

MIDDLE PECOS GROUNDWATER CONSERVATION DISTRICT

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Email: mpgcd@mpgcd.org Website: www.middlepecosgcd.org

Directors

Jerry McGuairt, President Janet Groth, Vice President M. R. Gonzalez, Secretary/Treasurer
Alvaro Mandujano, Jr. Vanessa Cardwell Ronald Cooper
Weldon Blackwelder Allan Childs Jeff Sims Puja Boinpally Larry Drgac

Employees

Ty Edwards, General Manager
Office: Gail Reeves & Melissa Mills Field Technician: Anthony Bodnar

MINUTES OF REGULAR BOARD MEETING TO BE HELD BY VIDEOCONFERENCE AND TELECONFERENCE

September 15, 2020

In accordance with Governor Abbott's declaration of the COVID-19 public health threat and action to temporarily suspend certain provisions of the Texas Open Meetings Act, a quorum of the District's Board of Directors held its regular Board meeting by videoconference and call-in. The public was invited to join this meeting by way of videoconference and toll-free call-in. Members of the public wishing to make public comment during the meeting were able to register by emailing mpgcd@mpgcd.org prior to 9:30 a.m. on September 15, 2020. A copy of the agenda packet was made available on the District's website at the time of the meeting.

On this the 15th of September 2020, a Regular Board Meeting was held by the Middle Pecos Groundwater Conservation District with the following members present:

Jerry McGuairt	President, Precinct 1
Janet Groth	Vice President, Precinct 1
M. R. Gonzalez	Prec. 2, Sec./Treasurer
Weldon Blackwelder	Precinct 3
Ronnie Cooper	Precinct 4
Alvaro Mandujano, Jr	Precinct 4
Vanessa Cardwell	City of Fort Stockton
Jeff Sims	City of Iraan

Quorum Present.

Members Absent: Puja Boinpally, Allan Childs and Larry Drgac

District employees and consultants participating: Ty Edwards, Gail Reeves, Anthony Bodnar, Allan Standen, Vince Clause, Michelle Sutherland, Bill Hutchison and Mike Gershon.

Others attending via Videoconference: Geoff Pike, Glenn Honaker, Ryan Reed, Buck Benson, Zachary Swick, Ed McCarthy, Brock Thompson, Jeff

Williams, Mark Tisdale, Gary Bryant, Robert Mace, Sharlene Leurig, Steven Sims, Daniel Lupton.

- I Call to order regular Board meeting at 10:01 a.m. by President Jerry McGuairt.
- II Comments from **public and media**: No comments.
- III Consider and/or act to approve **Minutes of Regular Meeting on August 18, 2020.**

General Manager Edwards presented the minutes to the Board. After discussion Janet Groth made a motion to approve the Minutes for the meeting of August 18, 2020 as presented. Motion seconded by Ronnie Copper.

Motion passed. Vote: 7 FOR. -0- Oppose 3 Absent 1 Abstain.

- IV Consider and/or act to approve **Minutes of Special Called Meetings and Public Hearing on August 21, 2020 and September 1, 2020.**

General Manager Edwards presented the minutes to the Board for the special meetings that were held to cancel the election and adopt the tax rate. After discussion Janet Groth made a motion to approve the Minutes of Special Called Meetings and Public Hearing on August 21, 2020 and September 1, 2020 as presented. Motion seconded by Vanessa Cardwell.

Motion passed. Vote: 7 FOR. -0- Oppose 3 Absent 1 Abstain.

- V Consider and/or act upon **Treasurer's Report for the Month Ending August 31, 2020.**

General Manager Edwards presented the financials to the Board. After discussion Ronnie Cooper made a motion to approve the Treasurer's Report for the Month Ending August 31, 2020. Motion seconded by Vanessa Cardwell.

Motion passed. Vote: 8 FOR. -0- Oppose 3 Absent

- VI Update on **FSH-MPGCD Joint Study and Implementation.**

General Manager Edwards updated the Board to report that the Joint Study was approved, the agreement has been signed, and we have received the funds. Our new fiscal year is starting October 1st; therefore, Jim Burton will be here the week of October 12th and we will go out to all the sites and start removing the old equipment and installing the downhole portion of the telemetry equipment in the eleven Threshold Wells associated with the Joint Study. Each site will be checked for cellular or satellite service to begin preparing for equipment installation the following month.

VII **Update on Groundwater Model and Management Zone 1 Historical Pumping Estimates.**

General Manager Edwards gave a brief introduction on the work completed on the 3D geologic and groundwater flow models. Vince Clause and Michelle Sutherland, consultants for the District, gave a detailed update and 3D movie preview on the new defined Management Zone 1 update to the 3D geological model. The PowerPoint presentation presented at the meeting is attached as attachment A.

Dr. Bill Hutchison gave an update on historical groundwater production estimates from 2008 to 2018 based on District records and presented several graphs comparing historical groundwater production estimates to current Groundwater Models. He indicated that all this information is critical to the development of the groundwater flow model that is being developed by the District. A tech memo will be created for each of the components for the groundwater flow model and the District will receive comment on each phase of the development. The pumping estimates presentation is attached as attachment B.

Dr. Robert Mace spoke during this item and discussed some of his work on pumping estimates in his draft report associated with Comanche Springs. Dr. Mace went over his simple "Bathtub Model" and reported, in his estimate, if pumping in the Leon Belding area is above 49,000 acre feet a year spring flow will be nonexistent and pumping below 49,000 acre feet a year will produce winter spring flow in Comanche Springs. Dr. Mace did elaborate that in his estimates to produce year round flow at Comanche Springs of 10 – 20 cfs, pumping in the Leon Belding area would need to be 25,000-36,000 acre feet a year. He estimated that 50% of current pumping would need to be reduced to restore Comanche Springs to year round flows.

