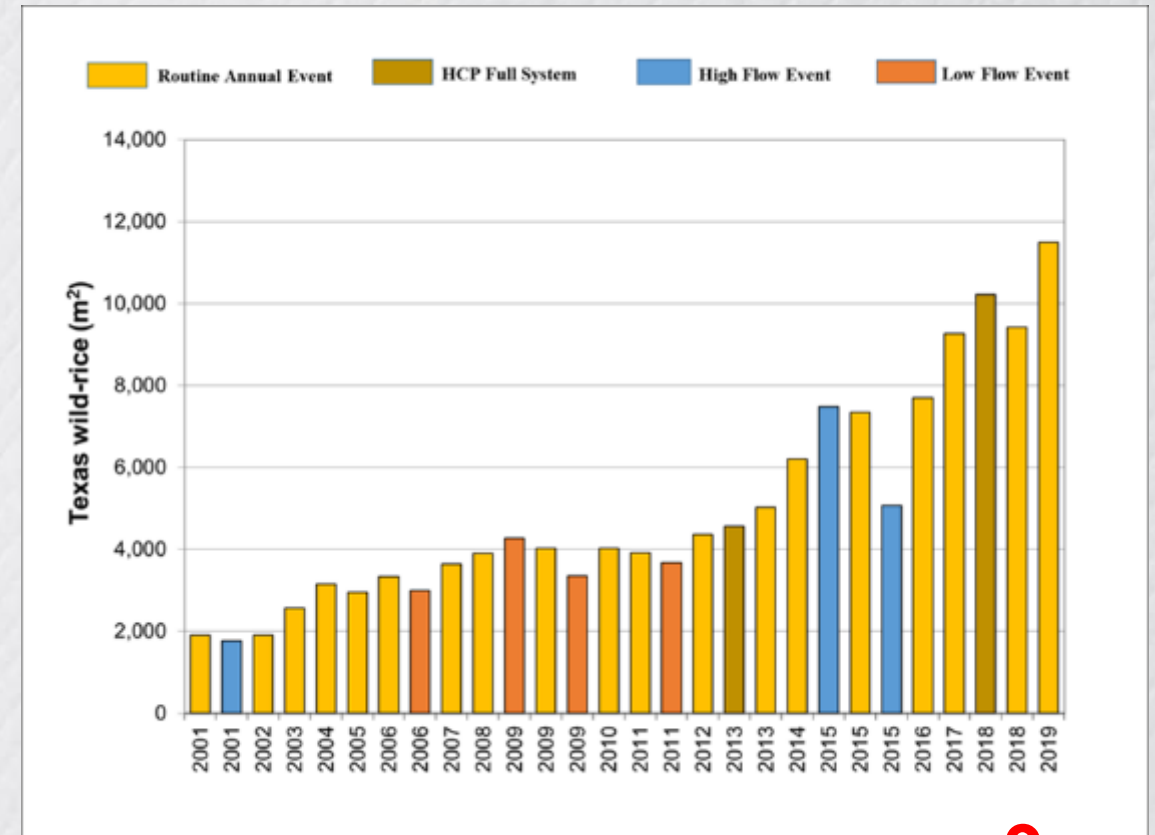
Texas wild-rice Conservation Efforts

Texas wild-rice (TWR) enhancement is among conservation measures in the EAHCP.

Since 2013, efforts have been extremely successful, more than doubling TWR coverage.



TWR at City Park in the San Marcos River





Sampling in Texas wild-rice

TWR along with other submerged aquatic vegetation (SAV) species serve as habitat for the endangered fountain darter.

EAHCP long-term biological goals (LTBG) for fountain darter consist of specific coverage targets for SAV species that relate to fountain darter densities.

The primary means to evaluate fountain darter densities is through dropnetting.

- Been used since the early 2000's
- Currently, we have a good understanding of fountain darter densities among SAV species, except TWR.



Sampling in Texas wild-rice

Starting in 2020, dropnetting in TWR will occur in the spring and fall as part of the EAHCP Biological monitoring program

- 2 dropnets will occur in each LTBG for a total of 6 per sampling event.
- Care will be taken to not uproot TWR plants.
- Dropnetting will not occur if Provision M is enacted.



Questions?

