

The background is a light blue gradient with several realistic water droplets of various sizes scattered across it. The droplets have highlights and shadows, giving them a three-dimensional appearance. The text is centered in the upper half of the image.

DEID GSA

DEID ANNEXED AREA STAKEHOLDERS MEETING

DECEMBER 4, 2018

DEID MANAGEMENT AREAS

THE DEID MANAGEMENT AREA- THIS AREA COVERS THE PORTION OF THE DEID GSA THAT HAS HISTORICALLY AND CURRENTLY RECEIVES SURFACE WATER THROUGH ITS CENTRAL VALLEY PROJECT-FRIANT DIVISION WATER SERVICE CONTRACT. IT IS APPROXIMATELY 56,570 ACRES.

THE EPUD MANAGEMENT AREA- THIS AREA COVERS THE AREA WITHIN THE CURRENT BOUNDARIES OF THE EARLIMART PUBLIC UTILITIES DISTRICT. IT PROVIDES WATER AND SEWER SERVICE TO THE RESIDENTS OF EARLIMART AND IS APPROXIMATELY 770 ACRES IN SIZE

THE ANNEXED MANAGEMENT AREA- THIS AREA IS COMPRISED OF LANDS WEST OF THE DEID MANAGEMENT AREA, BETWEEN ROAD 128 AND STATE HIGHWAY 43 AND SOUTH OF AVENUE 56. IT IS AN AREA OUTSIDE OF THE ORIGINAL DEID BOUNDARIES AND RECEIVES NO SURFACE WATER FROM DEID, HISTORICALLY DEPENDENT ON GROUNDWATER FOR ITS IRRIGATION NEEDS. IT WAS ANNEXED TO DEID IN 2016 FOR THE PURPOSE OF ASSISTING AREA GROWERS WITH SGMA. THE ANNEXED MANAGEMENT AREA IS APPROXIMATELY 7,554 ACRES.

STAKEHOLDER MEETINGS:

FOR THE DEID MANAGEMENT AREA

- ~~• NOVEMBER 13, 2018 AT 2:00 PM. TOPIC: REVIEW OF POLICY POINTS INTERNAL TO THE MANAGEMENT AREA.~~
- ~~• NOVEMBER 20, 2018 AT 2:00 PM. TOPIC: REVIEW OF POLICY POINTS EXTERNAL TO THE MANAGEMENT AREA.~~

FOR THE ANNEXED MANAGEMENT AREA

- **DECEMBER 4, 2018 AT 10:00 AM. TOPIC: REVIEW WATER BALANCE, POLICY POINTS INTERNAL TO THE MANAGEMENT AREA, AND LANDOWNER PROPOSED PROJECTS.**
- DECEMBER 11, 2018 AT 10:00 AM. TOPIC: REVIEW OF POLICY POINTS EXTERNAL TO THE MANAGEMENT AREA.

FOR THE EPUD MANAGEMENT AREA

- NO MEETINGS ARE PLANNED FOR THE EPUD MANAGEMENT AREA UNTIL EARLY 2019.

POLICY POINTS

POLICY POINTS ARE BRIEF SUMMARY STATEMENTS THAT ADDRESS SPECIFIC ISSUES DEALING WITH SUSTAINABILITY THAT WILL BE A PART OF THE DEID GSP. POLICY POINTS INCLUDE ISSUES THAT ARE INTERNAL TO EACH DEID MANAGEMENT AREA AS WELL AS ISSUES EXTERNAL TO THE DEID GSA THAT WILL HAVE AN IMPACT ON THE SUSTAINABILITY OF THE DEID GSA. POLICY POINTS ARE BEING DRAFTED BASED ON INPUT RECEIVED AT PRIOR PUBLIC MEETINGS FROM STAKEHOLDERS AND INTERESTED PARTIES AS WELL AS STAFF AND CONSULTANT RESEARCH AND REVIEW BY THE DEID GSA BOARD OF DIRECTORS.

