

Edwards Aquifer Habitat Conservation Plan Report of the 2021 Budget Work Group



To: Edwards Aquifer Habitat Conservation Plan Implementing Committee

From: Edwards Aquifer Habitat Conservation Plan Budget Work Group

Date: October 5, 2021

Overview:

On September 29, 2021, a meeting of the Edwards Aquifer Habitat Conservation Plan (EAHCP) Budget Work Group was held to receive reports from Edwards Aquifer Authority (EAA) staff pertaining to the EAA's 2022 proposed budget. Specifically, the Budget Work Group has been 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:

- Brock Curry, EAA designee (serving as interim Chair)
- Myron Hess, EAHCP Stakeholder member (Living Waters Project)
- Tom Taggart, EAHCP Implementing Committee (IC) Member (City of San Marcos)
- Cecilia Velasquez, San Antonio Water System (SAWS) designee
- Adam Yablonski, Member-at-Large, Medina County Farm Bureau

Work Group Discussions:

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

- EAHCP Table 7.1A Analysis and Forecast
- Updated Drought of Record probabilities
- Aquifer Storage Recovery (ASR) and Voluntary Irrigation Suspension Program Option (VISPO) updates
- EAHCP 2022 Proposed Budget
- EAA Aquifer Management Fee and EAHCP Reserve Fund Forecast

EAHCP Table 7.1A Analysis and Forecast. EAA staff presented an update on the 7.1 Budget, detailing the projected expenses for all EAHCP activities for the duration of the current Incidental Take Permit (ITP), which runs 2013-2027 and totals \$261,907,955, without application of the 2% escalation component. A detailed illustration was given of how this compares to actual expenses (7.1 Adjusted or Table 7.1A) thus far and projected through 2027. The current projections show the EAHCP will be about \$52.8 million under budget by the end of that timeframe (\$209,092,255). This projection assumes no triggering events for VISPO or ASR recovery before 2027.

Updated Drought probabilities. EAA staff presented the updated Drought probabilities to the Work Group. Based on the recent recharge numbers, there is a 0% chance that ASR forbearance will trigger in 2022 or 2023 and a near zero probability of triggering in 2024. There is a 35% probability that the 10-year recharge trigger for the ASR forbearance program will occur between 2025 and 2031, with the strongest likelihood of this occurring in 2028/2029, beyond the term of the current ITP.

Between 2021 and 2028, EAA staff projects there is a 43.2% chance that VISPO forbearance will trigger in one or more years (0.2% higher than the 2020 forecast), a 9.9% chance it will trigger in two or more years (0.1% lower than 2020), a 1.4% chance it will trigger in three or more years (0.1% higher than 2020), and a 0.1% chance of it triggering four or more times (0.02% lower than 2020).

Aquifer Storage Recovery and Voluntary Irrigation Suspension Program Option updates. EAA staff provided an update and overview of ASR and VISPO. A key EAHCP goal of the ASR, to store 126,000 acre-feet to off-set pumping during the Drought of Record (DOR), was successfully met in 2020. The EAHCP also includes a second key goal for an additional 50,000 acre-feet of groundwater withdrawal rights to remain unused during the DOR, which is the ASR lease/forbearance acquisition goal. Thus far, there is approximately 12,838 acre-feet in ASR leases and approximately 36,477 acre-feet in ASR forbearance agreements, for a total of 49,315 acre-feet for 2022. EAA staff anticipates securing forbearance agreements in the amount of 685 acre-feet by the end of 2021 to meet the total 50,000 acre-feet goal.

The EAA has met the VISPO goal of securing 41,795 acre-feet of water in 5- and 10-year forbearance agreements. These forbearance agreements will remain in place through 2023, with about 19,365 acre-feet expiring in 2024. The terms of future agreements may be adjusted to coincide with the end of the ITP.

EAA Aquifer Management Fee and EAHCP Reserve Fund Forecast. EAA staff presented the proposed 2022 EAHCP Budget as well as expense projections through 2026. The projected EAHCP program expenditures, which assume no triggering of ASR or VISPO forbearance through 2026, are forecasted to level-off and remain relatively flat during this timeframe. This is largely due to the conclusion of the Regional Water Conservation Program in 2020 and the prediction that implementation of the EAHCP will essentially be in operational maintenance for the rest of the period.

As presented by EAA staff, the EAHCP Reserve Fund is projected to be at just over \$28 million at the end of 2021 and is expected to decrease to about \$26.4 million by the end of 2022, equal to the minimum reserve "floor" recommended by the Budget Work

Group in 2017 and implemented by the EAA Board beginning in 2018. With no additional increase to the EAA's aquifer management fee rate for 2023 and implementation of the proposed reduction in the HCP Program AMF rate to \$31, current projections indicate the EAHCP Reserve Fund would drop about \$2.1 million below the \$26.4 million level by the end of 2023.

The portion of the overall AMF rate that funds the EAA's general operations is projected to continue to increase as in past budget cycles with another projected increase in 2022. Based on the proposed allocation of AMF, to maintain the EAHCP Reserve Fund at, or just above, its Reserve Floor of \$26.4 million, the EAA would need to assess a gradual and significant increase to the current \$84 per acre-foot AMF rate starting in 2023, as summarized in the following table:

| | | Aquifer Management Fee Rates * | | | | |
|-----------------|--------|--------------------------------|--------------|--------------|--------|--------|
| | 2021-A | 2022-F | 2023-F | 2024-F | 2025-F | 2026-F |
| EAA General AMF | \$50 | \$53 | \$55 | \$55 | \$64 | \$68 |
| HCP Program AMF | \$34 | \$31 | <i>\$3</i> 5 | <i>\$3</i> 5 | \$33 | \$33 |
| Combined AMF | \$84 | \$84 | \$90 | \$90 | \$97 | \$101 |

* "A" - Actual "F" - Forecast

At the September 29 meeting of the Budget Work Group, Mr. Roland Ruiz - EAA General Manager, expressed the EAA's plan to retain the services of a third-party consultant to conduct an economic analysis of the EAA's AMF structure prior to proposing future rate increases.

Findings of the Budget Work Group and considerations for the Implementing Committee. The major findings of the Budget Work Group and its recommendations to the Implementing Committee are listed below.