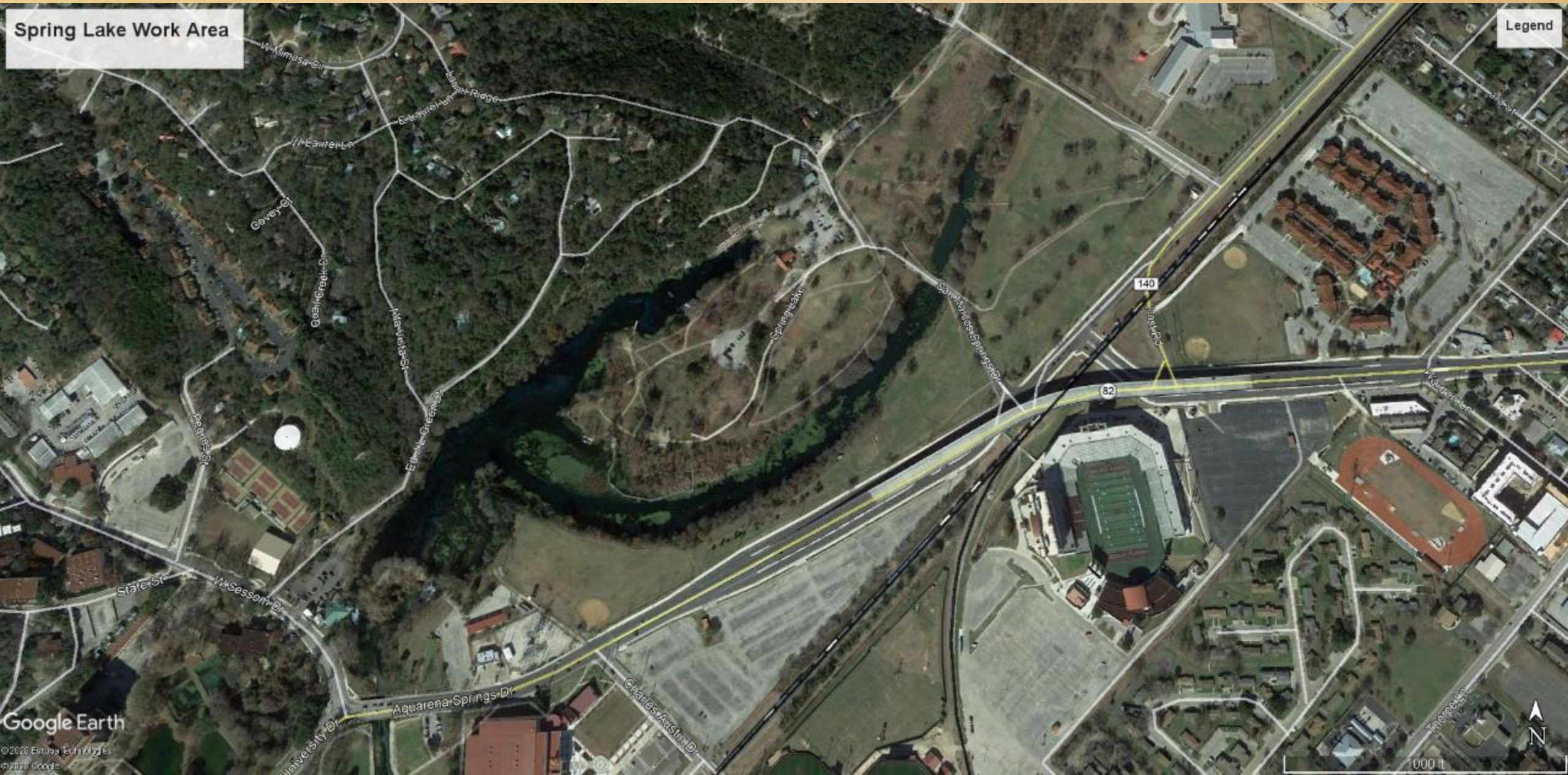


SPRING COMMUNITIES UPDATE:

San Marcos

Volunteers at Spring Lake

Floating Invasive Removal



First lesson with the expert





It's laundry day at Spring Lake!







35th Annual Great Texas River Cleanup



- 600 upper SMR volunteers
- 14,730 lbs trash
- 15,080 lbs recycle
- 112 canoers
- 2,236 lbs trash



Questions?

