



Edwards Aquifer Habitat Conservation Plan  
**Report of the 2018 Budget Work Group**



To: Edwards Aquifer Habitat Conservation Plan Implementing Committee

From: Edwards Aquifer Habitat Conservation Plan Budget Work Group

Date: October 11, 2018

**Overview:**

On October 4, 2018, a meeting of the Edwards Aquifer Habitat Conservation Plan (EAHCP) Budget Work Group was held to review and discuss the Edwards Aquifer Authority 2019 budget process to monitor the management of EAHCP revenue and expenses. Specifically, the Budget Work Group was charged by the EAHCP Implementing Committee to “collaborate with and inform the EAA Budget Process, as it relates to the EAHCP, EAHCP reserve and EAHCP aquifer management fee and to address fiscal issues.”

Members of this Work Group include:

- Tom Taggart, Implementing Committee (IC) Member (serving as Chair)
- Brock Curry, Edwards Aquifer Authority (EAA) designee
- Steve Raabe, EAHCP Stakeholder member
- Myron Hess, EAHCP Stakeholder member
- Mary Bailey, San Antonio Water System (SAWS) designee
- Adam Yablonski, Member-at-Large

**Work Group Discussions:**

During the meeting, EAA staff presented information on the following items:

- Aquifer Storage Recovery and Voluntary Irrigation Suspension Program Option program updates
- Updated calculations of the Drought of Record projected expenses, forecasts and probabilities
- EAA Budgeting Process
- EAA Aquifer Management Fee and Reserve Forecast
- EAHCP 2019 Budget and Reserve Fund
- EAHCP 2019 Proposed Budget regarding EAHCP Program Management Costs

Attached to this report are selected slides presented at the October 4 meeting. The discussion concerning these issues is described below. The full set of slides can be accessed online at:

[http://www.eahcp.org/files/admin-records/NEPA-and-HCP/2018\\_EAHCP\\_Budget\\_Workgroup\\_presentation.pdf](http://www.eahcp.org/files/admin-records/NEPA-and-HCP/2018_EAHCP_Budget_Workgroup_presentation.pdf)

**Aquifer Storage Recovery (ASR) and Voluntary Irrigation Suspension Program Option (VISPO) programs**

EAA staff provided an update and overview of the ASR and VISPO programs. In 2019, the total costs for the ASR Program will be about \$6,603,929. This expenditure comprises forbearance agreements, leases, and operations and maintenance injection costs. Under the VISPO program, 40,000 acre-feet of water is required in forbearance agreements. The target for 2019 is to maintain a balance of 40,921.214 acre-feet and to pursue renewals for the expiring 5-year forbearance agreements. The estimated cost for the VISPO program in 2019 is \$2,389,175.

#### **Updated calculations of the Drought of Record projected expenses, forecasts and probabilities.**

EAA staff presented the updated Drought of Record probabilities to the Work Group. Based on the aquifer levels on October 1, 2018, VISPO forbearance will not trigger in 2019. Between 2020-2027, EAA staff projects there is a 44% chance that VISPO forbearance will trigger in at least one year, a 10% chance it will trigger in two or more years and a 0.13% chance of it triggering four or more times.

Based on current modeling scenarios, there is a 36% probability of the 10-year recharge trigger for the ASR Forbearance program occurring at least once by 2027. However, it should be noted that the high-recharge values of 2015 and 2016 will drop out of the 10-year average in 2026. Following this adjustment of the 10-year average, the probability of an ASR recharge trigger occurring is 10% and the forbearance for that trigger will not be realized until 2027.

#### **EAA 2019 Aquifer Management Fee and Reserve Forecast.**

EAA staff provided detailed charts to the Work Group that illustrated various projections associated with the EAA General Fund and the EAHCP Fund. These charts delineated the progression of both funds from 2012 until 2023, complete with actuals for 2012-17 and budgeted/forecasted estimates beyond 2017.

The EAHCP Reserve Fund has grown from \$14.3 million in 2012 to a projected \$31.3 million at the end of 2018. As presently forecasted, the EAHCP Reserve fund will decrease to \$27.2 million in 2019, about \$0.8 million above the Reserve Floor of \$26.4 million recommended by the Work Group in 2017. Based on current projections, without an adjustment to the overall Aquifer Management Fee (AMF) rate, the triggering of VISPO forbearance or ASR recovery, the EAHCP Reserve would increase each year to \$27.6 million in 2023.

While the EAHCP Reserve Fund will grow to a projected \$31.3 million in 2018, the EAA General Fund Reserve has decreased to a projected \$1.6 million in 2018 from \$4.2 million in 2017. Since 2012, the EAA has absorbed several large expense items, such as a \$4.6 million legal judgment, while maintaining the combined AMF rate of \$84. To maintain minimal reserves for the EAA General Fund and maintaining the \$84 combined AMF rate, the EAA has proposed an additional adjustment of the AMF rate between the EAA and the EAHCP in 2019. The EAA's 2019 Proposed Budget reduces the EAHCP Program AMF from the \$42 rate in 2018 to \$38, and the EAA General Fund AMF rate increases from \$42 to \$46, as illustrated in Table 1. The EAA acknowledges that the \$84 overall AMF rate, in place since 2012, is unsustainable after 2019 to meet the EAA and EAHCP reserve requirements. The EAA is currently considering options for AMF rate increases as early as 2020 to ensure operational expense and reserve needs are met.