VIII **Briefing and take action as necessary on Cockrell Investment Partners, L.P. v. Middle Pecos Groundwater Conservation District, Cause No. P-12176-112-CV (Pecos County District Court).**

MPGCD Attorney Mike Gershon reminded the Board that an upcoming hearing is set before Judge Ables on November 12th on the District's plea to the jurisdiction and FSH's plea to the jurisdiction. Mike Gershon recommended that the Board go into executive session before adjourning to discuss this case as authorized by law under the Texas Open Meetings Act section 551.071.

IX **Progress Reports: Well Registrations, Production Permits, Drilling Permits, Data Loggers, Drought Monitor Map, Water Quality Analysis and General Manager's Correspondence.**

- Drought Map was provided in the Board Packet. Pecos County is in Extreme Drought as of 09-08-2020.
- Update on PCWCID#1 USDA Grant Funding and system update.
- Region F Water Planning Group Meeting set for September 17, 2020.
- GMA 7 meeting scheduled for September 16, 2020 at the Sonora Caverns.

- Texas Water Trade has a Request for Proposals: Ag Producer Outreach for Comanche Springs.
- Rig Data Report shows Pecos County has 2 Rigs drilling as of 09-11-2020.
- We had 4 water wells drilled since the last meeting. Two exempt water wells for Bob Hayter at Cannon Ranch for Livestock use. One domestic water well for Colby Jones on N. Hwy 285. One livestock well for Lane Porter on his ranch in South Pecos County.
- Reeves County GCD meeting scheduled for September 17, 2020 to discuss DFC's.
- Total Well Registrations are 3,282 as of 09-15-2020. Exempt 2,319 Non-Exempt 963. 120 Groundwater Samples have been collected so far in 2020.

X **Directors' Comments** and consider and/or act upon **agenda for next meeting**.

No comments. Next Board Meeting is scheduled for October 20, 2020.

President Jerry McGuairt called an Executive Session at 11:11 a.m. pursuant to the Texas Open Meetings Act, section 551.071 of the Texas Government Code, to consult with its attorney, and announced that any action on this matter will be taken in open session only if the action relates to an agenda item that is posted on today's agenda.

The Executive Session adjourned at 11:50 a.m., and the regular session reconvened at 11:53 a.m. The Board President, President Jerry McGuairt, stated that no action, no decisions and no votes were taken in Executive Session.

XI **Adjourn Board meeting**.

Ronnie Copper made a motion to adjourn the meeting. Seconded by M. R. Gonzalez. Motion passed. The meeting adjourned at 11:54 a.m.