Findings:

- The current financial projections and cost estimates presented to the Budget Work Group indicate an overall fiscally stable and adequate budget for the EAHCP program for fiscal year 2022.
- While the EAHCP Reserve is projected to remain slightly above the established Reserve Floor of \$26.4 million in 2022, concerns were raised at the Budget Work Group meeting regarding the continuing downward trend of the EAHCP Reserve and the possible fiscal implications, particularly should drought conditions trigger ASR or VISPO forbearance. Absent increases to the EAHCP Program AMF rate, the EAHCP Reserve is projected to drop below the minimum reserve floor by the end of 2023.
- The Budget Work Group agrees that the EAA should conduct an economic analysis to measure the necessity and potential effects of a substantial AMF rate increase over the next 5 years. The group stresses the importance that the EAHCP Implementing Committee and EAA Board understand that decisions related to EAA operations and EAHCP program funding and associated reserve

- amounts may dramatically affect the financial viability of the program, particularly as it draws nearer to the renewal date of the Incidental Take Permit.
- The Budget Work Group will convene as early in the budget process as reasonable (as has been proposed in the past) and is likely to have more than one meeting prior to the EAA's 2023 proposed budget adoption.

Recommendations:

- The Work Group recommends the Implementing Committee advise the EAA Board to maintain an appropriate HCP Program AMF rate beginning in 2023 to ensure reserves are sufficient to meet the drought-related provisions of the EAHCP.
- The Budget Work Group further recommends the Implementing Committee, EAA Board, and staff continue to monitor the potential for conditions triggering drought response measures and the impact of such droughts on the EAHCP Reserve Funds.
- For 2022, the Budget Work Group recommends that the Implementing Committee take necessary actions to appoint individuals to fill any open positions and a work group chair, as prescribed in the original 2017 charge.

APPENDIX A SLIDE PRESENTATIONS





EAHCP BUDGET WORK GROUP

SEPTEMBER 29, 2021

CHARGE OF THE EAHCP BUDGET WORK GROUP

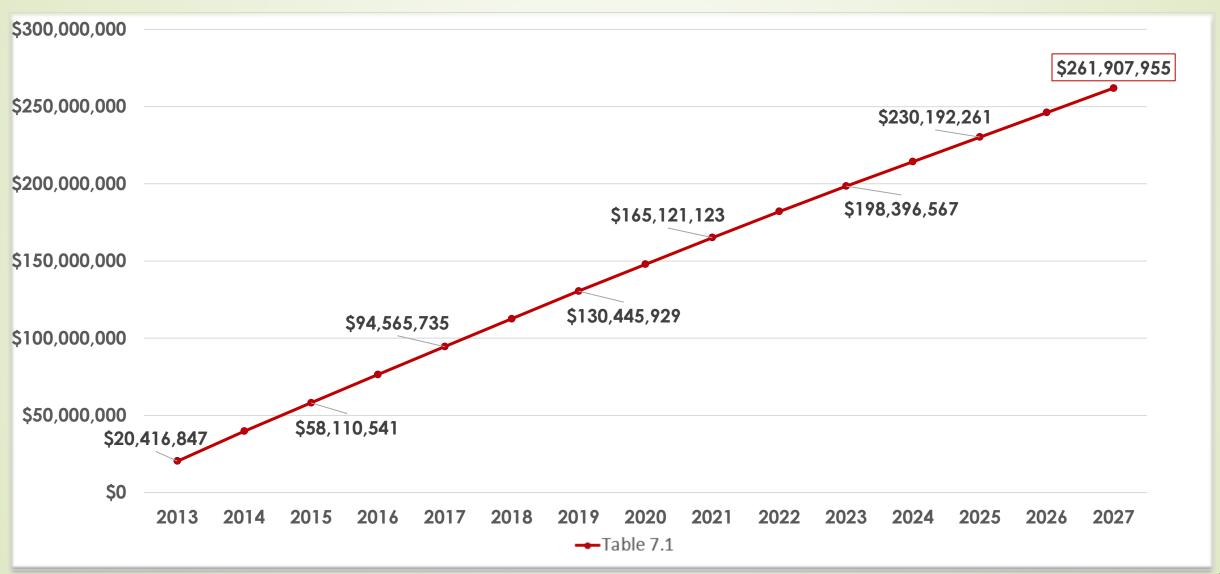
- Collaborate with and inform the EAA Budget Process, as it relates to the EAHCP, EAHCP reserve and EAHCP aquifer management fee.
- Address fiscal issues as they arise and are referred by the Implementing Committee.