Table 1. Current and Proposed AMF Rates for the EAA and EAHCP

|                 | Current            | Proposed           |
|-----------------|--------------------|--------------------|
|                 | <b><u>2018</u></b> | <b><u>2019</u></b> |
| EAA General AMF | \$42               | \$46               |
| HCP Program AMF | \$42               | \$38               |

### **Considerations for the Implementing Committee**

The Work Group recommends three items for the Implementing Committee to consider in their deliberations related to EAHCP funding and possible comment to the EAA board as they review the budget for FY 2019. Those items are as follows:

- The financial data provided by EAA demonstrates that the projected 2019 EAHCP Reserve will exceed the \$26.4 million floor, sufficient to cover projected VISPO forbearance and ASR recovery operations for 4 consecutive years. Based on current aquifer conditions, neither of these expenses will be incurred in 2019. It should be noted that, over time, the reserve floor will require review to determine if adjustments may be appropriate.
- The current forecast for the EAHCP Reserve indicates a downward trend from 2019 through 2023. The Work Group expressed concern about the projected reduction of the reserve levels toward the minimum floor. EAA management reiterated that the EAA is committed to maintaining the EAHCP Reserve floor.
- The proposal by EAA management to consider moving the EAHCP staff costs for salary and benefits from the EAHCP budget to the EAA General Fund budget was not considered necessary. This proposal was intended to shift costs in the Program Administration account from the EAHCP budget to the EAA General Fund budget as a means of staying within the constraints set forth in Table 7.1 of the EAHCP, the multi-year budget established in 2012. The Work Group stated they did not believe there was a financial benefit to the EAHCP and that for transparency purposes, it is better to keep the EAHCP staff salaries within the EAHCP budget.