 M. R. Gonzalez, Secretary/Treasurer



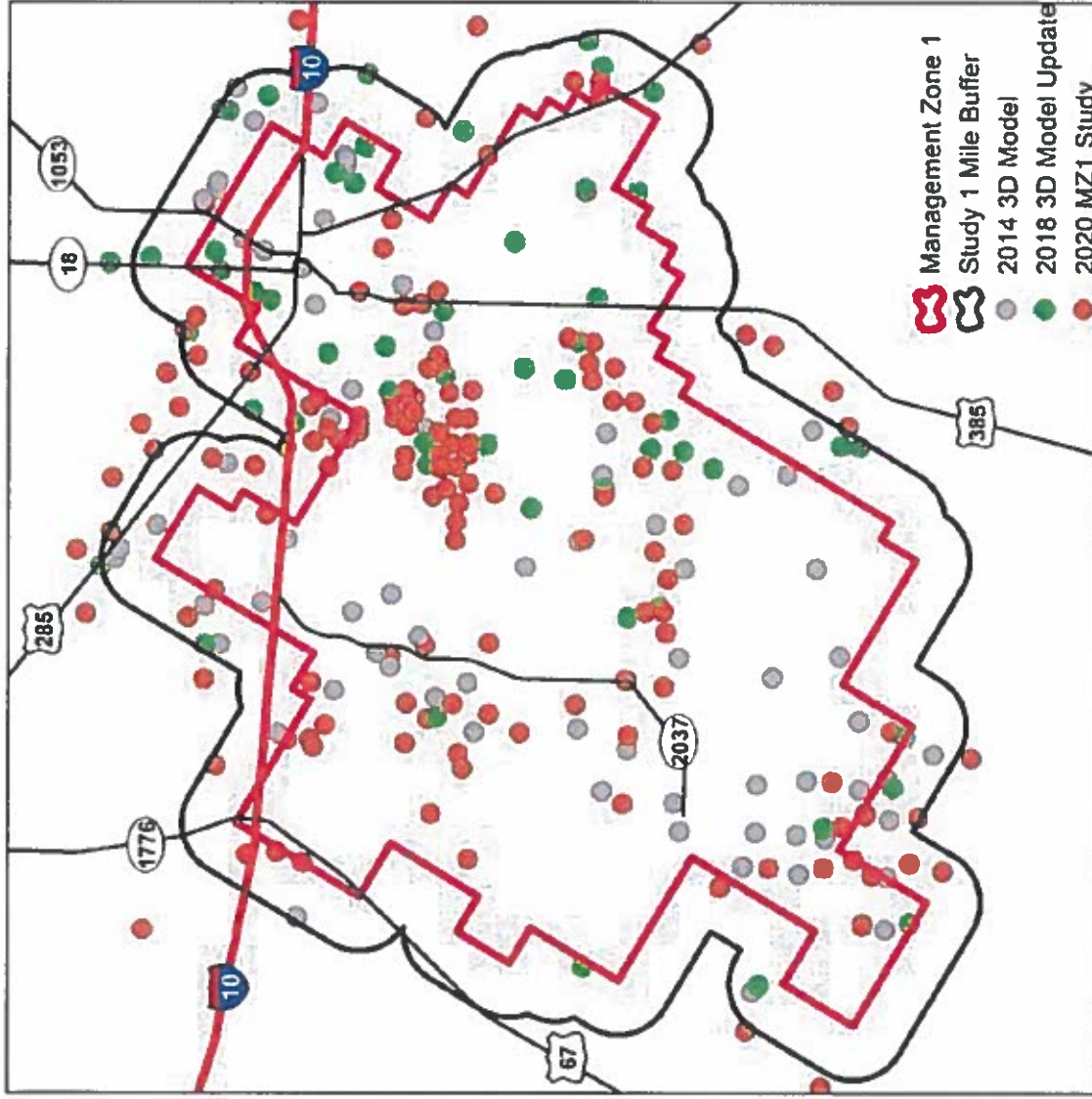
 Jerry McGuairt, President

Date Approved 10-20-20

Middle Pecos GCD – Management Zone 1 Model Update

Vince Clause, GISP (ARS, LLC)
Michelle Sutherland, P.E. (MAS, LLC)
Allan R. Standen P.G. (ARS, LLC)

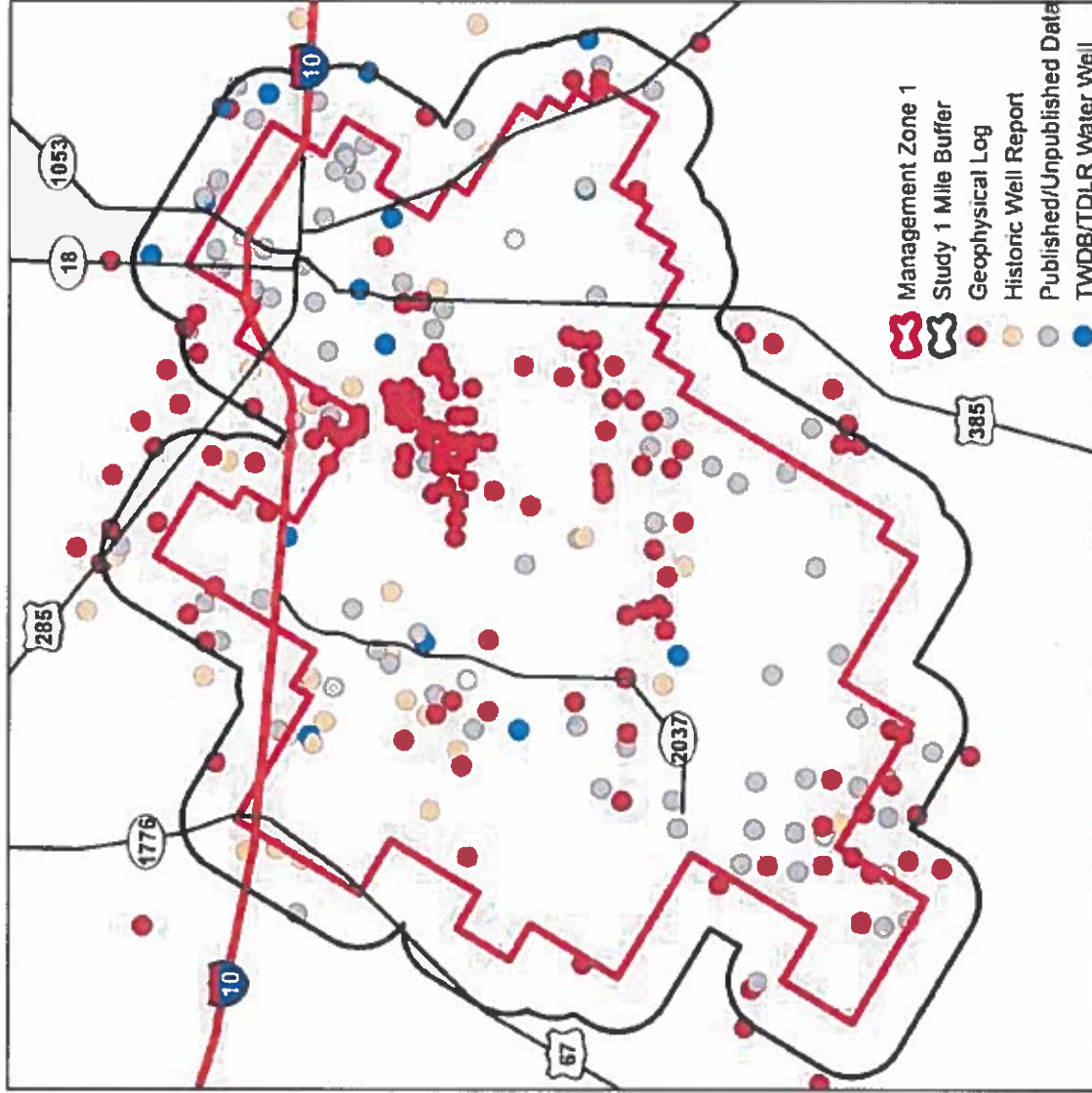
Hydrostratigraphic Well Control



Model Updates	Count
2014 3D Model	72
2018 3D Model Update	57
2020 Management Zone 1 Update	143
Total	272



