AGENDA ITEM #1
GROUNDWATER SUSTAINABILITY PLAN UPDATES

- GSP updates
  - Three-month look-ahead
  - Groundwater Modeling Classroom
  - GSA one-on-one meetings
  - Groundwater Modeling Coordination – Model mesh
  - Hydrogeologic Conceptual Model progress – Cross section development

- General updates
  - Near-term coordination: ESJ meeting summary
  - TSS Grant Applications
Cosumnes GSP Schedule – 3 Month Look Ahead

- Landowner, local and Basin-specific data due mid-April
- All DMS data due to EKI 4/30
- Feedback on TM #2 6/19
- TM #2: Data Compilation and Data Gaps Assessment 5/31
- Approve Recommended Model Mesh Specifications

Legend
- Current schedule
- Deadline
Cosumnes GSP Schedule – 3 Month Look Ahead

Deadlines within the next 3 Months

**Task 5: Gather Available Data and Compile into DMS**

**GSAs:** Stakeholder Surveys due by 2/28/2019. Compile landowner, local and Basin-specific data (in required format) and send to EKI to be included in the Basin DMS by mid-April. All data for the DMS must be sent to EKI by 4/30/2019.

**Task 6: Compile Information on the Plan Area and Basin Management Activities**

**GSAs:** Respond to GSA data requests regarding information required in the Plan Area by mid-April.

**Task 7: Conduct Data Gaps Assessment**

**EKI:** Conduct Basin-wide data gaps assessment and prepare associated work products (Draft TM #2 – Data Compilation and Data Gaps Assessment – due 5/31/2019).

**WG:** Review and provide feedback on TM #2 by 6/19/2019.

**Task 8: Evaluate Numerical Groundwater Model Options**

**EKI:** Provide recommended model mesh specifications April 2019.
GROUNDWATER MODELING CLASSROOM

- Held April 4th in Galt 1-3 pm.
- Presentation with audio will be available in the future
- 24 attendees

GSA 1-ON-1 INTERVIEW SUMMARY

- **Very helpful and informative!**
- Additional 1-on-1s planned during key GSP development milestones

<table>
<thead>
<tr>
<th>GSA</th>
<th>Data Received</th>
<th>Data Expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amador County GMA</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>City of Galt</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Galt Irrigation District</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Omochumne-Hartnell WD</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Sacramento County</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Sloughhouse RCD</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Clay WD</td>
<td>TBD</td>
<td>TBD</td>
</tr>
</tbody>
</table>
## GSA 1-ON-1 INTERVIEW: DATA RECEIVED

<table>
<thead>
<tr>
<th>GSA</th>
<th>Data Received</th>
</tr>
</thead>
</table>
| Amador County                           | **Jackson Valley Irrigation District:**  
| Groundwater Management Authority        | • Lithology logs  
|                                         | • Monthly Water Reports and data in excel format (reservoir elevation, water releases, precipitation, storage values)  
|                                         | • Historical local-geology reports  
| Amador Water Agency                     | • Production well information (location, well construction, daily pumping amounts)  
|                                         | • Water level data  
|                                         | • Water quality data  
|                                         | • Operation records (Eagles Nest, Lake Camanche & Ione wastewater total flows, daily spray field irrigation flow and acreage applied)  
|                                         | • Groundwater Monitoring Well Installation and Hydrogeologic Study Report, for the Lake Camanche Village Waste Water Treatment Plant  
|                                         | • Lake Camanche Sustainable Yield Study                                                                                                                                                                   |
| Galt Irrigation District                | • Past relevant studies: Coordinated Groundwater Management Plan for the Galt Irrigation District, Omochumne-Hartnell Water District and Clay Water District in Sacramento County (1997 and 1998 update), Groundwater Basin Management (Assembly Bill 3030 discussion material) |
# GSA 1-ON-1 INTERVIEW: DATA EXPECTED

<table>
<thead>
<tr>
<th>GSA</th>
<th>Data Expected</th>
</tr>
</thead>
</table>
| City of Galt                             | • Lithology logs for City wells  
• Production well information (location, well construction, pumping values, etc.)  
• Water level data  
• Water quality data  
• Wastewater treatment plant influent and effluent flows  
• Recent and expected future land areas incorporated into City boundaries |
| Omochumne-Hartnell Water District        | • Surface water diversions and deliveries  
• Gauging and flow data  
• Time periods of dam installations                                                                                                              |
| Galt Irrigation District                 | • Laguna Creek diversions and deliveries  
• Dairy monitoring reports  
• Monitoring well lithology logs  
• Fish Farm effluent data                                                                                                                        |
| Sloughhouse Resource Conservation District| • Cosumnes Watershed Assessment Report                                                                                                                                                                     |
GSA 1-ON-1 INTERVIEW: CURRENT CHALLENGE