APPENDIX A  
SLIDE PRESENTATIONS

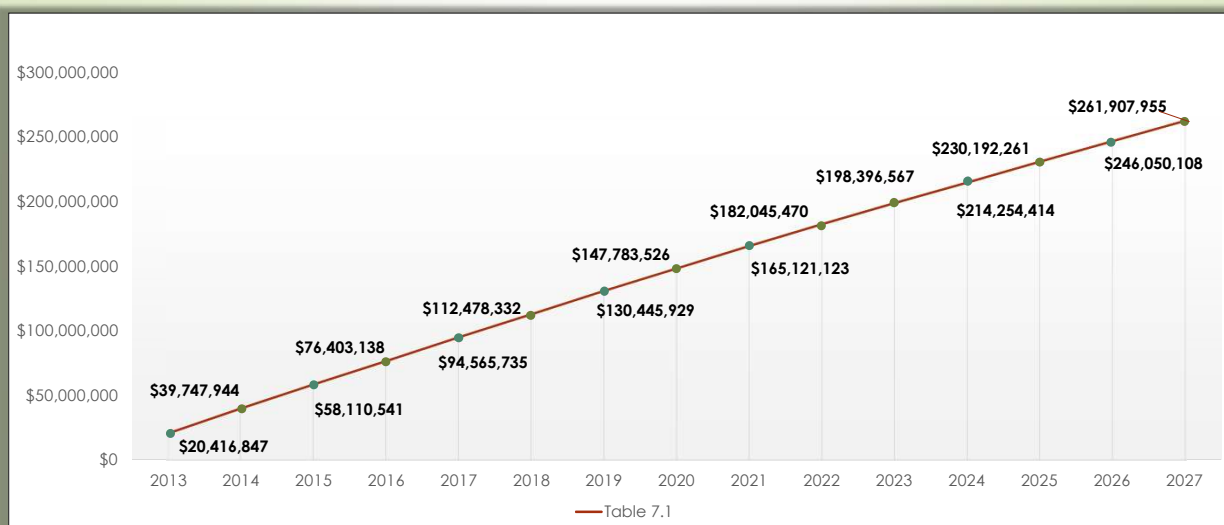


# EAHCP BUDGET WORK GROUP

OCTOBER 4, 2018



EAHCP TABLE 7.1



# 7.1 ADJUSTED

## "TABLE 7.1A"

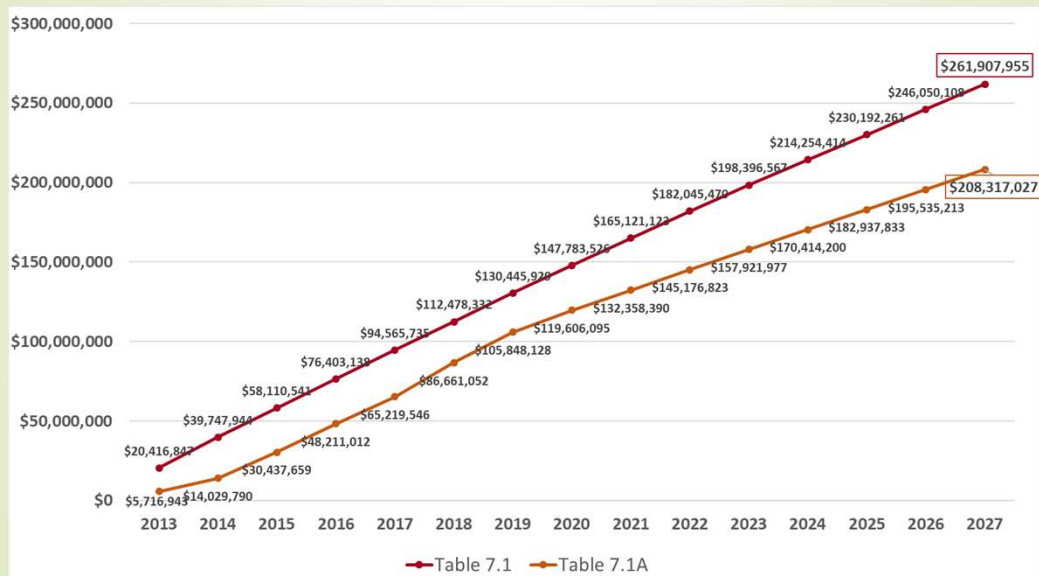
TRACKS ACTUALS FOR CLOSED YEARS AND  
FORECASTED PERIODS THROUGH THE END OF THE ITP.

### PROGRAM TOTALS | TABLE 7.1 AND TABLE 7.1A COMPARISON

| EAHCP Measure               | Table 7.1<br>Totals  | Table 7.1A<br>Projected<br>Totals | ▲ Between Table<br>7.1 to 7.1A |
|-----------------------------|----------------------|-----------------------------------|--------------------------------|
| Program Administration      | \$11,250,000         | \$15,170,013                      | (\$3,920,013)                  |
| ASR - Leasing/Forbearance   | 71,385,000           | 69,093,956                        | 2,291,044                      |
| ASR - O & M                 | 32,910,000           | 4,789,731                         | 28,120,269                     |
| Regional Water Conservation | 19,730,000           | 19,414,103                        | 315,897                        |
| VISPO                       | 62,580,000           | 38,101,022                        | 24,478,978                     |
| San Marcos Springs          | 16,394,000           | 18,678,885                        | (2,284,885)                    |
| Comal Springs               | 16,030,000           | 17,345,465                        | (1,315,465)                    |
| Modeling & Research         | 6,450,000            | 6,004,986                         | 445,014                        |
| Refugia                     | 25,178,955           | 19,718,866                        | 5,460,089                      |
| <b>Total</b>                | <b>\$261,907,955</b> | <b>\$208,317,027</b>              | <b>\$53,590,928</b>            |

| Entity                                      | Table 7.1<br>Totals  | Table 7.1A<br>Projected<br>Totals | ▲ Between Table<br>7.1 to 7.1A |
|---|----------------------|-----------------------------------|--------------------------------|
| Edwards Aquifer Authority                   | \$238,483,955        | \$185,423,339                     | \$53,060,616                   |
| City of San Marcos - Texas State University | 11,894,000           | 12,147,416                        | (253,416)                      |
| City of New Braunfels                       | 11,530,000           | 10,746,272                        | 783,728                        |
| <b>Program Totals</b>                       | <b>\$261,907,955</b> | <b>\$208,317,027</b>              | <b>\$53,590,928</b>            |

TABLE 7.1 AND TABLE 7.1A COMPARISON



Edwards Aquifer Authority 7.1A Budget as Compared to Table 7.1

| EAHCP Measure                          | Table 7.1 Totals     | Table 7.1A Projected Totals | ▲ Between Table 7.1 to 7.1A |
|--|----------------------|-----------------------------|-----------------------------|
| SAWS ASR Leasing                       | \$71,385,000         | \$69,093,956                | \$2,291,044                 |
| SAWS ASR O&M                           | 32,910,000           | 4,789,731                   | 28,120,269                  |
| Regional Municipal Water Conservation  | 19,730,000           | 19,414,103                  | 315,897                     |
| VISPO                                  | 62,580,000           | 38,101,022                  | 24,478,978                  |
| Biological Monitoring                  | 6,000,000            | 8,391,326                   | (2,391,326)                 |
| Water Quality Monitoring               | 3,000,000            | 4,739,335                   | (1,739,335)                 |
| Ecological Modeling                    | 1,150,000            | 1,158,780                   | (8,780)                     |
| Applied Research (Research & Facility) | 4,750,000            | 3,607,678                   | 1,142,322                   |
| Refugia                                | 25,178,955           | 19,718,866                  | 5,460,089                   |
| Program Management                     | 11,250,000           | 15,170,013                  | (3,920,013)                 |
| Science Review Panel                   | 550,000              | 1,238,529                   | (688,529)                   |
| <b>Program Total</b>                   | <b>\$238,483,955</b> | <b>\$185,423,339</b>        | <b>\$53,060,616</b>         |