Hydrostratigraphic Well Data Type



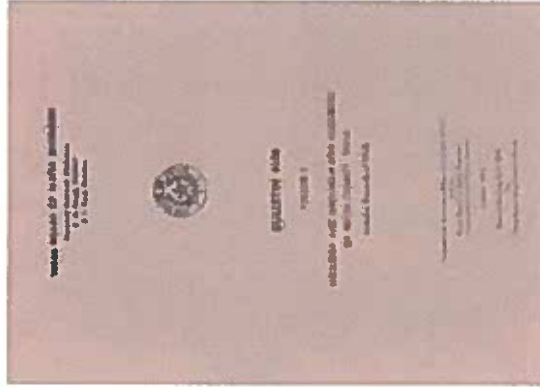
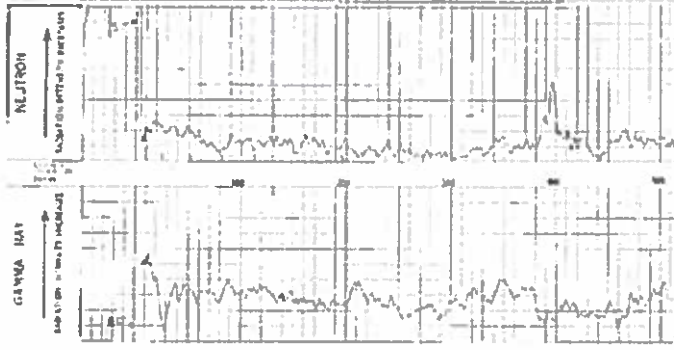
Data Type	Count
Geophysical Log	141
Historic Well Report	29
Published / Unpublished Data	85
TDLR/TWDB Water Well Report	17

Data Sources

- TBWE Bulletin 6106
- TBWE Historic Report - M208
- USGS Edwards-Trinity Framework
- Geophysical Logs – BRACS & BEG
- O&G Cable Tool Well Reports
- TCEQ Plotted/Non-Plotted Wells
- TDLR Driller Reports
- TWDB Driller Reports
- MPGCD Geophysical Logs
- MPGCD Drilling Permits
- DBSA FSH Report

Pecos County, Texas
 330' fr. South & East lines
 Sec. 8, T4K 119
 O C & S F Ry. Co. Survey

0- 65 Limg
 65- 80 Clay & gray shale
 80- 250 Blue & gray shale
 250- 290 Yellow sand
 290- 320 Blue shale
 320- 350 Sandy shale
 350- 405 slick sand
 405- 412 blue shale
 412- 490 quick sand
 490- 497 Red shale
 497- 660 slick sand & shale
 640- 645 Red rock
 645- 740 Red rock & shale
 740- 765 Brown sand
 765- 990 Red rock
 990-1009 Brown sand
 1009-1070 Red rock
 1070-1080 Sand
 1080-1275 Red rock
 1275-1370 Sandy red shale
 1380-1472 Red shale & lime shells
 1472-1465 Blue shale
 1405-1545 Ashy & lime
 1545-1558 Asher sand
 1548-1620 Gray lime
 1620-1719 Blue liq
 1719-1830 Ashy sand
 1830-1838 Gray sand
 1838-2108 Ashy & sil water



STATE OF TEXAS WELL REPORT for Tracking #126310						
Owner	2D's Oilfield Services Inc	Owner Well #	#1	Proposed Use	Domestic	
Address	2109 E Hwy 81 Midland, TX 79702	Grid #	63-81-7			
Well Location	Hwy 288 & Gonzalez Loop Fl. Section, TX. 79723	Latitude	36° 02' 54" N			
Well County	Pecos	Longitude	102° 07' 23" W	Elevation	No Data	
Type of Well	New Well					
Drilling Start Date	10/24/2007	Drilling End Date	10/25/2007			
Borehole	Diameter (in)	9.75	The Depth (ft)	0	Bottom Depth (ft)	275
Drilling Method	Air Rotary					
Borehole Completion	Filter Pack					

A Conceptual Model of the Hydrogeologic Framework, Geochemistry, and Groundwater-Flow System of the Edwards-Trinity and Related Aquifers in the Pecos County Region, Texas

Management Zone 1 – 3D Model Hydrostratigraphy

Stratigraphic Unit	2014 & 2018 MZ1 Formation Picks	2020 MZ1 Update	Total
Edwards	Land Surface	Land Surface	-
Trinity	86	131	217
Dockum	51	123	74
Dewey Lake*	-	136	136
Rustler	45	122	167
Culebra*	-	135	135
Lower Rustler*	-	135	135
Salado	27	98	125
Yates	24	56	80
Capitan Reef	27	18	45

* Not included in prior model updates. Provides enhanced stratigraphic control, and detailed production intervals.



Management Zone 1 – 3D Well Construction and Completion

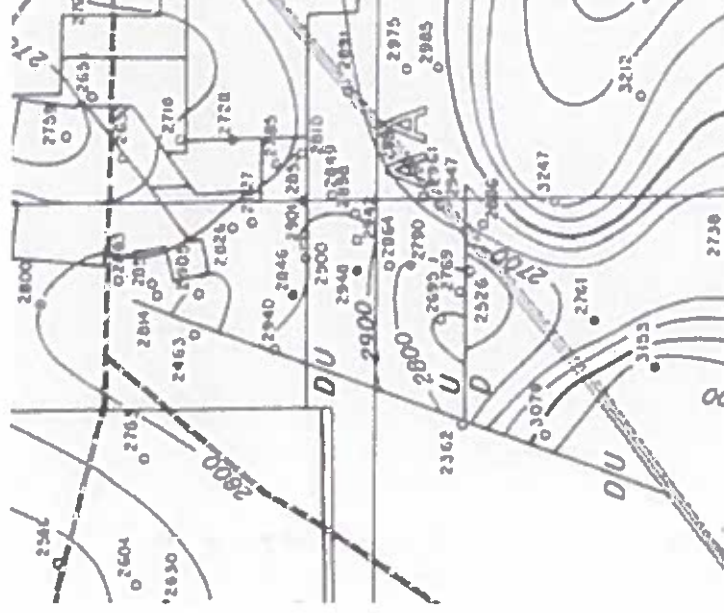
- Located 97 historic water wells not in MPGCD database (Management Zone 1 study area)
 - Many may be plugged/destroyed
- Added well completion data