TODAYS DISCUSSION IS SPECIFIC TO THE DEID ANNEXED MANAGEMENT AREA

DISCUSSION POINT #1 - EXISTING OPERATIONS ARE UNSUSTAINABLE

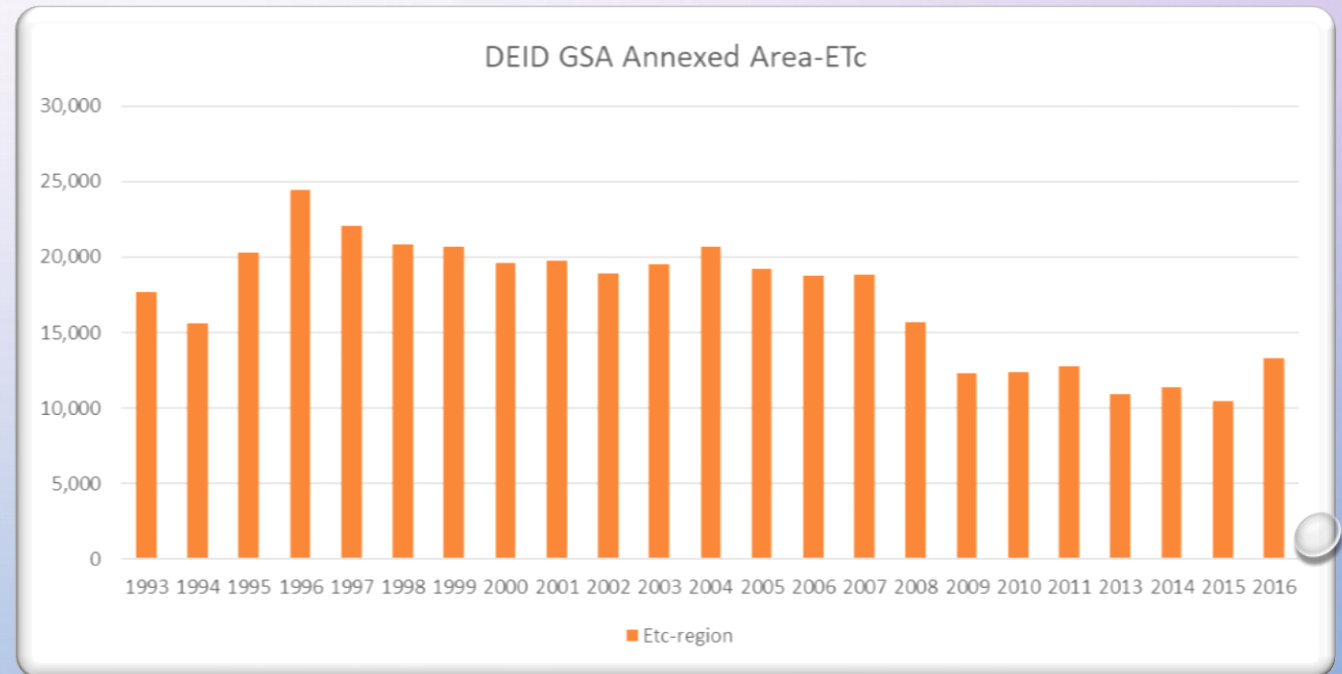
DEID ANNEXED MANAGEMENT AREA IS CURRENTLY UNSUSTAINABLE IN ITS CURRENT USE OF GROUNDWATER. THE WATER BALANCE FOR THE AREA IS BASED ON:

- RECOGNITION OF AREA IS FULLY DEPENDENT ON GROUNDWATER;
- RECOGNITION OF CURRENT CROPPING PATTERN;
- LANDSAT DATA OF CROP ET_c FROM 1993-2016;
- APPLICATION OF ALL PRECIPITATION TO THE BENEFIT OF THE AREA-MAY BE OVERSTATED IN SOME AREAS DUE TO PRESENCE OF CORCORAN CLAY;
- SUSTAINABLE YIELD ADJUSTED TO EXCLUDE PRECIPITATION AND IRRIGATION RETURN FLOWS THAT ARE A PART OF THE PREVIOUS S.Y. CALCULATION.

DISCUSSION POINT #1 – WATER BALANCE RESULTS

NET AVERAGE ANNUAL GROUNDWATER OVERUSE IS 11,000 ACRE-FEET (1.50 AF/AC).

- AVERAGE ANNUAL CROP ETC IS 2.35 AF/AC.
 - SUBJECT TO REVISION BASED ON RECEIPT OF CURRENT CROPPING DATA BEING RECEIVED FROM ALL LANDOWNERS.
- PRECIPITATION CREDIT = 0.65 AF/AC.
- ADJ. SUSTAINABLE YIELD = 0.20 AF/AC.