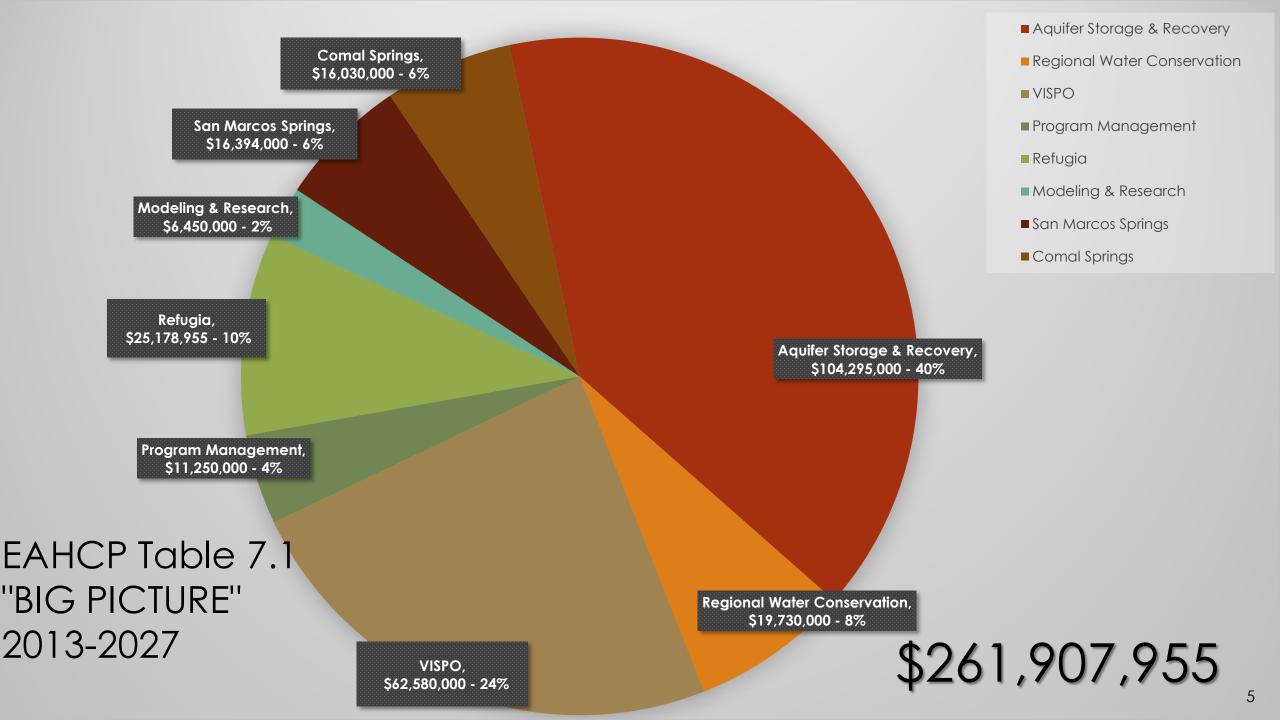




EAHCP 7.1A ANALYSIS AND FORECAST

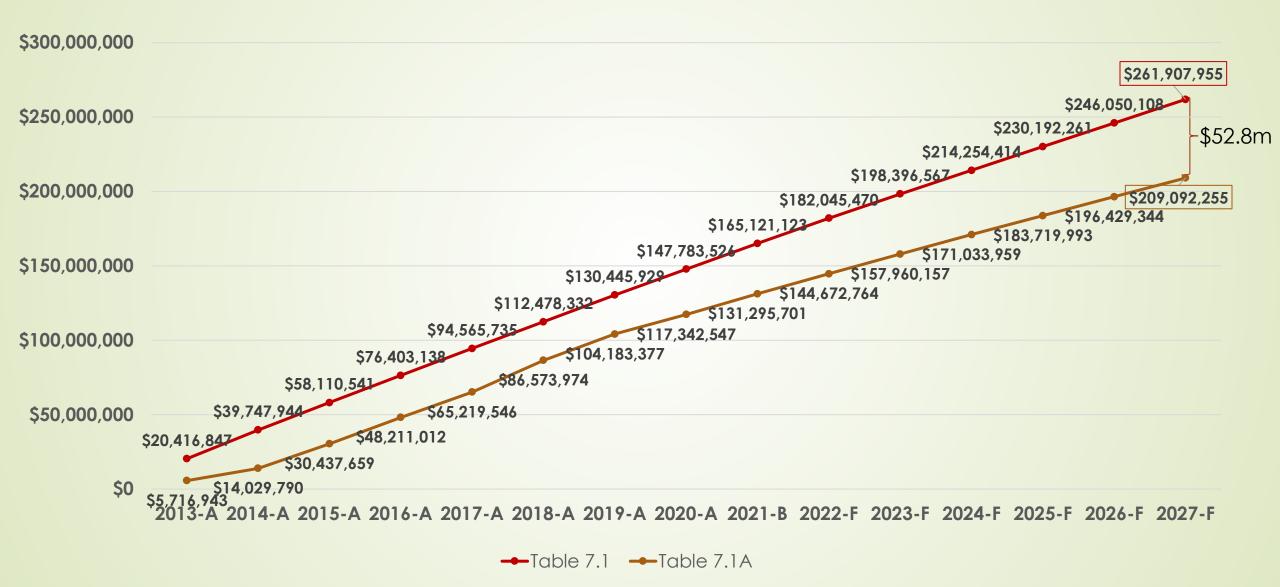
EAHCP TABLE 7.1





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 Totals | Table 7.1A Projected Totals | Between Table 7.1 to 7.1A |
|-----------------------------|---------------------|-----------------------------------|---------------------------|
| Program Administration | \$11,250,000 | \$15,130,739 | (\$3,880,739) |
| ASR - Leasing/Forbearance | 71,385,000 | 71,360,175 | 24,825 |
| ASR - O & M | 32,910,000 | 4,709,262 | 28,200,738 |
| Regional Water Conservation | 19,730,000 | 19,414,103 | 315,897 |
| VISPO | 62,580,000 | 37,870,934 | 24,709,066 |
| San Marcos Springs | 16,394,000 | 19,098,697 | (2,704,697) |
| Comal Springs | 16,030,000 | 16,293,330 | (263,330) |
| Modeling & Research | 6,450,000 | 6,497,699 | (47,699) |
| Refugia | 25,178,955 | 18,717,315 | 6,461,640 |
| Total | \$261,907,955 | \$209,092,255 | \$52,815,700 |

| Entity | Table 7.1 Totals | Table 7.1A Projected Totals | Between Table 7.1 to 7.1A |
|---|---------------------|-----------------------------------|---------------------------|
| Edwards Aquifer Authority | \$238,483,955 | \$185,035,542 | \$53,448,413 |
| City of San Marcos - Texas State University | 11,894,000 | 13,476,208 | (1,582,208) |
| City of New Braunfels | 11,530,000 | 10,580,506 | 949,494 |
| Total | \$261,907,955 | \$209,092,255 | \$52,815,700 |

EDWARDS AQUIFER AUTHORITY

| EAHCP Measure | Table 7.1 Totals | Table 7.1A Projected Totals | Between Table 7.1 to 7.1A |
|--|---------------------|-----------------------------------|---------------------------|
| ASR - Leasing/Forbearance | \$71,385,000 | \$71,360,175 | \$24,825 |
| ASR - O & M | 32,910,000 | 4,709,262 | 28,200,738 |
| Regional Municipal Water Conservation | 19,730,000 | 19,414,103 | 315,897 |
| VISPO | 62,580,000 | 37,870,934 | 24,709,066 |
| Biological Monitoring | 6,000,000 | 8,594,367 | (2,594,367) |
| Water Quality Monitoring | 3,000,000 | 2,740,948 | 259,052 |
| Ecological Modeling | 1,150,000 | 1,147,758 | 2,242 |
| Applied Research (Research & Facility) | 4,750,000 | 3,991,428 | 758,572 |
| Refugia | 25,178,955 | 18,717,315 | 6,461,640 |
| Program Management | 11,250,000 | 15,130,739 | (3,880,739) |
| Science Review Panel | 550,000 | 1,358,513 | (808,513) |
| Total | \$238,483,955 | \$185,035,542 | \$53,448,413 |