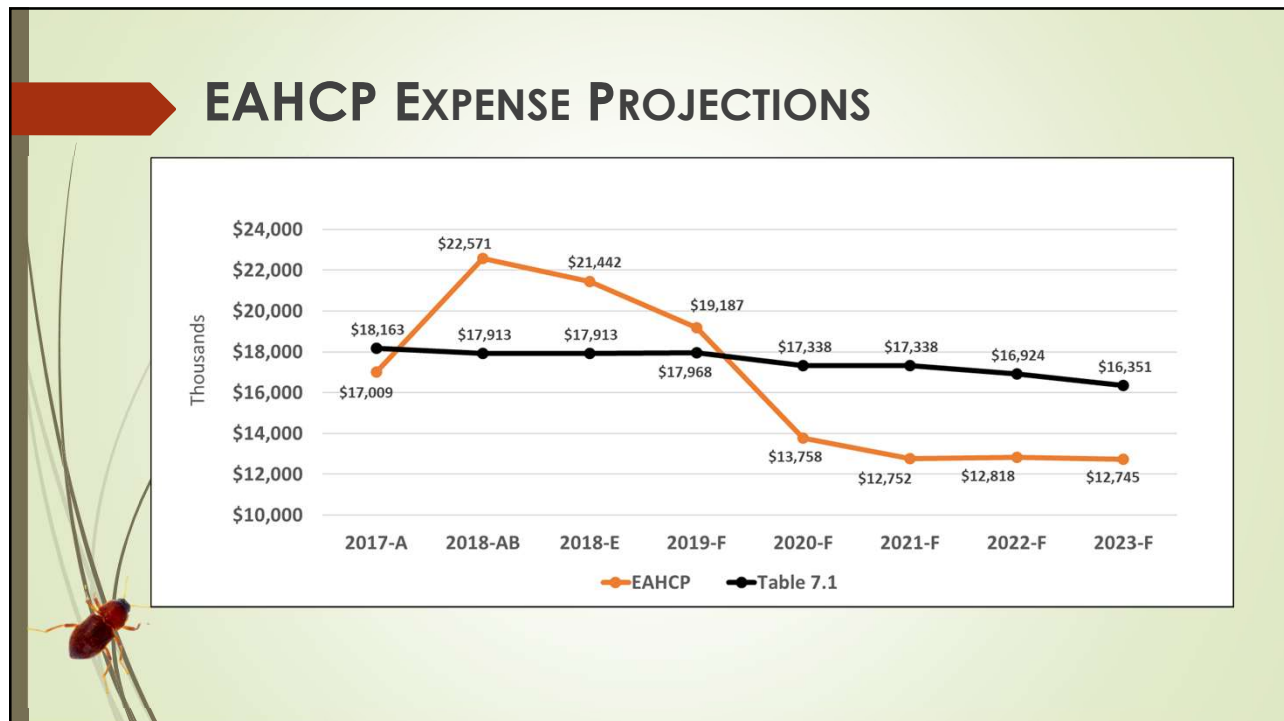
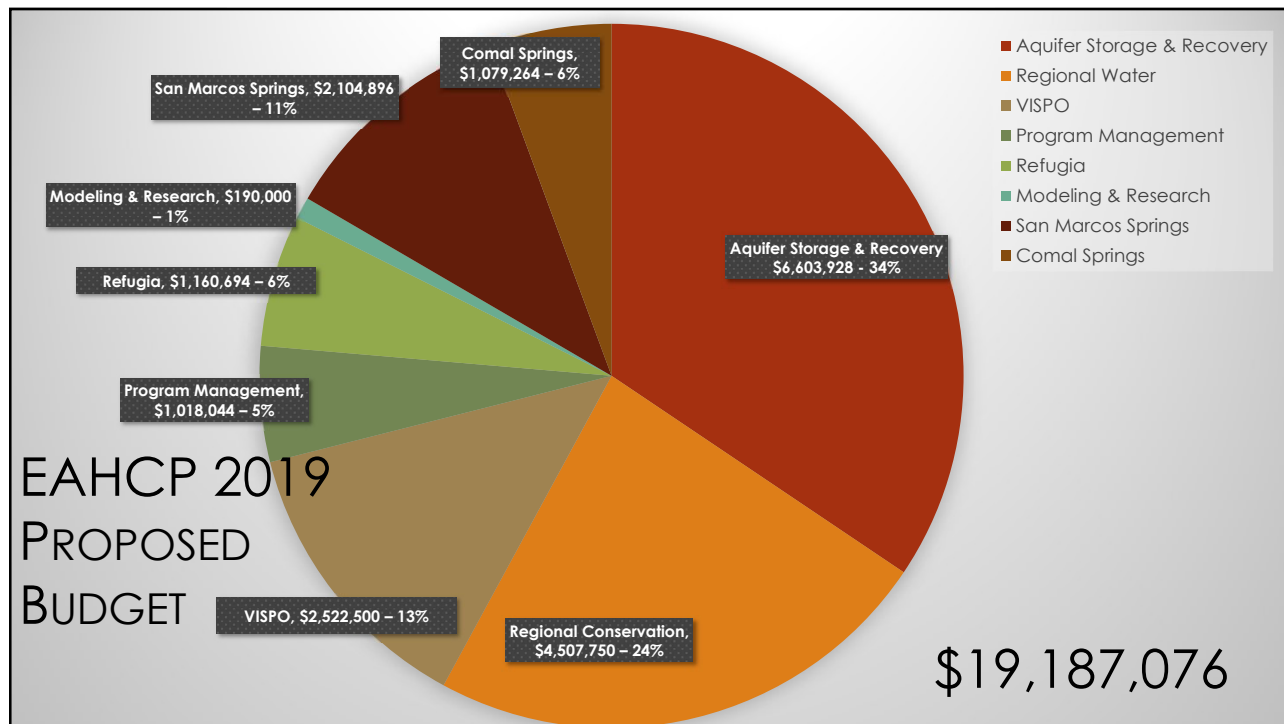