EDWARDS AQUIFER HABITAT CONSERVATION PLAN

2019 ANNUAL REPORT

Submitted to
THE U.S. FISH & WILDLIFE SERVICE

MARCH 27, 2020

On behalf of
**THE EDWARDS AQUIFER HABITAT
CONSERVATION PLAN PERMITTEES**



Prepared by

Blanton & Associates, Inc.
ENVIRONMENTAL CONSULTING • PLANNING • PROJECT MANAGEMENT

**CITY OF SAN MARCOS/TEXAS STATE
UNIVERSITY**

**2020 Work Plan and
Funding Application
Amendments**

March 19, 2020



Management of Floating Vegetation

Target for 2020:

Management activities include removal of litter from the littoral zone and the river bottom.

Volunteer groups remove litter in the major tributaries and portions of the watershed. Floating vegetation mats from Spring Lake to IH-35 will be dislodged or removed in accordance with methodologies and conditions described in EAHCP § 5.3.3 and § 5.4.3 and the Incidental Take Permit #TE63663A-1, Condition M clarification approved by USFWS on September 30, 2014.

Texas State University will manage aquatic vegetation in Spring Lake through use of its harvester boat and trained divers authorized to dive in Spring Lake.



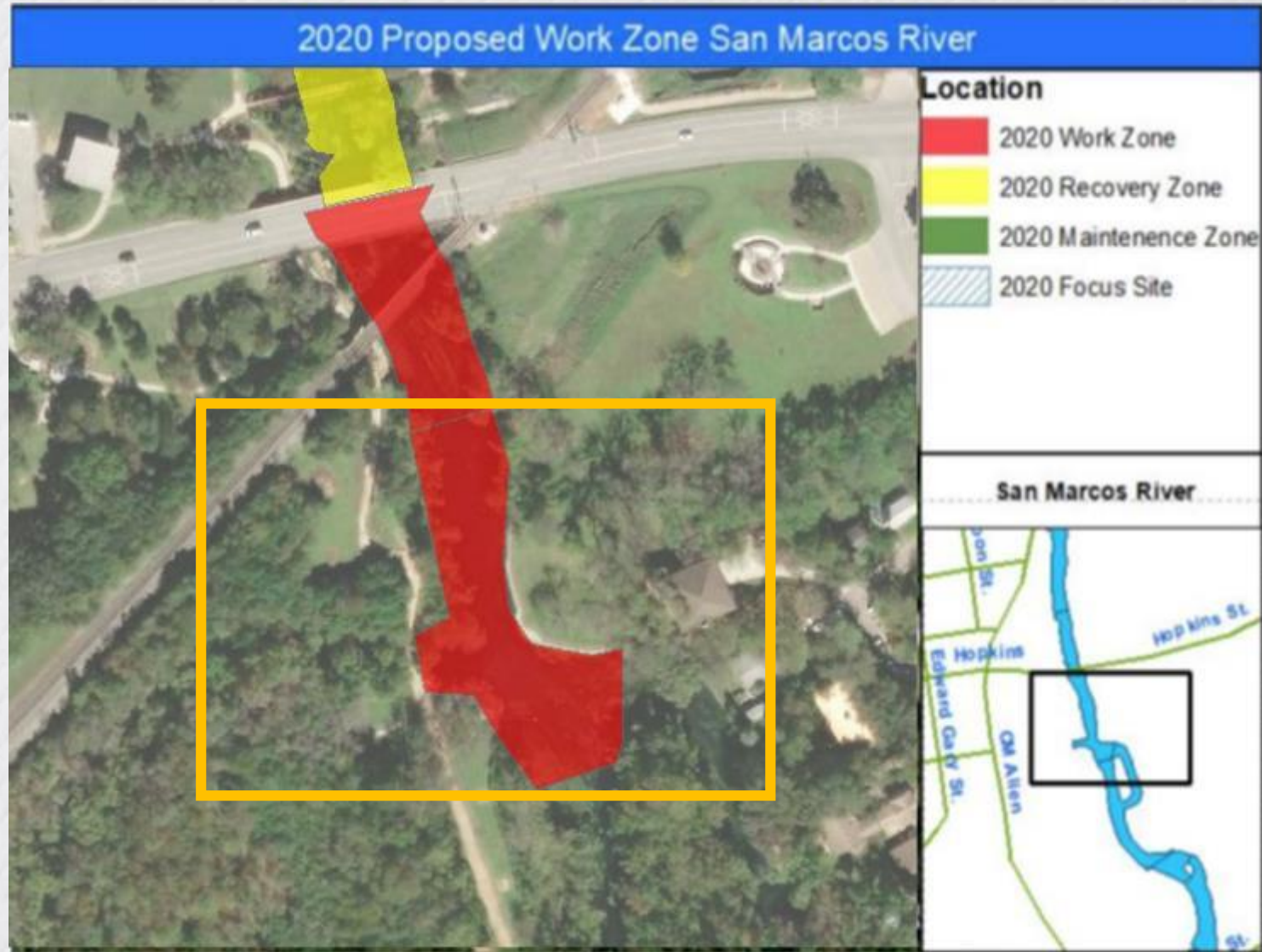
Management of Floating Vegetation

San Marcos River: Floating vegetation in Texas wild-rice stands is lifted off the stands and either pushed downstream past IH-35 or removed from the system. Inorganic litter is picked up weekly from the substrate, surface and littoral zones of the San Marcos River from Clear Springs Natural Area to City Park and from IH-35 to Stokes Island during the recreational season (May 1st to September 30th) and monthly during offseason.

Monitoring:

In the event of low flows, this activity will be monitored by the EAA contractor for potential impacts on listed species and will be suspended if impacts are observed. Pushing and removal of vegetation mats will be tracked with polygons delineating work areas and attribute data that include date, location, and percent species composition.

Control of Non-native Plants (aquatic)





