SGMA STATUS

MODESTO & EASTERN SAN JOAQUIN GROUNDWATER SUBBASINS

JUNE 6, 2022

ERIC THORBURN, P.E.
WATER OPERATIONS MANAGER & DISTRICT ENGINEER
SUSTAINABLE GROUNDWATER MANAGEMENT ACT

- SIGNED INTO LAW BY GOVERNOR JERRY BROWN IN 2014.
- SETS FRAMEWORK FOR STATEWIDE SUSTAINABLE GROUNDWATER MANAGEMENT.
- RECOGNIZES THAT GROUNDWATER MANAGEMENT IS BEST ACCOMPLISHED LOCALLY.
SUSTAINABLE GROUNDWATER MANAGEMENT ACT REQUIREMENTS

- **Jun. 30, 2017**: Form Groundwater Sustainability Agencies
- **Jan. 31, 2020/22**: Critically Overdrafted/Medium and High Priority Basins Submit GSP to State
- **Every Five Years**: Update Groundwater Sustainability Plan
- **2040/42**: ESJ/Modesto Subbasin Achieves Sustainability
“Sustainable yield means the maximum quantity of water, calculated over a base period representative of long-term conditions in the basin and including any temporary surplus, that can be withdrawn annually from a groundwater supply without causing an undesirable result.”

Undesirable Results:
- Chronic Lowering of Groundwater Levels
- Reduction in Groundwater Storage
- Seawater Intrusion
- Degraded Water Quality
- Land Subsidence
- Depletion of Interconnected Surface Water

California Water Code Section 10721
STRGBA GSA AND THE MODESTO SUBBASIN

Modesto Subbasin Agencies

Legend
STRGBA GSA Agencies
- Modesto Subbasin
- County Lines
- Stanislaus County
- City of Modesto
- City of Oakdale
- City of Waterford
- City of Riverbank
- Oakdale Irrigation District
- Modesto Irrigation District

STANISLAUS AND TUOLUMNE RIVERS GROUNDWATER BASIN ASSOCIATION
TUOLUMNE COUNTY GSA

- Oversees the portion of the Modesto Subbasin that falls within Tuolumne County.
- Coordinating with the STRGBA GSA through Stanislaus County
MODESTO SUBBASIN
GSP MANAGEMENT AREAS

Non-District West Management Area (NDW)
MID Management Area
OID Management Area
Non-District East Management Area (NDE)

Extent of Corcoran Clay
Management actions in non-District East will occur if IMs are not met.
In the absence of any surface water supply projects, a pumping reduction of 47,000 AFY (58%) in the Non-District East would be needed to reach sustainability.
## Project Scenarios

<table>
<thead>
<tr>
<th>#</th>
<th>Urban Projects</th>
<th>Project Proponent</th>
<th>Group</th>
<th>Scenario I</th>
<th>Scenario II</th>
<th>Scenario III</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Municipal Conservation Projects</td>
<td>City of Modesto</td>
<td>1</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>2</td>
<td>Storm Drain Cross Connection Removal Project</td>
<td>City of Modesto</td>
<td>2</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>3</td>
<td>Surface Water Supply Project</td>
<td>City of Waterford</td>
<td>2</td>
<td>X</td>
<td>X</td>
<td>X</td>
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</tbody>
</table>

### In-lieu Supply or Recharge Projects

<table>
<thead>
<tr>
<th>#</th>
<th>In-lieu Supply or Recharge Projects</th>
<th>Proponent</th>
<th>Group</th>
<th>Scenario I</th>
<th>Scenario II</th>
<th>Scenario III</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>MID to Out-of-District Lands In-lieu and Direct Recharge Project</td>
<td>Non-District East</td>
<td>2</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>5</td>
<td>OID to Out-of-District Lands In-lieu and Direct Recharge Project</td>
<td>Non-District East</td>
<td>2</td>
<td>X</td>
<td>X</td>
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### Flood Mitigation Projects

<table>
<thead>
<tr>
<th>#</th>
<th>Flood Mitigation Projects</th>
<th>Proponent</th>
<th>Group</th>
<th>Scenario I</th>
<th>Scenario II</th>
<th>Scenario III</th>
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</thead>
<tbody>
<tr>
<td>6</td>
<td>Tuolumne River Flood Mitigation Direct Recharge Project</td>
<td>Stanislaus County</td>
<td>2</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>7</td>
<td>Dry Creek Flood Mitigation Direct Recharge Project</td>
<td>Stanislaus County</td>
<td>2</td>
<td>X</td>
<td>X</td>
<td>X</td>
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</tbody>
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### Post-PMA Sustainable Yield Analysis