- Some great historical data has been received and inventoried
- Not all of the data are in a ready format to import into the DMS (e.g., in excel or shapefile form, as requested)
- EKI will work with GSAs to figure out most efficient way to incorporate the data
GSA 1-ON-1 INTERVIEW: ADDITIONAL SOURCES

- Developed a list of additional entities to contact for potentially useful information:
  - Cosumnes Coalition – provided relevant studies:
    - Comprehensive Groundwater Quality Management Plan – Central Valley Water Coalition
    - South County Ag Recycled Water Feasibility Study – Sac County Regional County Sanitation District
  - Groundwater Observatory/UC Davis –
    - Requested groundwater elevation monitoring/well log data (Laura Foglia)
    - Boring log data (Stephen Maples) received on 4/9/2019
  - SMUD – Meeting scheduled for April 18th
    - Barnesraid study on aquifer recharge
  - Fishery Foundation – Additional surface water data (Trevor Kennedy)
  - Nature Conservancy – Regional ecological information (Sarah Sweet)

Stephen Maples’ boring log data
STAKEHOLDER SURVEY RESULTS

- 211 survey responses received as of 4/15/2019
- 127 stakeholders indicated that they have data that they are willing to share
BASIN STAKEHOLDER DATA RESULTS

- 15 landowners have provided additional data (as of 4/15/19)

<table>
<thead>
<tr>
<th>Data Type</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wells</td>
<td>23</td>
</tr>
<tr>
<td>Water level data</td>
<td>6 (from 5 wells)</td>
</tr>
<tr>
<td>Pumping rates</td>
<td>14 wells</td>
</tr>
<tr>
<td>Monthly pumpage</td>
<td>2 wells</td>
</tr>
<tr>
<td>Crop data</td>
<td>2 parcels</td>
</tr>
</tbody>
</table>
DATA MANAGEMENT SYSTEM (DMS)

- 544 Data Sites in the Cosumnes Subbasin
  - 512 Wells
  - 20 Surface water sites
  - 12 “Other” sites (lysimeter, outfall)

<table>
<thead>
<tr>
<th>March</th>
<th>April</th>
</tr>
</thead>
<tbody>
<tr>
<td>445 wells</td>
<td>512 wells</td>
</tr>
<tr>
<td>13 SW sites</td>
<td>20 SW sites</td>
</tr>
<tr>
<td>0 other sites</td>
<td>12 other sites</td>
</tr>
</tbody>
</table>
DATA GAPS ASSESSMENT (MAY 31, 2019)

- Basin setting is the physical setting, characteristics, and current conditions:
  - Hydrogeological Conceptual Model
  - Ground Water Conditions
  - Water Budget

- Well information used to develop the basin setting shall be maintained in the Agency’s data management system

§ 351. Defines “Data gap” as a lack of information that significantly affects the understanding of the basin setting or evaluation of the efficacy of Plan implementation, and could limit the ability to assess whether a basin is being sustainably managed.
### WELL DATA CHECK LIST

<table>
<thead>
<tr>
<th>Well data standards</th>
<th>Additional well data</th>
</tr>
</thead>
<tbody>
<tr>
<td>❑ Well location</td>
<td>❑ Well completion report</td>
</tr>
<tr>
<td>❑ Reference point elevation</td>
<td>❑ Geophysical log</td>
</tr>
<tr>
<td>❑ Ground surface elevation</td>
<td>❑ Identification of principal aquifers monitored</td>
</tr>
<tr>
<td>❑ Primary well use</td>
<td>❑ Pumping rates</td>
</tr>
<tr>
<td>❑ Status of well (active/inactive)</td>
<td></td>
</tr>
<tr>
<td>❑ Single, clustered, or nested well</td>
<td></td>
</tr>
<tr>
<td>❑ Casing perforations</td>
<td>❑ Water quality data</td>
</tr>
<tr>
<td>❑ Borehole depth</td>
<td>❑ Groundwater elevation data</td>
</tr>
<tr>
<td>❑ Total well depth</td>
<td></td>
</tr>
<tr>
<td>❑ Well capacity</td>
<td></td>
</tr>
<tr>
<td>❑ Casing diameter</td>
<td></td>
</tr>
</tbody>
</table>