CITY OF SAN MARCOS/TEXAS STATE UNIVERSITY

| 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 | \$1,241,168 | \$608,832 |
| Sediment Removal | 850,000 | 744,292 | 105,708 |
| Non-Native Plant Species Control | 1,375,000 | 3,028,019 | (1,653,019) |
| Litter Control/Floating Vegetation | 1,200,000 | 690,501 | 509,499 |
| Non-Native Animal Species Control | 525,000 | 414,212 | 110,788 |
| Bank Stabilization/Perm Access Points | 780,000 | 1,153,492 | (373,492) |
| Restoration - Riparian Zones | 380,000 | 659,245 | (279,245) |
| Management - Key Public Rec Areas | 784,000 | 846,781 | (62,781) |
| LID/BMP Management | 3,600,000 | 4,170,454 | (570,454) |
| Household Hazardous Waste Program | 450,000 | 412,696 | 37,304 |
| Sessom Creek Sand Bar | 100,000 | 100,000 | 0 |
| Education | 0 | 15,349 | (15,349) |
| Total | \$11,894,000 | 13,476,208 | (\$1,582,208) |

CITY OF NEW BRAUNFELS

| EAHCP Measure | Table 7.1 Totals | Table 7.1A Projected Totals | Between Table 7.1 to 7.1A |
|---|---------------------|-----------------------------------|---------------------------|
| Old Channel Restoration | \$2,000,000 | \$1,759,022 | \$240,978 |
| Flow Split Management | 270,000 | 352,878 | (82,878) |
| Aquatic Vegetation Restoration | 1,245,000 | 1,421,616 | (176,616) |
| Non-Native Animal Species Control | 1,245,000 | 1,009,722 | 235,278 |
| Decaying Vegetation Removal | 960,000 | 405,518 | 554,482 |
| Riparian Impr - Riffle Beetle | 525,000 | 498,343 | 26,657 |
| Gill Parasite Control | 1,325,000 | 879,811 | 445,189 |
| Restoration - Riparian Zones | 1,600,000 | 2,192,681 | (592,681) |
| LID/BMP Management | 1,900,000 | 1,267,611 | 632,389 |
| Household Hazardous Waste Program | 450,000 | 538,641 | (88,641) |
| Litter Control/Floating Vegetation | 0 | 251,313 | (251,313) |
| Prohibition - Hazardous Materials Route | 10,000 | 0 | 10,000 |
| Education | 0 | 3,349 | (3,349) |
| Total | \$11,530,000 | \$10,580,506 | \$949,494 |

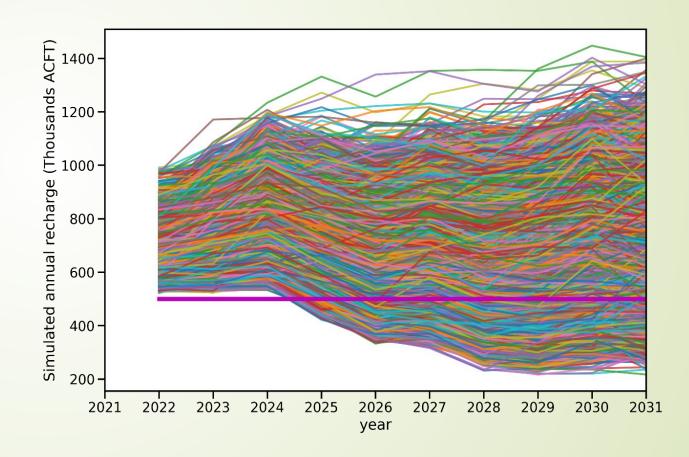




DROUGHT OF RECORD PROBABILITIES

ASR FORBEARANCE TRIGGERING PROBABILITIES

- 2022, 2023: 0% each year
- 2024: near 0%
- 2025: 2.2%
- 2026: 15.8%
- 2027: 14.1%
- Overall chance of triggering at least once during 2025-2031: ~ 35% with probability weighted toward 2028/2029



VISPO TRIGGERING PROBABILITIES

Based on historical J-17 data and current levels, the probability of VISPO triggering in:

- 2021: < 1%
- 2021 2028, each year is independent from the previous year:
 - In any individual year = 6.82%
 - 1 or more VISPO trigger years = 43.2%
 - 2 or more = 9.9%
 - 3 or more = 1.4%
 - 4 or more = 0.1%

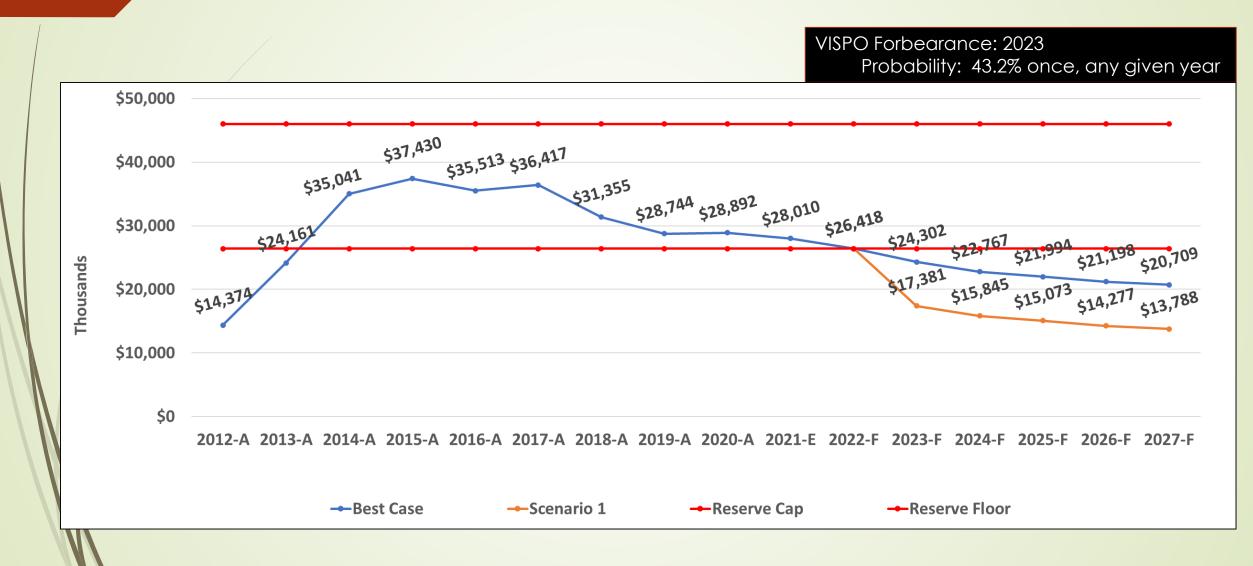
Note: These probabilities are for the number of possible occurrences of VISPO years for period 2021-2028. They are **not** necessarily consecutive years.