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<tr>
<th>#</th>
<th>Post-PMA Sustainable Yield Analysis</th>
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<tbody>
<tr>
<td></td>
<td>Demand Reduction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
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**NOTE:** The *Growth Realization of Surface Water Treatment Plant Phase II* is a Group I PMA and is already simulated as part of the projected conditions baseline.
MODESTO GW SUBBASIN SGMA STATUS

• GSP ADOPTED & SUBMITTED BY JAN. 31, 2022 DEADLINE

• PROJECT IMPLEMENTATION = NO MANAGEMENT ACTIONS?
  • NDE SUPPLY PROJECTS
  • ADDRESS IDENTIFIED DATA GAPS

• 2022 ANNUAL REPORT SUBMITTED BY APRIL 1, 2022 DEADLINE

FUTURE - 2042 SUSTAINABILITY

• CONTINUED ANNUAL REPORTING & 5-YR GSP UPDATES

• DWR REVIEW TO APPROVE OR IDENTIFY DEFICIENCIES (2-YRS)

• ADDRESS DATA GAPS
STRGBA GSA – GET INVOLVED!

• STRGBA GSA MEETINGS
  • TYPICALLY MONTHLY @ 1:30 PM ON THE 2ND WEDNESDAY

• OID WEBSITE
  • WWW.OAKDALEIRRIGATION.COM ➔ WATER OPERATIONS ➔ SGMA

• STRGBA.ORG
  • MODESTO SUBBASIN GSP
  • STRGBA GSA ACTIVITIES
  • JOIN THE STRGBA MAILING LIST!
ESJGWA & THE ESJ GW SUBBASIN
ESJ GW SUBBASIN BOUNDARIES
ESJ GW SUBBASIN SGMA STATUS

HIGH PRIORITY BASIN IN CRITICAL OVERDRAFT

- OID GSA FORMED JUNE 15, 2017
- ESJGW AUTHORITY JPA ESTABLISHED FEBRUARY 8, 2017
  - A TOTAL OF 16 GSAS

GSP ADOPTED BY JANUARY 31, 2020 DEADLINE
NOTE: MANAGEMENT TO A RECHARGE/REDUCTION OF 78K AC-FT/YR.
HOW DO WE GET THERE?
PROJECTS & MANAGEMENT ACTIONS

1. GSAS MAY IMPLEMENT PROJECTS INDIVIDUALLY OR JOINTLY
   • 23 POSSIBLE PROJECTS IN THE FOLLOWING CATEGORIES (CH. 6)
     • PLANED PROJECTS (8)
     • POTENTIAL PROJECTS (9)
     • LONGER-TERM OR CONCEPTUAL PROJECTS (6)

2. GW PUMPING RESTRICTIONS OR ALLOCATIONS
   • THESE DEMAND-SIDE MANAGEMENT ACTIONS WILL FOLLOW IF NECESSARY
SUSTAINABLE MANAGEMENT CRITERIA

**The Goal**

1. Current Condition
2. Measurable Objective
3. Undesirable Results

- **Measurable Objective**
- **Interim Milestones**
- **Margin of Operational Flexibility**
- **Minimum Threshold**
- **Groundwater Elevation**

Years: 5, 10, 15, 20

Undesirable Results
ESJ GW SUBBASIN GSP ADOPTION

• GSP ADOPTED & SUBMITTED BY JAN. 31, 2020 DEADLINE

• PROJECT IMPLEMENTATION = NO MANAGEMENT ACTIONS?
  • SUPPLY-SIDE PROJECTS (NOT MODELED W/ SPECIFIC APPLICATIONS)
  • ADDRESS IDENTIFIED DATA GAPS

• ANNUAL REPORT SUBMITTED BY APRIL 1, 2022 DEADLINE

• DWR IDENTIFIED 2020 GSP DEFICIENCIES
  • JULY 27, 2022 DEADLINE TO RESPOND/ADOPT NEW GSP

FUTURE - 2040 SUSTAINABILITY

• CONTINUED ANNUAL REPORTING & 5-YR GSP UPDATES

• ADDRESS DATA GAPS
ESJGWA SGMA RESOURCES

• DWR SGMA PORTAL
  • SUSTAINABLE GROUNDWATER MANAGEMENT ACT (SGMA) (CA.GOV)

• OID WEBSITE
  • WWW.OAKDALEIRRIGATION.COM ➔ WATER OPERATIONS ➔ SGMA

• EAST SAN JOAQUIN GW AUTHORITY
  • MONTHLY WORKGROUP & JPA MEETINGS (2ND WEDNESDAY)
  • WEBSITE: ESJGROUNDWATER.ORG
  • DMS: HTTPS://OPTI.WOODARDCURRAN.COM/ESJ