Wells	Count	Well Depth	Screen Interval
MPGCD Wells	552	201 (+52)	0 (+58)
Historic Water Wells	97	94	45
Totals	649	347	103

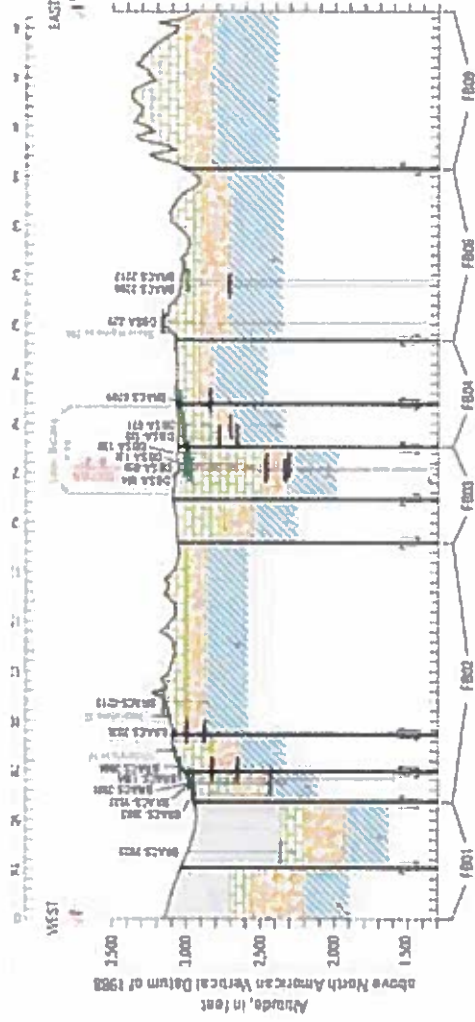


Management Zone 1 – Structure/Fault Development

- Published research provide foundation
 - USGS Conceptual Flow Model
 - Bulletin 6106 Trinity Fault (Figure 5)
- 3D Model formation picks provide enhanced well control