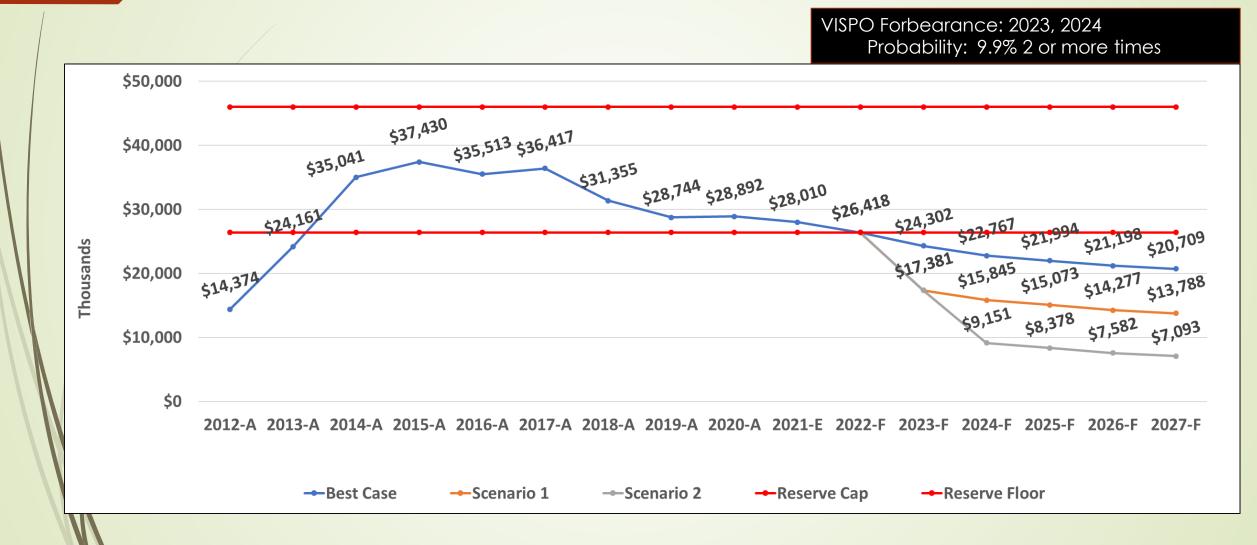


EAHCP DROUGHT SCENARIO RESERVE IMPACTS

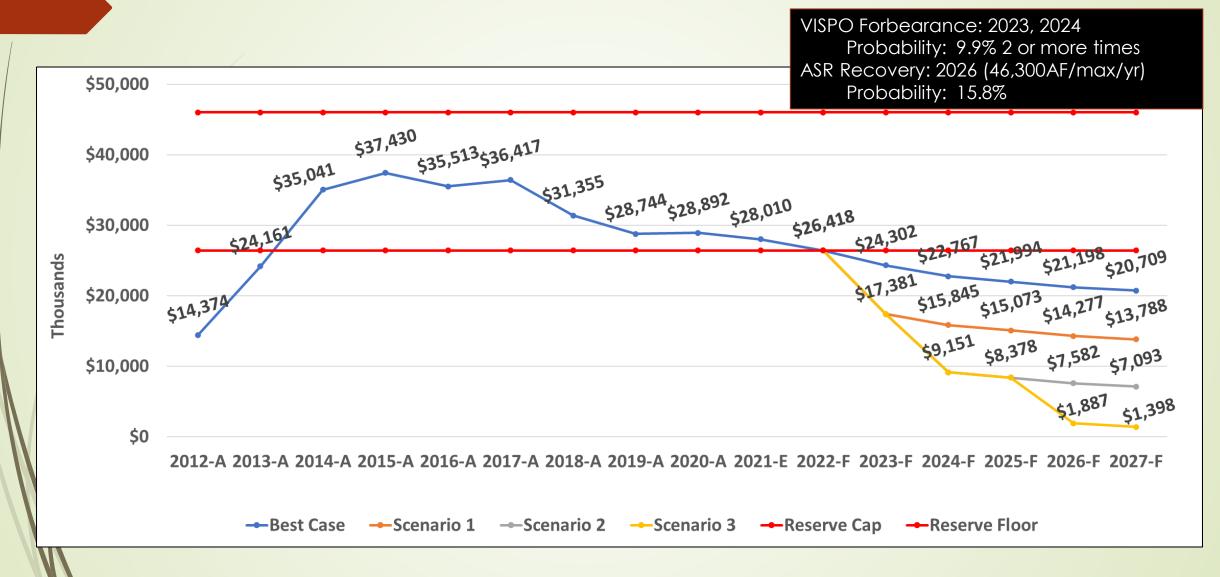
EAHCP RESERVE FORECAST: DROUGHT SCENARIO 1



EAHCP RESERVE FORECAST: DROUGHT SCENARIO 2



EAHCP RESERVE FORECAST: DROUGHT SCENARIO 3







AQUIFER STORAGE AND RECOVERY (ASR) &

VOLUNTARY IRRIGATION SUSPENSION PROGRAM OPTION (VISPO)

AQUIFER STORAGE AND RECOVERY (ASR)

Requirements

- Deliver 126,000 acre-feet to off-set pumping during the Drought of Record (DOR). Storage Complete.
- Acquire an additional 50,000 acre-feet of withdrawal rights to remain unused during DOR.

Objective for 2022

Continue to manage near 300 ASR contracts.

ASR

ASR Storage Complete

| Year | ASR Water Noticed To SAWS (acre-feet) | Cumulative Balance (acre-feet) |
|------|---------------------------------------|-----------------------------------|
| 2013 | 1,868.325 | 1,868.325 |
| 2014 | 4,031.402 | 5,899.727 |
| 2015 | 12,075.016 | 17,974.743 |
| 2016 | 33,258.630 | 51,233.373 |
| 2017 | 31,475.188 | 82,708.561 |
| 2018 | 16,667.000 | 99,375.561 |
| 2019 | 16,667.000 | 116,042.561 |
| 2020 | 9,957.439 | 126,000.000 |

No additional O&M costs until withdrawals during a DOR.