### City of San Marcos/Texas State University 7.1A Budget as Compared to Table 7.1

| EAHCP Measure                        | Table 7.1 Totals    | Table 7.1A Projected Totals | ▲ Between Table 7.1 to 7.1A |
|--------------------------------------|---------------------|-----------------------------|-----------------------------|
| TX Wild Rice Enhancement/Restoration | \$1,850,000         | \$2,041,168                 | (\$191,168)                 |
| Sediment Removal                     | 850,000             | 744,292                     | 105,708                     |
| Non-Native Plant Species Control     | 1,375,000           | 2,230,132                   | (855,132)                   |
| Litter Control/Floating Vegetation   | 1,200,000           | 693,612                     | 506,388                     |
| Non-Native Animal Species Control    | 525,000             | 432,131                     | 92,869                      |
| Bank Stabilization/PermAccess Points | 780,000             | 1,153,492                   | (373,492)                   |
| Restoration - Riparian Zones         | 380,000             | 666,986                     | (286,986)                   |
| Management - Key Public Rec Areas    | 784,000             | 846,781                     | (62,781)                    |
| LID/BMP Management                   | 3,600,000           | 2,808,316                   | 791,684                     |
| Household Hazardous Waste Program    | 450,000             | 415,158                     | 34,842                      |
| Sessom Creek Sand Bar                | 100,000             | 100,000                     | 0                           |
| Education                            | 0                   | 15,349                      | (15,349)                    |
| <b>Program Total</b>                 | <b>\$11,894,000</b> | <b>\$12,147,416</b>         | <b>(\$253,416)</b>          |

### City of New Braunfels 7.1A Budget as Compared to Table 7.1

| EAHCP Measure                           | Table 7.1 Totals    | Table 7.1A Projected Totals | ▲ Between Table 7.1 to 7.1A |
|---|---------------------|-----------------------------|-----------------------------|
| Old Channel Restoration                 | \$2,000,000         | \$1,809,051                 | \$190,949                   |
| Flow Split Management                   | 270,000             | 352,878                     | (82,878)                    |
| Aquatic Vegetation Restoration          | 1,245,000           | 1,371,656                   | (126,656)                   |
| Non-Native Animal Species Control       | 1,245,000           | 981,853                     | 263,147                     |
| Decaying Vegetation Removal             | 960,000             | 435,518                     | 524,482                     |
| Riparian Impr - Riffle Beetle           | 525,000             | 533,543                     | (8,543)                     |
| Gill Parasite Control                   | 1,325,000           | 554,871                     | 770,129                     |
| Restoration - Riparian Zones            | 1,600,000           | 2,140,655                   | (540,655)                   |
| LID/BMP Management                      | 1,900,000           | 1,703,402                   | 196,598                     |
| Household Hazardous Waste Program       | 450,000             | 423,871                     | 26,129                      |
| Litter Control/Floating Vegetation      | 0                   | 435,625                     | (435,625)                   |
| Prohibition - Hazardous Materials Route | 10,000              | 0                           | 10,000                      |
| Education                               | 0                   | 3,349                       | (3,349)                     |
| <b>Program Total</b>                    | <b>\$11,530,000</b> | <b>\$10,746,272</b>         | <b>\$783,728</b>            |