DISCUSSION POINT #1 – RESULTS CONTINUED

BASED ON CURRENT LAND USE INFORMATION AND AVERAGE ET_c FOR MATURE CROPS, THE WATER BALANCE INDICATES THE FOLLOWING REDUCTION IN FARMABLE ACRES:

Annexed Area Water Balance-Region				
Preliminary calculation of future farmable acres				
	Current Avg ET _c /ac.	available wtr per ac.=zero overpump- ing	% of current ET _c	reduction per 100 acres
Avg acre	2.35	0.85	36%	64
grapes	2.30	0.85	37%	63
almonds	3.27	0.85	26%	74
pistachios	2.88	0.85	29%	71

DISCUSSION POINT #2 – ALLOCATION OF GROUNDWATER AND TRANSFER OF GROUNDWATER WITHIN THE ANNEXED MANAGEMENT AREA

- SUSTAINABLE YIELD WILL BE ALLOCATED ON AN EQUAL BASIS (TOTAL ACRE-FEET OF SUSTAINABLE YIELD FOR THE MANAGEMENT AREA DIVIDED BY THE TOTAL ACRES = ACRE-FEET PER ACRE).
- AN ACCOUNTING SYSTEM OF TRACKING ALLOCATION AND USE OF GROUNDWATER WILL BE IMPLEMENTED.
- GROUNDWATER IS TRANSFERABLE WITHIN THE ANNEXED MANAGEMENT AREA SUBJECT TO:
 - POTENTIAL RESTRICTIONS BASED ON LOCATION OF CORCORAN CLAY.
 - DETERMINATION OF ANY UNMITIGATED IMPACTS TO GROUNDWATER LEVELS OR SUBSIDENCE.

DISCUSSION POINT #3 - TRANSFER OF GROUNDWATER TO OR FROM THE ANNEXED MANAGEMENT AREA

CONCERNS OF UNMITIGATED LOCAL IMPACTS TO THE DEID MANAGEMENT AREA IF GROUNDWATER CREDITS WERE TO BE MOVED AND EXTRACTED FROM ONE AREA/GSA TO ANOTHER REMAIN. AN EXAMPLE WOULD BE IF SIGNIFICANT CREDITS ARE MOVED TO OR FROM THE ANNEXED AREA THAT RESULTED IN ADDITIONAL IMPACTS ON FKC SUBSIDENCE OR CONTRIBUTING TO THE DEID MANAGEMENT AREA'S INABILITY TO MAINTAIN GROUNDWATER LEVELS AT OR ABOVE MINIMUM THRESHOLD LEVELS.

- PROPOSE NO UNMITIGATED TRANSFER OF GROUNDWATER EITHER TO OR FROM THE ANNEXED MANAGEMENT AREA.
- AN ACCEPTABLE GROUNDWATER TRANSFER WOULD BE ONE WHERE THE ANNEXED AREA CAN DEMONSTRATE EITHER (1) NO SUBSIDENCE IMPACTS OR UNACCEPTABLE IMPACTS ON DEID MGMT. AREA GROUNDWATER LEVELS, OR (2) IDENTIFIED IMPACTS ARE FULLY MITIGATED.
- NO TRANSFERS FROM THE DEID MANAGEMENT AREA ALLOWED CONSISTENT WITH POLICY POINTS FOR THAT AREA (NO GROUNDWATER ALLOCATIONS; CURRENT SUSTAINABILITY STATUS).

DISCUSSION POINT #4 - TRANSITIONAL PUMPING WITHIN THE ANNEXED MANAGEMENT AREA

TRANSITIONAL PUMPING CAN BE DEFINED AS CONTINUED OVER-PUMPING OF GROUNDWATER BEYOND THE SUSTAINABLE YIELD OVER A PERIOD OF TIME (UP TO 20 YEARS) AFTER THE REQUIRED GSP IMPLEMENTATION DATE OF JANUARY 2020.

CONCERN WITH TRANSITIONAL PUMPING IS THE SAME AS TRANSFERS OF GROUNDWATER: UNMITIGATED LOCAL IMPACTS IN AREA(S) WHERE TRANSITIONAL PUMPING OCCURS. EXAMPLES ARE ALSO THE SAME: POTENTIAL IMPACT ON FKC SUBSIDENCE OR IMPACTING GROUNDWATER LEVELS IN THE DEID MANAGEMENT AREA.