ASR

2022 ASR Program Balance

| ASR Program Contracts | Acre-feet |
|--|------------|
| Leases | 12,837.627 |
| Forbearance Agreements | 36,477.373 |
| Current ASR Leasing/Forbearance Total: | 49,315 |
| Forbearance Agreements Needed | 685.000 |
| Total Expected: | 50,000.000 |

ASR RATES

2022 ASR Leases

| Lease Terms | Acre-feet | Rates/AF |
|-------------|------------|----------|
| 10 Year | 10,585.422 | \$160 |
| 15 Year | 2,252.205 | \$160 |
| Totals: | 12,837.627 | |

2022 ASR Forbearance Agreements

| Forbearance Agreement Terms | Acre-feet | Rates/AF |
|--------------------------------|------------|----------|
| 7-10 Years | 37,162.373 | \$100 |

ASR

Expiring ASR Leases

| Year | ASR Leases (Acre-ft.) | Expiration Amounts (Acre-ft.) |
|------|-----------------------|-------------------------------|
| 2022 | 12,837.627 | 1,724.170 |
| 2023 | 12,754.164 | 83.463 |
| 2024 | 12,753.164 | 1.000 |
| 2025 | 11,486.018 | 1,267.146 |
| 2026 | 10,864.898 | 621.120 |
| 2027 | 10,263.498 | 601.400 |
| 2028 | 0.000 | 10,263.498 |

ASR

Cumulative ASR Forbearance Agreements and Lease Expirations

| Year | ASR Leases | ASR Forbearance Agreements | Totals | Shortage of 50,000 AF |
|------|------------|-------------------------------|------------|-----------------------|
| 2021 | 14,561.797 | 35,438.203 | 50,000.000 | 0.000 |
| 2022 | 12,837.627 | 36,477.373 | 49,315.000 | 685.000 |
| 2023 | 12,754.164 | 36,477.373 | 49,231.537 | 768.463 |
| 2024 | 12,753.164 | 36,477.373 | 49,230.537 | 769.463 |
| 2025 | 11,486.018 | 36,477.373 | 47,963.391 | 2,036.609 |
| 2026 | 10,864.898 | 36,477.373 | 47,342.271 | 2,657.729 |
| 2027 | 10,263.498 | 36,477.373 | 46,740.871 | 3,259.129 |
| 2028 | 0.000 | 36,477.373 | 36,477.373 | 13,522.627 |

VOLUNTARY IRRIGATION SUSPENSION PROGRAM OPTION (VISPO)

Requirements:

 Secure 41,795 acre-feet of forbearance agreements.

Target for 2022:

Continue to manage near 200 VISPO agreements.

VISPO

Rates per Acre-foot:

| Years | Year | Beginning Rate | Rate Increase |
|----------------------|------------|----------------------|-----------------------|
| 10-Year | Standby | \$57.50 (years 1-5) | \$70.20 (years 6-10) |
| | Suspension | \$172.50 (years 1-5) | \$210.60 (years 6-10) |
| 5-Year Agreements | Standby | \$54 | None |
| | Suspension | \$160 | None |

J-17 Index Well Reading is expected to be above 635 ft. msl on October 1st therefore permit holders will be paid the standby rate.

VISPO

2022 VISPO Program Full Until 2024

| | VISPO Agreements | Acre-ft. |
|---|------------------|------------|
| | 5-Year | 26,174.931 |
| / | 10-Year | 15,620.069 |
| | Current Total: | 41,795.000 |

VISPO

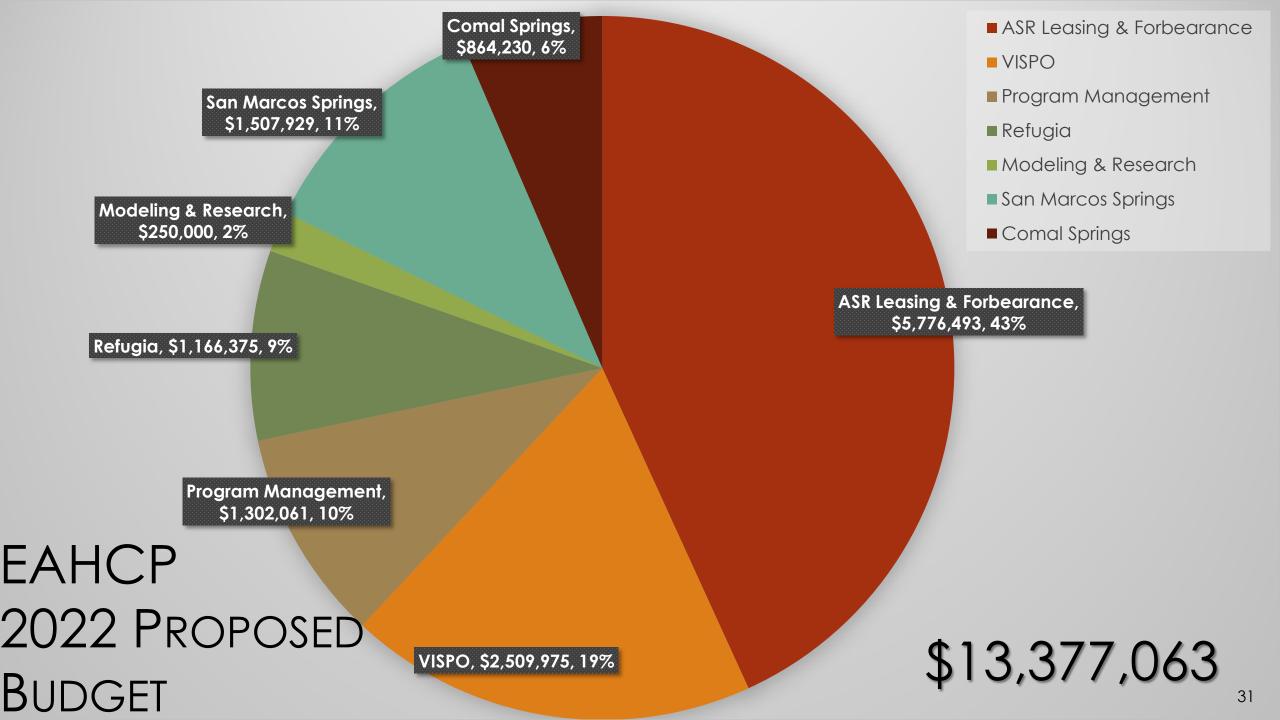
Cumulative VISPO Agreements

| Year | 10-Year | 5-Year | Totals | Shortage of 41,795 AF |
|------|------------|------------|------------|-----------------------|
| 2021 | 15,620.069 | 26,174.931 | 41,795.000 | 0.000 |
| 2022 | 15,620.069 | 26,174.931 | 41,795.000 | 0.000 |
| 2023 | 15,620.069 | 26,174.931 | 41,795.000 | 0.000 |
| 2024 | 4,626.297 | 17,803.548 | 22,429.845 | 19,365.155 |
| 2025 | 150.000 | 3,234.351 | 3,384.351 | 38,410.649 |
| 2026 | 150.000 | 0.000 | 150.000 | 41,645.000 |
| 2027 | 0.000 | 0.000 | 0.000 | 41,795.000 |
| 2028 | 0.000 | 0.000 | 0.000 | 41,795.000 |