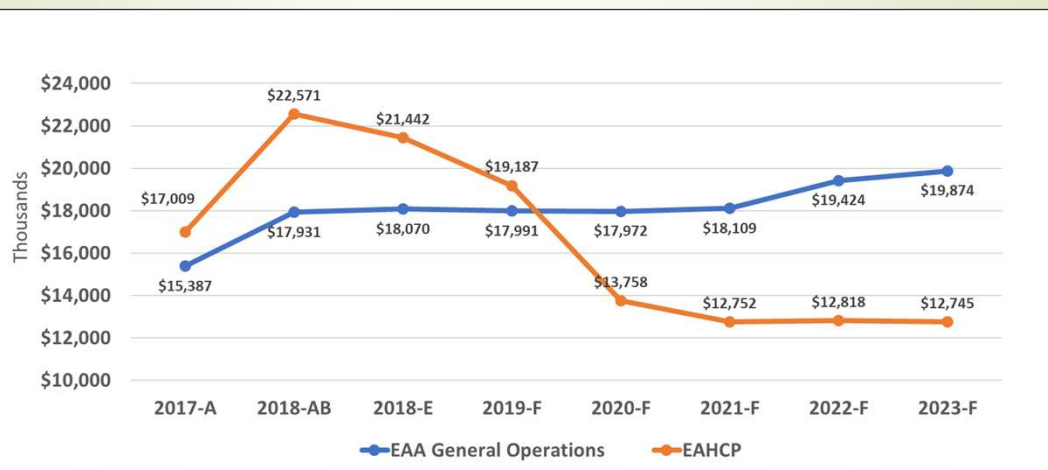




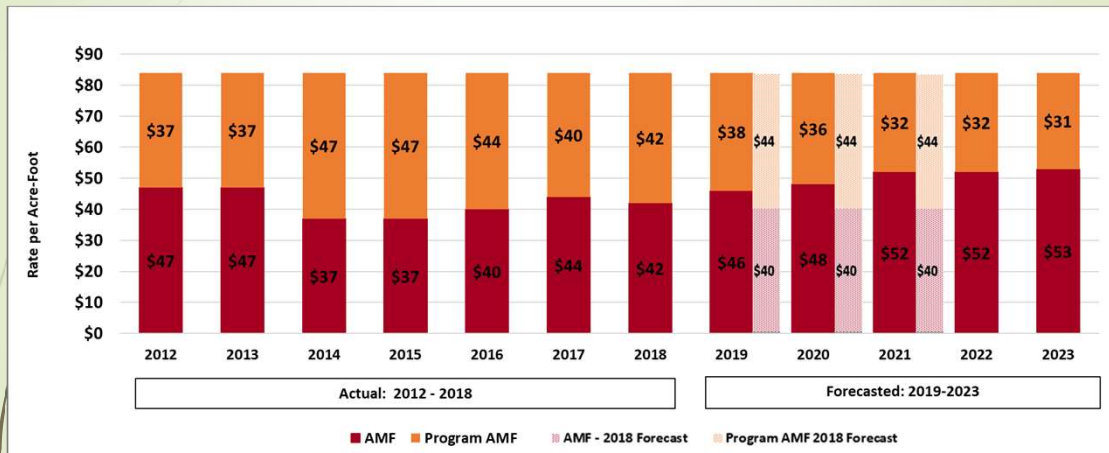
# EAA AQUIFER MANAGEMENT FEE AND EAHCP RESERVE FUND



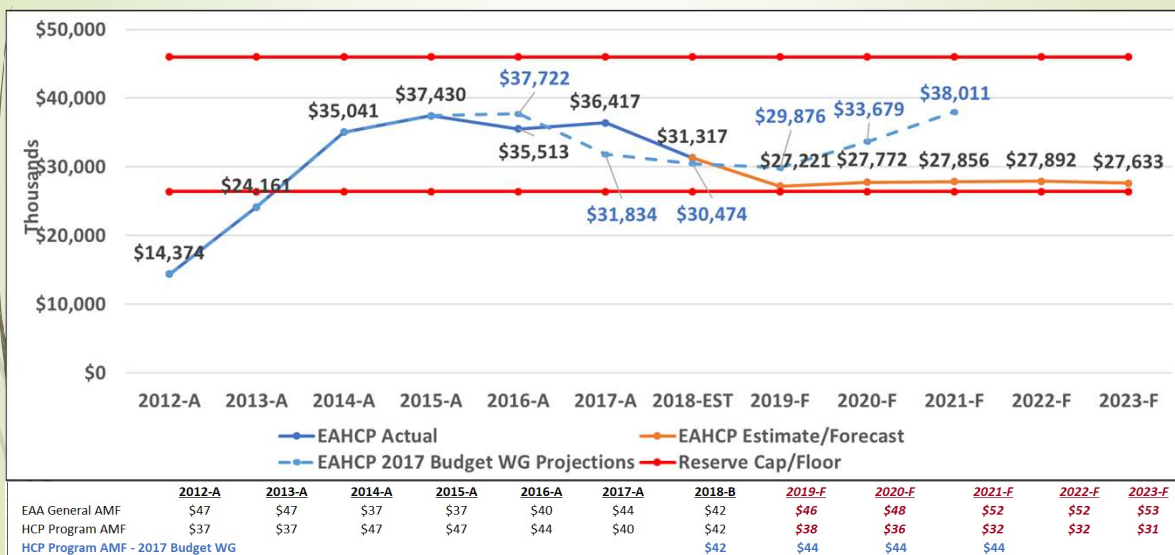
## EXPENSE PROJECTIONS



## AMF RATES

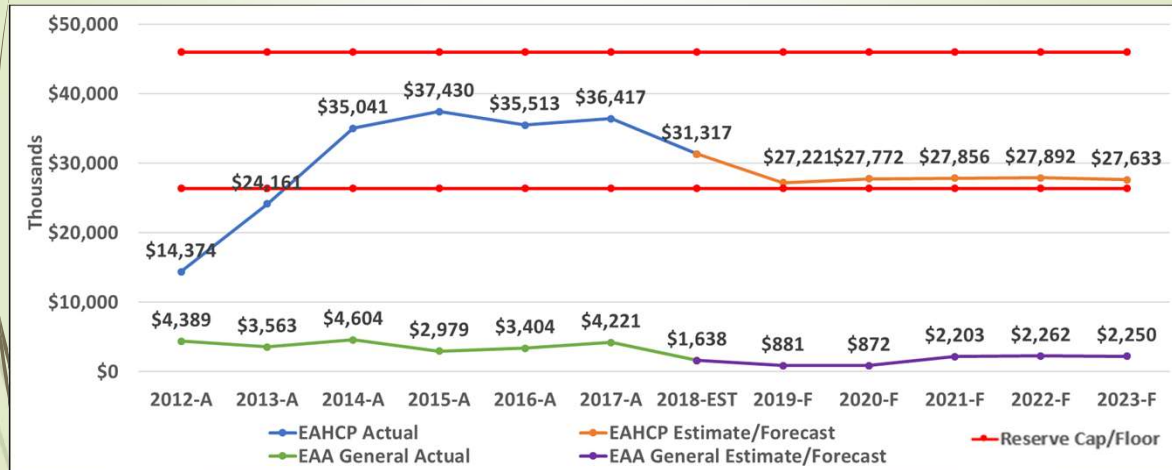


## EAHCP RESERVE PROJECTIONS \*



\*Revised Chart includes updated M&I Acre-Feet Projections

## RESERVE PROJECTIONS \*



|                 | 2012-A | 2013-A | 2014-A | 2015-A | 2016-A | 2017-A | 2018-B | Forecast Rates |        |        |        |        |
|-----------------|--------|--------|--------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|
| EAA General AMF | \$47   | \$47   | \$37   | \$37   | \$40   | \$44   | \$42   | 2019-F         | 2020-F | 2021-F | 2022-F | 2023-F |
| HCP Program AMF | \$37   | \$37   | \$47   | \$47   | \$44   | \$40   | \$42   | \$46           | \$48   | \$52   | \$52   | \$53   |
|                 |        |        |        |        |        |        |        | \$38           | \$36   | \$32   | \$32   | \$31   |

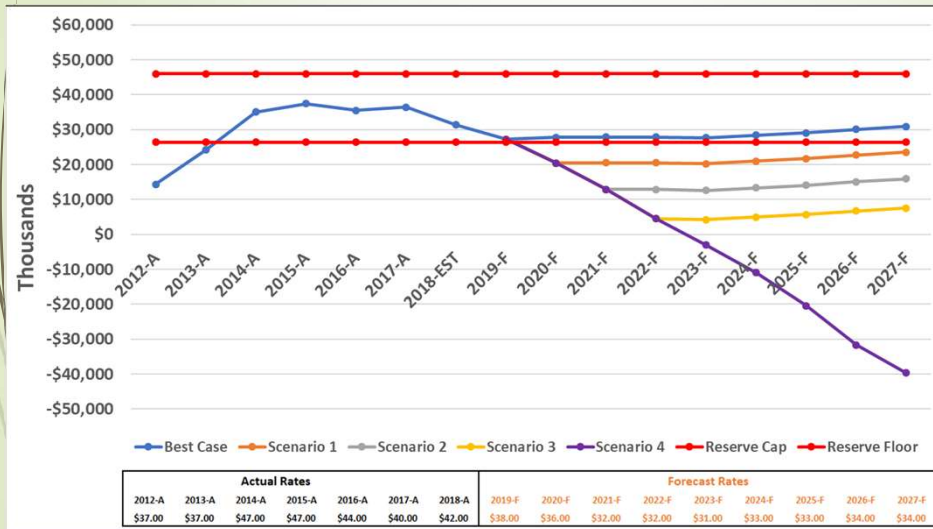
\*Revised Chart includes updated M&I Acre-Feet Projections



## EAHCP DROUGHT SCENARIO RESERVE IMPACTS



## EAHCP RESERVE FORECAST: DROUGHT SCENARIO IMPACTS \*



Scenario 1 Probability: 44%  