§ 352.4. *Data and Reporting Standards.*

(c) *The following standards apply to wells:*

(1) *Wells used to monitor groundwater conditions shall be constructed according to applicable construction standards, and shall provide the following information . . .*
### WELL CONSTRUCTION INFORMATION

- **512 Well Sites in the Cosumnes Subbasin.**
- **Less than 50% have depth and screened interval information.**

<table>
<thead>
<tr>
<th>GSA</th>
<th># of wells</th>
<th># of wells w/ well depths</th>
<th>Min well depth</th>
<th>Max well depth</th>
<th>% of wells w/ screened intervals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amador County</td>
<td>137</td>
<td>53</td>
<td>22</td>
<td>505</td>
<td>27%</td>
</tr>
<tr>
<td>City of Galt</td>
<td>106</td>
<td>16</td>
<td>70</td>
<td>1,720</td>
<td>13%</td>
</tr>
<tr>
<td>Clay WD</td>
<td>11</td>
<td>8</td>
<td>280</td>
<td>916</td>
<td>18%</td>
</tr>
<tr>
<td>Galt ID</td>
<td>72</td>
<td>45</td>
<td>68</td>
<td>850</td>
<td>17%</td>
</tr>
<tr>
<td>Omochumne-Hartnell WD</td>
<td>42</td>
<td>14</td>
<td>135</td>
<td>685</td>
<td>17%</td>
</tr>
<tr>
<td>Sloughhouse RCD</td>
<td>117</td>
<td>76</td>
<td>15</td>
<td>1,327</td>
<td>21%</td>
</tr>
<tr>
<td>Sacramento County</td>
<td>27</td>
<td>19</td>
<td>39</td>
<td>1,000</td>
<td>30%</td>
</tr>
<tr>
<td><strong>SUM</strong></td>
<td><strong>512</strong></td>
<td><strong>231</strong></td>
<td>---</td>
<td>---</td>
<td><strong>20%</strong></td>
</tr>
</tbody>
</table>
### WATER LEVEL DATA DENSITY - SPATIAL

<table>
<thead>
<tr>
<th>GSA</th>
<th># of wells</th>
<th>Wells w/ WL data</th>
<th>Wells w/ WL data &amp; screened intervals</th>
<th># of WL msmts</th>
<th>Avg # of WL msmts per well</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amador County</td>
<td>137</td>
<td>52</td>
<td>28</td>
<td>1-64</td>
<td>40</td>
</tr>
<tr>
<td>City of Galt</td>
<td>106</td>
<td>10</td>
<td>6</td>
<td>3-565</td>
<td>84</td>
</tr>
<tr>
<td>Clay WD</td>
<td>11</td>
<td>5</td>
<td>2</td>
<td>1-9</td>
<td>5</td>
</tr>
<tr>
<td>Galt ID</td>
<td>72</td>
<td>36</td>
<td>6</td>
<td>1-160</td>
<td>23</td>
</tr>
<tr>
<td>Omochumne-Hartnell WD</td>
<td>42</td>
<td>5</td>
<td>0</td>
<td>1-25</td>
<td>10</td>
</tr>
<tr>
<td>Sloughhouse RCD</td>
<td>117</td>
<td>50</td>
<td>8</td>
<td>1-1541</td>
<td>86</td>
</tr>
<tr>
<td>Sacramento County</td>
<td>27</td>
<td>12</td>
<td>2</td>
<td>1-128</td>
<td>48</td>
</tr>
<tr>
<td><strong>SUM</strong></td>
<td><strong>512</strong></td>
<td><strong>170</strong></td>
<td><strong>52</strong></td>
<td><strong>-</strong></td>
<td><strong>53</strong></td>
</tr>
</tbody>
</table>

- 163 wells with water level data
- Only 32% have screened intervals to associate the water levels with specific aquifer depth
WATER LEVEL DATA DENSITY - TEMPORAL

- Number of wells with water level data have increased since the 1950s.
- The greatest number of wells/data available in the last 10 years.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
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<td>Amador County</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22</td>
<td>41</td>
</tr>
<tr>
<td>City of Galt</td>
<td>-</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Clay WD</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Galt ID</td>
<td>3</td>
<td>9</td>
<td>18</td>
<td>18</td>
<td>13</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>OHWD</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>SRCD</td>
<td>6</td>
<td>15</td>
<td>20</td>
<td>27</td>
<td>29</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Sac. County</td>
<td>1</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td><strong>SUM</strong></td>
<td><strong>10</strong></td>
<td><strong>35</strong></td>
<td><strong>49</strong></td>
<td><strong>53</strong></td>
<td><strong>58</strong></td>
<td><strong>56</strong></td>
<td><strong>75</strong></td>
</tr>
</tbody>
</table>