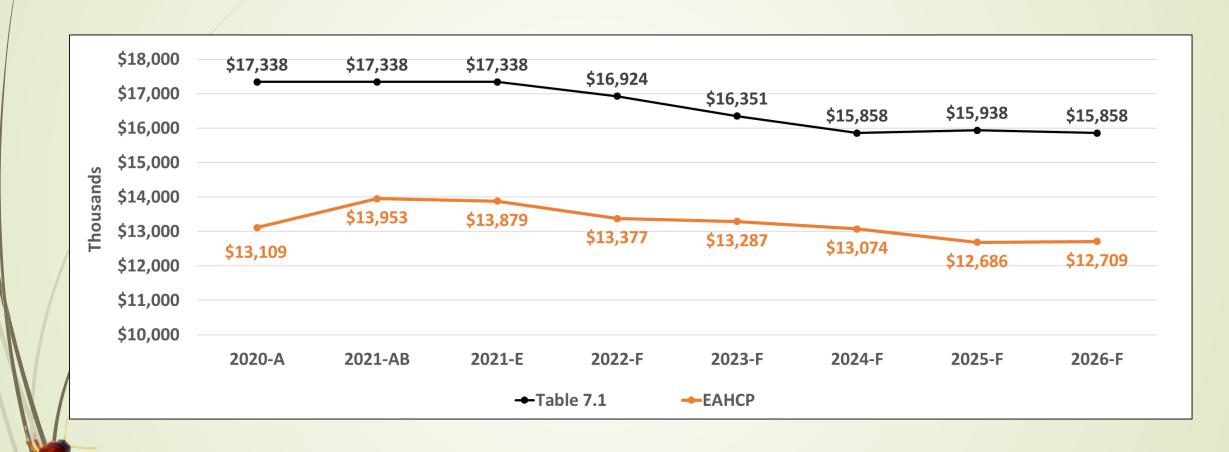




2022 PROPOSED EAHCP BUDGET & RESERVE FUND PROJECTIONS



EAHCP EXPENSE PROJECTIONS

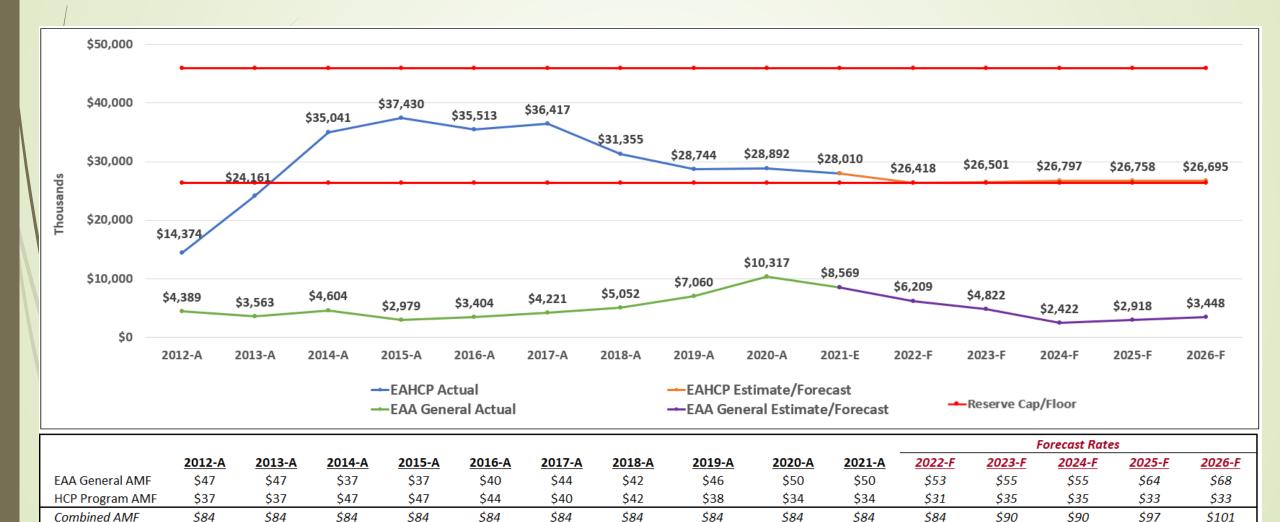


EXPENSE PROJECTIONS



Note: Percentages indicate year-to-year percentage change in budget/forecast.

RESERVE FUND PROJECTIONS



QUESTIONS?

APPENDIX B MEETING AGENDA



2021 EAHCP Budget Work Group

Meeting Agenda Wednesday September 29, 2021 2:00 p.m.- 4:00 p.m.

Click here to join the meeting Or call in 210-729-0064 Phone Conference ID: 673 251 931#

- 1. Confirm attendance
- 2. Meeting logistics
- 3. Public comment
- 4. Presentation and discussion of the EAHCP Table 7.1A Analysis and Forecast Purpose: To provide forecasted analysis of the EAHCP 7.1A Budget Action: No action required
- 5. Presentation and discussion of the updated Drought of Record probabilities within the remaining tenure of the current EAHCP

Purpose: To provide an overview of the updated Drought of Record

projected expenses

Action: No action required

6. Presentation of the fiscal impacts of the Aquifer Storage Recovery (ASR) and Voluntary Irrigation Suspension Program Option (VISPO) programs as modified through previous adaptive management processes

Purpose: To provide an update on the ASR and VISPO programs **Action:** No action required

7. Presentation and discussion of the 2022 EAHCP Budget

Purpose: To provide an overview of the EAHCP 2022 Budget Forecast and

Reserve Fund Projections

Action: Consideration to make recommendations to the Implementing

Committee



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9. Future meetings

APPENDIX C MEETING MINUTES



2021 EAHCP Budget Work Group

Meeting Minutes Wednesday September 29, 2021

Members of this Work Group include Brock Curry (Acting Chair – Edwards Aquifer Authority), Adam Yablonski (Medina County Farm Bureau), Myron Hess (Texas Living Waters Project), Cecilia Vasquez (SAWS), and Tom Taggart (City of San Marcos).