2020 San Marcos/Texas State University Work Plan Budget

EAIICP Section	Conservation Measure	Table 7.1	Estimated 2020 Budget	Selected Contractor
5.3.1/5.4.1	Texas wild-rice Enhancement	\$100,000	\$20,000 \$73,750	Texas State
5.3.6/5.4.4	Sediment Management	\$0 ^A	\$0	
5.3.8/5.4.3.1/ 5.4.12	Control of Non-Native Plant Species	\$50,000	\$160,000 \$76,607 \$40,000 \$42,670 Total is \$200,00	Texas State/ EBR
5.3.3/5.4.3	Management of Floating Vegetation Mats and Litter	\$80,000	\$30,000 10,299 6,687 Total is \$46,986	TxSt/Cuda/Atlas
5.3.5/5.3.9/ 5.4.11/5.4.13	Non-Native Species Control	\$35,000	\$23,000 \$27,285	Atlas
5.3.7	Designation of Permanent Access Points/Bank Stabilization	\$0	\$0	
5.7.1	Native Riparian Restoration	\$20,000	\$20,000	Cuda
5.3.2/5.4.2	Management of Recreation in Key Areas	\$56,000	\$56,000	TxSt
5.7.6	Impervious Cover/Water Quality Protection	\$225,000 ^A	\$49,500^B 40,000^C 22,970^D 87,530^E Total is \$200,000	JGLLC ^B /EPRK- H ^C /COSM ^D /TBA ^E
5.7.5	Management of HHW	\$30,000	\$30,000	TBA Green Guy Recycling
5.3.4	Prohibition of Hazardous Material Transport	\$0	\$0	
5.3.4/5.4.5,8,9 /5.7.3,4	Unfunded Measures	\$0	\$0	
	Total	\$596,000	\$595,986 \$71,000	

A.) Sediment Management funding will go towards the Impervious Cover and Water Quality Protection

Conservation Measure (5.7.6) per the 2017 Sediment Removal and Impervious Cover/Water Quality

Protection nonroutine adaptive management

B.) Funding for John Gleason LLC will cover bid and construction oversight of channel restoration.

C.) Funding for Kimlev-Horn will cover partial design, bid, and construction oversight of channel restoration

D.) \$22,970 will go to COSM for completion of the Downtown Hutchison Detention Pond. The IC approved

\$50,000 for the Downtown Pond on March 21, 2019. \$27,030 was spent in December 2019 and \$22,970 is the

remaining amount that will be allocated

E.) Phase 1&2 Sessom Creek Construction is anticipated from fall 2020-2023.