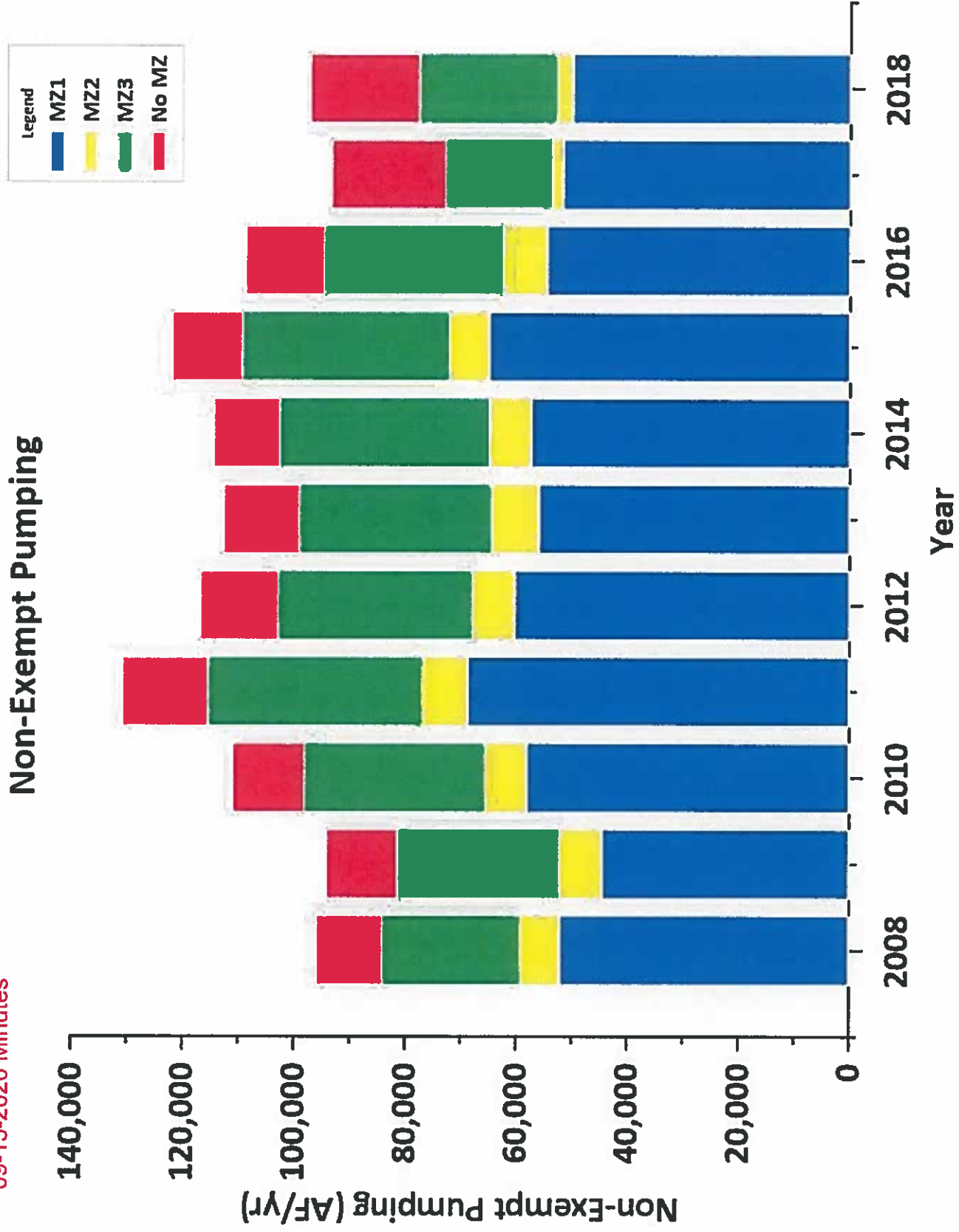


Bulletin 6106 Figure 5

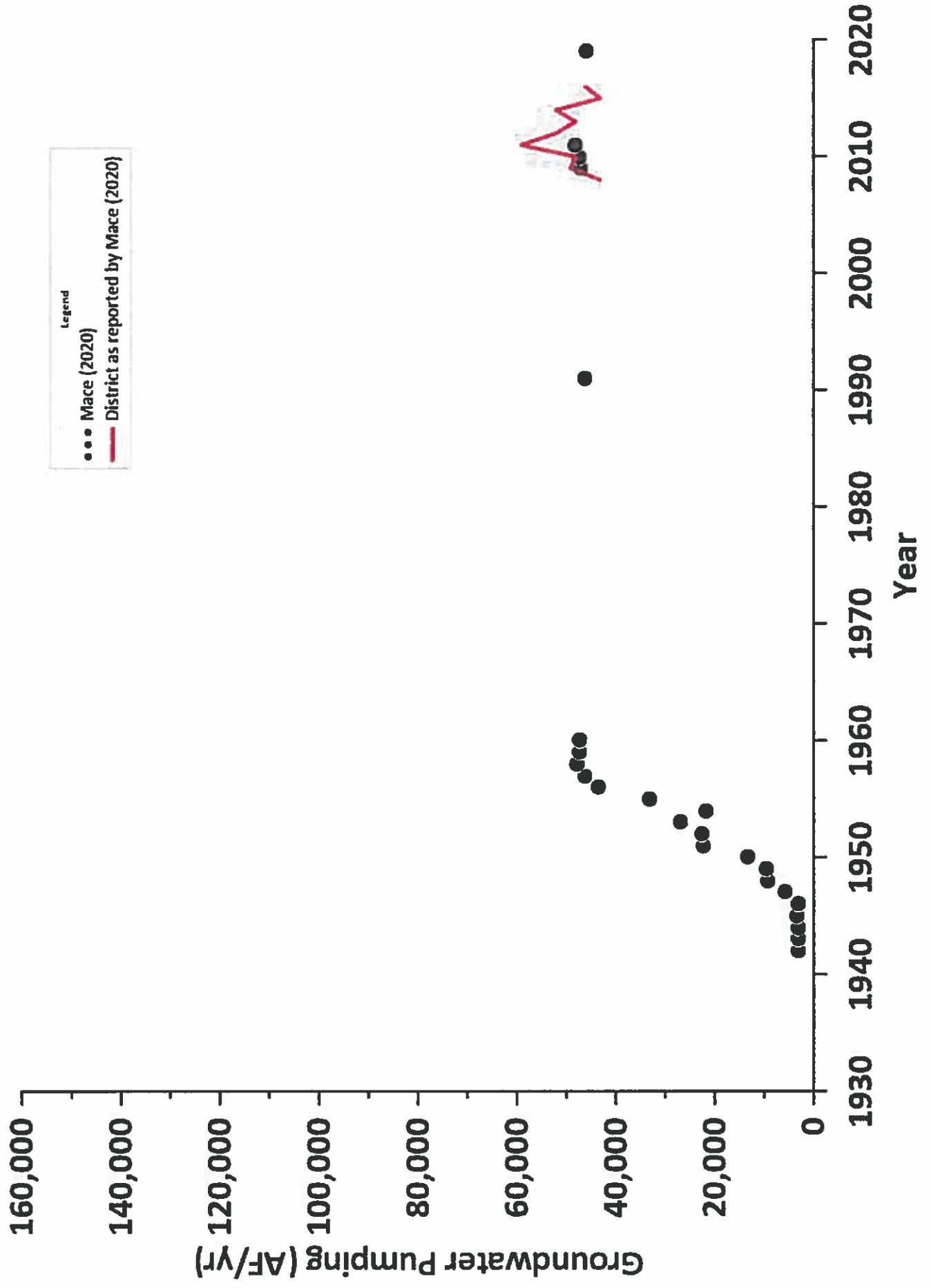


USGS A-A'