VISPO Forbearance: 2020  
ASR Recovery/Filling: 2020

Scenario 2 Probability: 10%  
VISPO Forbearance: 2020 - 21  
ASR Recovery/Filling: 2020 - 21

Scenario 3 Probability: 1.4%  
VISPO Forbearance: 2020 - 22  
ASR Recovery/Filling: 2020 - 22

Scenario 4 Probability: <0.13%  
VISPO Forbearance: 2020 - 27  
ASR Recovery/Filling: 2020 - 27

Scenario percentages noted  
above relate to VISPO probabilities

\*Revised Chart includes updated M&I Acre-Feet Projections

APPENDIX B  
MEETING AGENDA



**NOTICE OF OPEN MEETING**  
**Available at [eahcp.org](http://eahcp.org)**

As requested by the EAHCP Implementing Committee, the **2018 EAHCP Budget Work Group** has been formed to review the EAHCP budget process and make recommendations to the Implementing Committee regarding any directional changes to ensure a good stewardship of public dollars. A meeting of this Work Group is scheduled for **Thursday, October 4, 2018 at 1:00pm – 4:00pm at the Edwards Aquifer Authority, 900 E. Quincy St. San Antonio, TX 78215.**

Members of this workgroup include: Tom Taggart (San Marcos), Adam Yablonski (Medina County Farm Bureau), Myron Hess (Texas Living Waters Project), Steven Raabe (SARA), Brock Curry (EAA), Mary Bailey (SAWS).