2020 San Marcos/Texas State University Work Plan Budget

EAHCP Section	Conservation Measure	Table 7.1	Estimated 2020 Budget	Selected Contractor
5.3.1/5.4.1	Texas wild-rice Enhancement	\$100,000	\$20,000	Texas State
5.3.6/5.4.4	Sediment Management	\$0 ^A	\$0	
5.3.8/5.4.3.1/ 5.4.12	Control of Non-Native Plant Species	\$50,000	\$160,000/40,000 Total is \$200,000	Texas State/ EBR
5.3.3/5.4.3	Management of Floating Vegetation Mats and Litter	\$80,000	\$30,000/ 10,299/ 6,687 Total is \$46,986	TxSt/Cuda/Atlas
5.3.5/5.3.9/ 5.4.11/5.4.13	Non-Native Species Control	\$35,000	\$23,000	Atlas
5.3.7	Designation of Permanent Access Points/Bank Stabilization	\$0	\$0	
5.7.1	Native Riparian Restoration	\$20,000	\$20,000	Cuda
5.3.2/5.4.2	Management of Recreation in Key Areas	\$56,000	\$56,000	TxSt
5.7.6	Impervious Cover/Water Quality Protection	\$225,000 ^A	\$49,500 ^B /40,000 ^C / 22,970 ^D / 87,530 ^E Total is \$200,000	JGLLC ^B /K- HC/COSM ^D /TBA ^E
5.7.5	Management of HHW	\$30,000	\$30,000	Green Guy Recycling
5.3.4	Prohibition of Hazardous Material Transport	\$0	\$0	
5.3.4/5.4.5,8,9 /5.7.3,4	Unfunded Measures	\$0	\$0	
Total		\$596,000	\$595,986	

A.) Sediment Management funding will go towards the Impervious Cover and Water Quality Protection Conservation Measure (5.7.6) per the 2017 Sediment Removal and Impervious Cover/Water Quality Protection nonroutine adaptive management

B.) Funding for John Gleason LLC will cover bid and construction oversight of channel restoration.

C.) Funding for Kimley-Horn will cover partial design, bid, and construction oversight of channel restoration

D.) \$22,970 will go to COSM for completion of the Downtown Hutchison Detention Pond. The IC approved \$50,000 for the Downtown Pond on March 21, 2019. \$27,030 was spent in December 2019 and \$22,970 is the remaining amount that will be allocated

E.) Phase 1&2 Sessom Creek Construction is anticipated from fall 2020-2023.

Questions?



Springflow Habitat Protection Work Group



March 19, 2020

Springflow Habitat Protection Work Group Outline

- Charge
 - Organization & Operations
 - Makeup
 - Two-part Process
- Schedule

CHARGE: Organization and Operations

- Work group members will work by consensus
 - 9 Stakeholder Committee Members
 - 3 Science Committee Members
- Will report and seek approval of IC on Part 2 of the charge
- Will meet on as-needed basis
- Work group will be multi-year commitment by members
- All proposed work group recommendations will come to IC for consideration
- All final decisions remain with the IC

CHARGE: Makeup

- Comprised of Science and Stakeholder committee members
- Stakeholder Committee Members: Myron Hess, proposed Chair (Texas Living Water Project), Patrick Shriver (SAWS); Adam Yablonski (Agriculture); Doris Cooksey (CPS); Cindy Loeffler (TPWD); Ryan Kelso (NBU); Melani Howard (COSM); Kimberly Meitzen (Tx State); and Chuck Ahrens (EAA)
- Science Committee Members: Jacquelyn Duke, Charles Kreidler, Tom Arsuffi

CHARGE: Two-part Process

Part 1: Clarify and refine the primary questions

1. water quality impacts of predicted extended periods of flow below 80 cfs in both spring systems
2. impacts on Comal Springs riffle beetle populations
3. impacts on San Marcos salamander populations,
4. impacts on Texas wild-rice and other vegetation serving as habitat for fountain darters

Part 2: Define technical evaluations

SCHEDULE

- March 19, 2020: IC to approve charge and Work Group makeup
- March - July: Work Group addresses Part 1
- August 20, 2020: IC reviews and takes action on Work Group Part 1 report
- September - October: Work Group, through EAHCP staff develops SOWs for technical assistance in defining data gaps and available tools
- 2021: Contractor presents interim results and recommendations to Work Group and Science Committee
- 2022: Technical evaluations underway

Questions?