1. Confirm attendance.

Brock Curry called the meeting to order at 2:02 p.m. Damon Childs called roll for the Work Group. All Work Group members were present.

2. Public comment.

There were no comments from the public.

3. Presentation and discussion of the EAHCP Table 7.1A Analysis and Forecast.

Shelly Hendrix, Edwards Aquifer Authority (EAA) Director/Controller Financial Services, presented an overview of EAHCP Table 7.1 and Table 7.1A. Overall, Table 7.1 is budgeted at \$261,907,955 for EAHCP activities from 2013-2027. Ms. Hendrix also presented Table 7.1A, which illustrates the actual amounts spent per conservation measure per year through 2020 and forecasts expenses through the end of the Incidental Take Permit (2028). A comparative look at the projections between Table 7.1 and Table 7.1A indicates expenditures at \$52.8 million below Table 7.1 values, assuming no additional triggering of VISPO or ASR. Brock Curry clarified that current values of what has been spent as of 2020 are actual values and all other values are forecasted. Myron Hess noted that with respect to the amounts projected in Table 7.1 for VISPO and ASR measures, the original dollar amounts assumed the expenses associated with potential springflow triggers for both springflow protection conservation measures over the term of the ITP.

4. Presentation and discussion of the updated Drought probabilities within the remaining tenure of the current EAHCP.

Shelly Hendrix presented the updated Drought probabilities. Based on modeling scenarios, there is a 0% chance that Aquifer Storage and Recovery (ASR) forbearance will trigger in 2022 or 2023 and a near zero chance for 2024. There is an overall 35% chance of ASR forbearance triggering at least once throughout 2025 – 2031, with the highest probability occurring in 2028/2029.

Tom Taggart asked if the model was based on historical recharge amounts in



the period of record. Paul Bertetti, EAA Director of Aquifer Science, clarified that the period of record for recharge is calculated and used as the value for generating future recharge amounts. 10-year averages are recalculated and projected using model runs. Many model runs are used to account for the uncertainty that is associated with 10-year averages. Mr. Taggart asked if the model accounted for climate change variations. Mr. Bertetti noted that the model does not account for future climate change variations but rather historical recharge averages.

Myron Hess questioned the differences between the 2026 and 2027 ASR forbearance trigger probabilities. Mr. Bertetti explained that the values change as individual years drop out of the 10-year calculation period.

Based on historical data from J-17 and current aquifer levels, there is a 6.82% chance of a VISPO trigger during any individual year from 2021-2028. Specifically, there is a 43.2% chance that it may trigger 1 or more times during that timeframe, a 9.9% chance of 2 or more trigger years, a 1.4% chance of 3 or more trigger years, and a 0.1% chance of 4 or more trigger years.

Darren Thompson commented that future triggering percentages are conservative because the production from the Edwards Aquifer is changing as SAWS and others diversify water supplies. What has been produced in the past is not an indication of what will be produced in the future.

5. Presentation of the fiscal impacts of the Aquifer Storage Recovery (ASR) and Voluntary Irrigation Suspension Program Option (VISPO) programs as modified through previous adaptive management processes.

Javier Hernandez, EAA Special Projects Liaison, provided an update and overview of the ASR and VISPO programs. The targeted ASR storage, 126,000 acre-feet, was completed in 2020. Additionally, 50,000 acre-feet of withdrawal rights were secured, through leases and forbearance agreements, and will remain unused during a Drought of Record. About 300 ASR contracts will continue to be managed throughout 2022. Continuing through 2028, various ASR leases will expire. Mr. Hernandez indicated that the EAA is working on securing ASR forbearance agreements.

Mr. Hernandez reminded the Work Group of the VISPO requirement to secure 41,795 acre-feet of forbearance agreements. In 2022, the target is to continue to manage 200 VISPO agreements. The VISPO 10-Year agreements had different rates for years 1-5 and 6-10 for both standby and suspension payments. The rates for standby and suspension under 5-Year agreements did not change by year. Currently, there is no indication that VISPO forbearance will trigger on October 1. Enrollments have been met for 2022 however agreements will begin to expire by 2024. EAA will work to re-enroll permit holders into the VISPO program in 2023.

6. Presentation and discussion of the 2022 EAHCP Budget.



Ms. Hendrix presented the 2022 proposed budget for the EAHCP program. For 2022, the estimated budget to implement EAHCP activities is \$13,377,063. EAHCP expense projections indicate a decreasing trend as many conservation activities are assumed to operate in a maintenance phase. Mr. Taggart clarified that the EAHCP values assume no VISPO or ASR triggering.

Roland Ruiz, EAA General Manager, noted that Aquifer Management Fees (AMF) are projected to increase. It would be beneficial for a third-party consultant to provide a financial economic analysis of the various components of the AMF structure and the impact to the communities that EAA and the EAHCP serves.

Mr. Taggart agreed with Mr. Ruiz's recommendation to conduct a third-party financial review. Based on the current financial analysis, the EAHCP program is still financially sustainable through 2022 even with adjustments to the AMF. Mr. Taggart noted it may be possible that the current reserve floor will not provide financial protections under different climate scenarios, especially when applying this toward a future Incidental Take Permit.

Darren Thompson commented that it would be beneficial to have enough reserve funds in place for the EAHCP while not having to dramatically increase the AMF.

Myron Hess recommended that future discussions of the Work Group should occur much sooner than is occurring during the current budget cycle. This request had been made in previous years. Brock Curry noted that these budget discussions have historically occurred during the September timeframe after the EAA Board reviews financial projections. Mr. Curry recommended the Work Group meet earlier in 2022 than in the fall timeframe as in previous years to discuss the EAA's financial forecast, which likely would involve more than one meeting of the Work Group.

7. Public comment

There were no comments from the public.

8. Future meetings

Potential meeting on Monday, October 4, 2021 to finalize recommendations.

9. Adjourn - 3:26 p.m.