- PROPOSE NO UNMITIGATED TRANSITIONAL PUMPING IN THE ANNEXED MANAGEMENT AREA.
- AN ACCEPTABLE TRANSITIONAL PUMPING PROGRAM IS ONE WHERE THE ANNEXED AREA CAN DEMONSTRATE EITHER (1) NO SUBSIDENCE IMPACTS OR UNACCEPTABLE IMPACTS ON DEID MGMT. AREA GROUNDWATER LEVELS, OR (2) IDENTIFIED IMPACTS ARE FULLY MITIGATED.

DISCUSSION POINT #5 - GROUNDWATER BANKING AT THE LANDOWNER LEVEL

ASSUMING IT IS A “PROJECT” REQUESTED BY THE LANDOWNERS, GROUNDWATER BANKING AT THE GROWER LEVEL WILL BE INCLUDED IN THE ANNEXED MANAGEMENT AREA GSP, SUBJECT TO:

- LOCATION OF THE CORCORAN CLAY AND ITS AFFECT ON RECHARGING ATTRIBUTES.
- DETERMINATION OF EVAPORATION AND ANY LEAVE-BEHIND AMOUNTS THAT WILL AFFECT NET CREDIT TO THE LANDOWNER.
- DETERMINATION OF ACCEPTABLE METERING, INSTALLATION, CALIBRATION, AND MAINTENANCE STANDARDS.
- ACKNOWLEDGEMENT THAT LOCATION, PURCHASE, TRANSPORT AND ALL COSTS ASSOCIATED WITH THE WATER SUPPLY TO BE USED FOR ON-FARM BANKING IS THE SOLE RESPONSIBILITY OF THE ANNEXED AREA LANDOWNER REQUESTING ON-FARM BANKING.

DISCUSSION POINT #6 - WATER MEASUREMENT AND METERING

AG LANDS - THE GSP WILL USE REMOTE SENSING TECHNOLOGY (LANDSAT) TO MEASURE CROP ET/NET GROUNDWATER EXTRACTION-MAY REQUIRE METERS WHERE CORCORAN CLAY IS PRESENT

- ELIMINATES COST OF PURCHASING, INSTALLING AND MAINTAINING METERS ON PRIVATE WELLS
- NO RECONSTRUCTION OF DISCHARGE PIPING TO MEET METER INSTALLATION SPECIFICATIONS
- LEAVES ALL GROWER IRRIGATION EQUIPMENT INSTALLED AT THE WELLHEAD UNDISTURBED

NON-AG WELLS USING MORE THAN 2 AF/YEAR - WELLHEAD METERING REQUIRED

IMPLEMENTATION DETAILS TO BE DETERMINATION

- INVENTORY OF ALL PRIVATE WELLS IN THE MANAGEMENT AREA
- METER INSTALLATION COST AND RESPONSIBILITY FOR NON-AG WELLS
- IF THE DEID GSA WILL REQUIRE NOTICE OF ANY NEW WELL INSTALLED IN THE MANAGEMENT AREA

DISCUSSION POINT #7 – COST AND FUNDING OF SGMA IMPLEMENTATION

INITIAL COST CENTERS ASSOCIATED WITH SGMA/GSP IMPLEMENTATION (POST 2020):

- SUBBASIN MONITORING (INITIAL AND ONGOING)
- LANDSAT DATA COLLECTION (INITIAL AND ONGOING)
- NON-AG GROUNDWATER WELL METERS, INSTALLATION, MAINTENANCE, AND READING (INITIAL AND ONGOING)
- ANALYZING AND SYNTHESIZING DATA COLLECTED (ONGOING)
- ANNUAL AND 5-YEAR MILESTONE REVIEWS AND REPORTS (ONGOING)
- SUBBASIN COORDINATION (ONGOING)
- GIS MAP AND FUNCTION DEVELOPMENT (INITIAL AND ONGOING)
- DESIGN AND CONSTRUCTION OF PROJECTS (INITIAL AND ONGOING)

ADDITIONAL COST CENTERS ARE LIKELY TO BE IDENTIFIED AS TIME GOES ON.

COSTS ASSOCIATED WITH SGMA IMPLEMENTATION ARE UNKNOWN BUT IT CAN BE ASSUMED ADDITIONAL FINANCIAL RESOURCES WILL BE NEEDED. FUNDING FOR SGMA IMPLEMENTATION MUST BE IDENTIFIED WITHIN THE GSP.