At this meeting, the following business may be considered and recommended for Budget Work Group action:

1. Call to order - Establish that all members are present or represented.
2. Public Comment.
3. Budget Work Group Introduction.
4. Presentation of the Aquifer Storage Recovery (ASR) and Voluntary Irrigation Suspension Program Option (VISPO) programs.  
Purpose: To provide an update on the ASR and VISPO programs.  
Action: No action required.
5. Presentation and discussion of the updated Drought of Record forecasts and probabilities.  
Purpose: To provide an overview of the updated Drought of Record projected expenses.  
Action: No action required.
6. Presentation and discussion of the EAA Budget Adoption Process and 2019 Proposed EAA and EAHCP Budget.  
Purpose: To present the following:
  - EAA Budget Adoption Process, policy and timeline; and
  - The proposed EAA Aquifer Management Fee rates, EAHCP 2019 Budget and Reserve Fund, Aquifer Management Fee (AMF) and Reserve forecast; and potential adjustments to the 2019 Proposed Budget regarding EAHCP Program Management costs.



Action: Consideration for Action to make possible recommendations to the Implementing Committee.

7. Consider future meetings, dates, locations, and agendas.
8. Questions and comments from the public.
9. Adjourn.

APPENDIX C  
MEETING MINUTES



**EAHCP Budget Work Group  
Meeting Minutes  
October 4, 2018**

Members of this workgroup include: Tom Taggart (City of San Marcos), Adam Yablonski (Medina County Farm Bureau), Myron Hess (Texas Living Waters Project), Steven Raabe (SARA), Brock Curry (EAA), and Mary Bailey (SAWS).

**1. Call to order – 1:10pm**

Tom Taggart called roll for the Work Group. All members were present.

**2. Public Comment**

Alesia Garlock, a citizen advocate, asked if the Edwards Aquifer Authority had any intention of using the Land and Water Conservation Fund to support EAA conservation programs. Mr. Taggart thank Ms. Garlock for her inquiry and recommended that she redirect her question to Edwards Aquifer Authority. Brock Curry encouraged Ms. Garlock to contact EAA staff for additional information.

**3. Budget Work Group Introduction**

Brock Curry introduced the Work Group agenda and described the purpose of the meeting.

**4. Presentation of the Aquifer Storage Recovery (ASR) and Voluntary Irrigation Suspension Program Option (VISPO) programs.**

Javier Hernandez, Edwards Aquifer Authority staff, provided an update and overview of the ASR and VISPO programs. In 2019, the total costs for the ASR Program will be about \$6,603,929 This expenditure comprises forbearance agreements, leases, and operations and maintenance injection costs. Under the VISPO program, 40,000 acre-feet of water is required in forbearance agreements. The target for 2019 is to maintain a 40,921.214 acre-feet balance and to pursue renewals for the expiring 5-year forbearance agreement. The estimated cost for the VISPO program in 2019 is \$2,389,175.

**5. Presentation and discussion of the updated Drought of Record forecasts and probabilities.**

Shelly Hendrix, Edwards Aquifer Authority staff, presented the updated Drought of Record probabilities. Based on historical data from J-17 and current aquifer levels as of October 1, 2018, there is a 0% change that VISPO will trigger in 2019. Based on modeling scenarios, there is a 36% probability of the 10-year recharge trigger for the ASR Forbearance program occurring at least once by 2027. However, it should be noted once 2015 and 2016 drop out of the 10-year average, the probability of an ASR trigger occurring before 2026 is about 10%.

**6. Presentation and discussion of the EAA Budget Adoption Process and 2019 Proposed EAA and EAHCP Budget.**

Ms. Hendrix presented to the Budget Work Group the EAA budget process, the EAHCP 7.1 budget table and proposed 2019 budgets for the EAHCP and the EAA, as it relates to the EAHCP budget. Budget comparisons and projections of both budgets do not include expenses that arise during the occurrence of a trigger event of either ASR, VISPO or a Critical Period. Overall, the proposed budget for EAHCP in 2019 is \$19,187,076. This total includes the expenditures associated with the ASR program, RWCP, VISPO, refugia, program management, modeling and research, the San Marcos Springs and the Comal Springs.

Ms. Hendrix provided three tables detailing Table 7.1, Table 7.1A Projected Totals and the difference between the two values for the EAA, City of San Marcos and City of New Braunfels. Mr. Taggart clarified the underlying cause between the differences in Table 7.1 and Table 7.1A.

Ms. Hendrix presented the EAA Aquifer Management Fee and EAHCP Reserve Fund to the Work Group. The EAHCP Reserve Projections include EAHCP actual expenses, estimates/forecasts, the reserve cap/floor and the AMF rate as it changes overtime. Mary Bailey asked for clarification on the decrease in the EAA general estimate/forecast that occurs between 2018 and 2019. Ms. Hendrix answered that a decline in acre-feet leases within various programs was considered in the reserve projections.

The financial impacts of four drought scenarios on the EAHCP reserve forecast were also presented to the Work Group. The four scenarios described the change in forecast rates in the event of VISPO forbearance and ASR recovery/filling.

Lastly, Ms. Hendrix and EAA staff presented the EAHCP program administration costs and explained a financial alternative to transfer those expenditures to the EAA budget.

At the conclusion of the Budget Work Group meeting, Mr. Taggart summarized key areas of consensus to provide to the Implementing Committee for discussion at their next meeting. The Budget Work Group Report details these key topics.

**7. Consider future meetings, dates, locations, and agendas.**

The Work Group recommended a meeting of the Budget Work Group to be held in April 2019.

**8. Questions and comments from the public.**

No comments.

**9. Adjourn: 3:34pm**