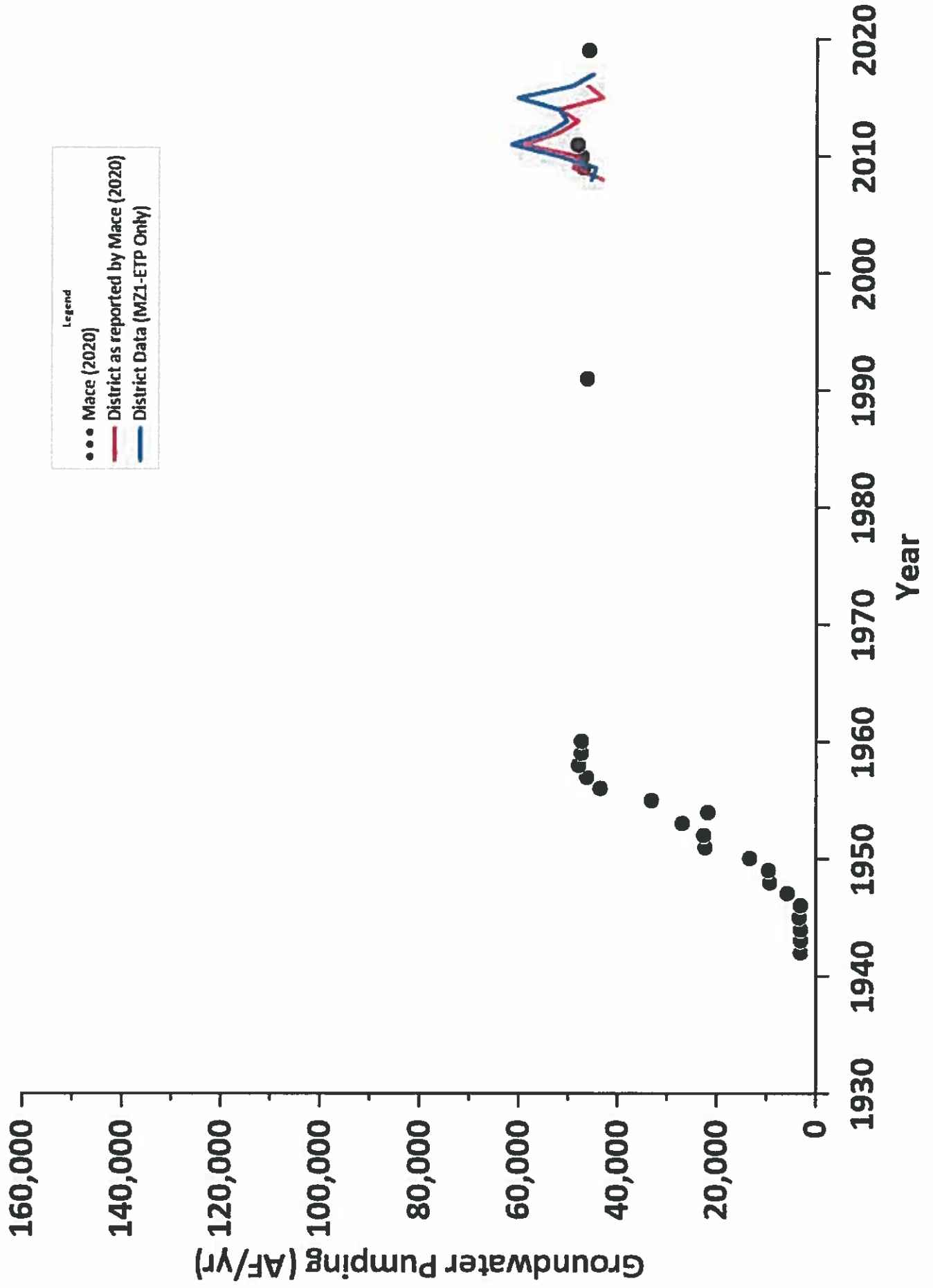
Pecos County Non-Exempt Pumping



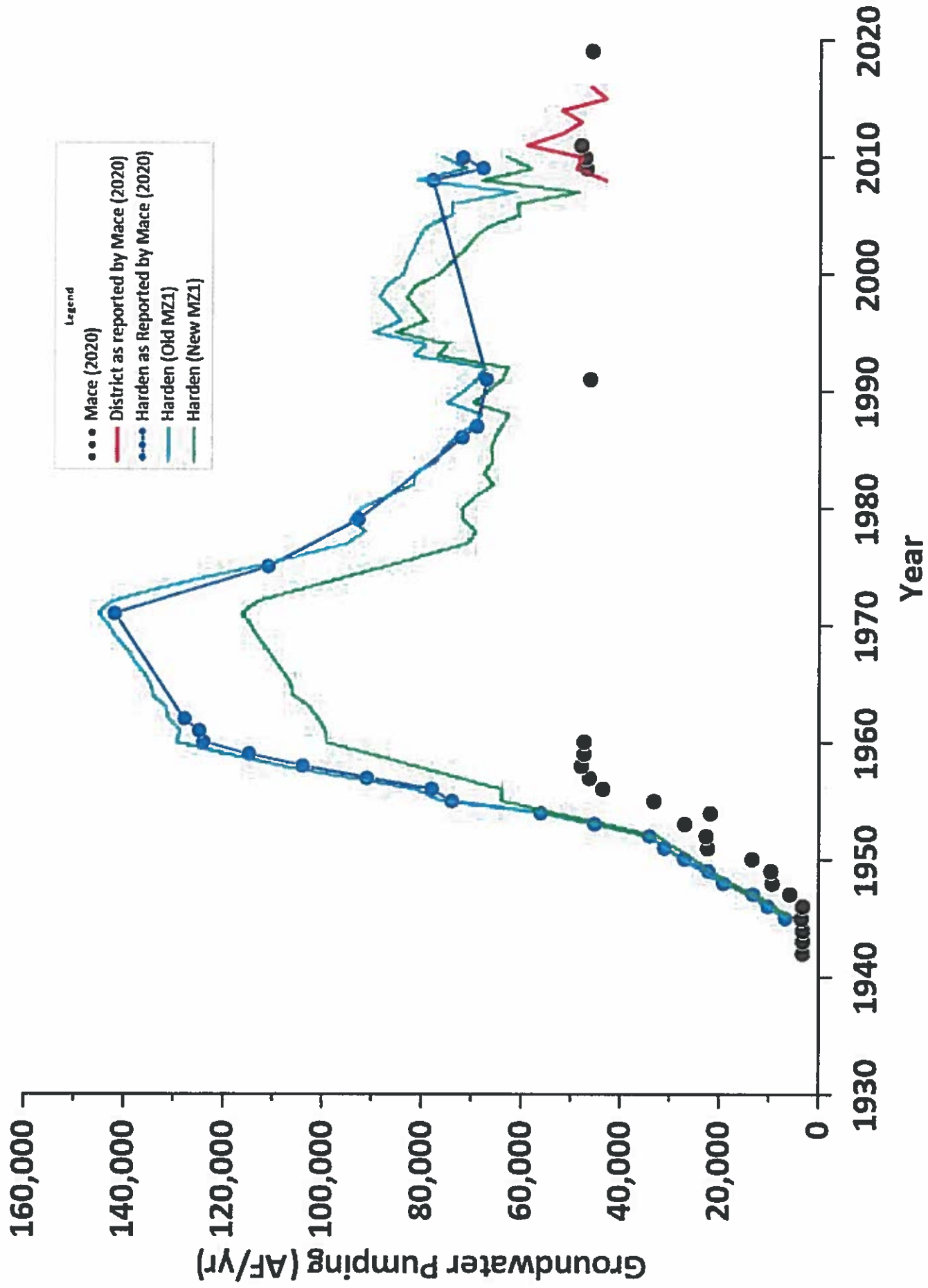
Management Zone 1 Groundwater Pumping



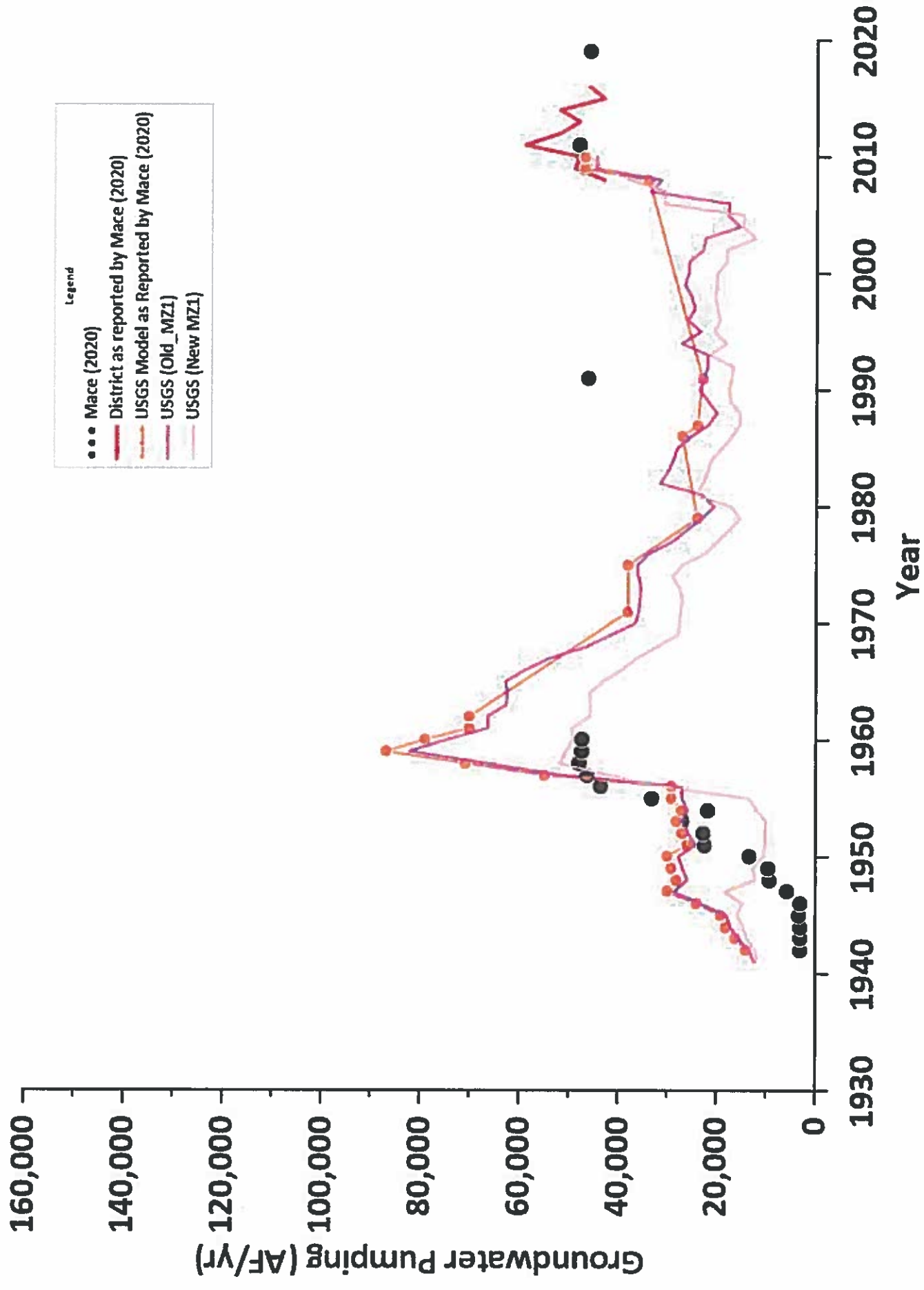
Management Zone 1 Groundwater Pumping



Management Zone 1 Groundwater Pumping



Management Zone 1 Groundwater Pumping



Management Zone 1 Groundwater Pumping (1970 to 2018)