DEID GSA-WIDE POLICY POINTS

WATER MEASUREMENT AND METERING IN THE TULE SUBBASIN:

AG WELLS:

- WELL-HEAD METERING TO MEASURE GROSS GROUNDWATER EXTRACTIONS, OR:
- REMOTE SENSING TECHNOLOGY TO MEASURE CROP USE/NET EXTRACTION OF GROUNDWATER (LANDSAT).

MUNICIPAL, INDUSTRIAL OR OTHER WATER USERS WELLS WHERE LANDSAT IS NOT APPLICABLE:

- WELL-HEAD METERS ARE REQUIRED.
- GROUNDWATER USER OF LESS THAN 2 ACRE-FEET PER YEAR ARE EXEMPT FROM METERING.

STANDARDS FOR METERS USED, INSTALLATION, REQUIRED MAINTENANCE AND CALIBRATION, FREQUENCY AND METHOD OF METER READING SHOULD BE DETERMINED AND COORDINATED BY THE SUBBASIN TAC CONSULTANT.

DEID GSA-WIDE POLICY POINTS

BASIN MONITORING PLAN:

SGMA REQUIRES A MONITORING PLAN ADDRESSING SURFACE WATER MONITORING, GROUNDWATER MONITORING, AND LAND SURFACE ELEVATION/SUBSIDENCE MONITORING.

DEID GSA SUPPORTS:

- DEVELOPMENT, IMPLEMENTATION, AND COLLECTION OF MONITORING DATA AT THE SUBBASIN LEVEL. THIS WILL INSURE OBJECTIVITY, CONSISTENCY IN COLLECTION, AND RELIABILITY OF THE DATA COLLECTED AS PART OF THE MONITORING PROCESS.
- INDIVIDUAL GSAS DEVELOPING FURTHER MONITORING POINTS IN ADDITION TO THOSE MONITORED BY THE SUBBASIN AS A WHOLE, PROVIDED THAT THE MONITORING POINTS MEET SPECIFIC CRITERIA AND DATA IS COLLECTED BY QUALIFIED INDIVIDUALS AND IN A MANNER CONSISTENT WITH STANDARDS SET BY THE SUBBASIN'S TECHNICAL EXPERT.
- DOES NOT SUPPORT INDIVIDUAL GSAS COLLECTING DATA FROM SPECIFIC MONITORING POINTS THAT THE GSA AND TULE SUBBASIN WILL RELY UPON IN MEETING ITS SUSTAINABILITY GOALS.

DEID GSA-WIDE POLICY POINTS

SAVINGS CLAUSE:

THE DEID GSA EXPECTS AND WELCOMES THE EFFORTS THAT ALL GSAS WITHIN THE SUBBASIN HAVE MADE AND WILL MAKE TO COORDINATE THEIR RESPECTIVE GSPS AS REQUIRED BY SGMA. THE DEID GSA FURTHER RECOGNIZES THE MONUMENTAL TASK BEFORE THE SUBBASIN TO AGREE UPON A COORDINATED SET OF SUSTAINABLE MANAGEMENT CRITERIA.

IN THE EVENT THAT THE TULE SUBBASIN'S GSPS REMAIN UNCOORDINATED ON JANUARY 31, 2020, THE DEID GSA BOD IS PREPARED TO SUBMIT ITS GSP TO THE DEPARTMENT OF WATER RESOURCES AND PROCEED WITH IMPLEMENTATION OF ITS GSP TO THE FULLEST EXTENT THAT IT CAN.

ANNEXED AREA PROJECTS

- SGMA PROVIDES FOR THE INCLUSION OF “PROJECTS” THAT A GSP IS USING AND THOSE THAT IT PLANS ON IMPLEMENTING IN ORDER TO ATTAIN SUSTAINABILITY.
- PROJECTS PROPOSED BY THE ANNEXED AREA, EITHER AS A WHOLE OR INDIVIDUALLY, ARE REQUESTED.
- DRAFT GSP SCHEDULED FOR PUBLIC REVIEW IN FEBRUARY-MARCH 2019 TIME FRAME. ANY PROPOSED PROJECTS NEED TO BE SUBMITTED FOR REVIEW AND ANALYSIS PRIOR TO THAT TARGETED TIME FRAME.