- Number of wells with water level data have increased since the 1950s.
- The greatest number of wells/data available in the last 10 years.
# WATER QUALITY DATA DENSITY - SPATIAL

<table>
<thead>
<tr>
<th>GSA</th>
<th># of wells</th>
<th>wells with WQ data</th>
<th>first sample date</th>
<th>last sample date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amador County</td>
<td>137</td>
<td>25</td>
<td>5/1971</td>
<td>8/2018</td>
</tr>
<tr>
<td>City of Galt</td>
<td>106</td>
<td>10</td>
<td>6/1971</td>
<td>7/2018</td>
</tr>
<tr>
<td>Clay WD</td>
<td>11</td>
<td>4</td>
<td>7/1961</td>
<td>2/2005</td>
</tr>
<tr>
<td>Galt ID</td>
<td>72</td>
<td>31</td>
<td>8/1961</td>
<td>8/2017</td>
</tr>
<tr>
<td>Omochumne-Hartnell WD</td>
<td>42</td>
<td>3</td>
<td>6/1968</td>
<td>12/1984</td>
</tr>
<tr>
<td>Sloughhouse RCD</td>
<td>117</td>
<td>40</td>
<td>8/1955</td>
<td>8/2017</td>
</tr>
<tr>
<td>Sacramento County</td>
<td>27</td>
<td>6</td>
<td>8/1955</td>
<td>1/2014</td>
</tr>
<tr>
<td><strong>SUM</strong></td>
<td><strong>512</strong></td>
<td><strong>119</strong></td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

24% of wells have water quality data.
<table>
<thead>
<tr>
<th>GSA</th>
<th># of wells</th>
<th>Wells with WQ data</th>
<th># of wells sampled for each constituent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td>TDS</td>
</tr>
<tr>
<td>Amador County</td>
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<td>25</td>
<td>22</td>
</tr>
<tr>
<td>City of Galt</td>
<td>106</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Clay WD</td>
<td>11</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Galt ID</td>
<td>72</td>
<td>31</td>
<td>28</td>
</tr>
<tr>
<td>Omochumne-Hartnell WD</td>
<td>42</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Sloughhouse RCD</td>
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<td>40</td>
<td>38</td>
</tr>
<tr>
<td>Sacramento County</td>
<td>27</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td><strong>SUM</strong></td>
<td><strong>512</strong></td>
<td><strong>119</strong></td>
<td><strong>103</strong></td>
</tr>
</tbody>
</table>
# SURFACE WATER SITE CHECK LIST

## Surface water site data types

- Location of surface water site
- Stage data
- Discharge data
- Diversion points and quantity
- Stream geometry
- Streambed properties
- Water quality data

Picture from: USGS 11335000 Cosumnes R A Michigan Bar CA site.  
## SURFACE WATER SITES SUMMARY

<table>
<thead>
<tr>
<th>GSA</th>
<th># of SW sites</th>
<th>sites w/ stage data</th>
<th>sites w/ discharge data</th>
<th>sites w/ water quality data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amador County</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>City of Galt</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Clay WD</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Galt ID</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1 (4/15)</td>
</tr>
<tr>
<td>Omochumne-Hartnell WD</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1 (10/83-12/84)</td>
</tr>
<tr>
<td>Sloughhouse RCD</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>3 (10/52-4/16)</td>
</tr>
<tr>
<td>(10/07-4/19)</td>
<td>(9/07-2/19)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sacramento County</td>
<td>9</td>
<td>1</td>
<td>1</td>
<td>6 (9/98-7/15)</td>
</tr>
<tr>
<td>(11/82-1/19)</td>
<td>(10/41-10/82)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUM</td>
<td>20</td>
<td>2</td>
<td>2</td>
<td>11</td>
</tr>
</tbody>
</table>

(First sample date – Last sample date)
HYDROGEOLOGIC CONCEPTUAL MODEL (HCM) (1)

“Each Plan shall include a descriptive hydrogeologic conceptual model of the basin based on technical studies and qualified maps that characterizes the physical components and interaction of the surface water and groundwater systems in the basin.”

(1) 23-CCR Section 354.14
www.water.ca.gov/groundwater/smg/gsp.cfm
INITIATING WORK ON THE HCM
EXISTING CROSS-SECTION TRACES

- **1974**

- **1993**

- **2009**

- **2009**

- **2010**
  Meirovitz, Casey Donald. “Influence of American River Incised Valley Fill on Sacramento County Hydrogeology.” University of California, Davis, 2010

- **2012**

- **2012**
  Dunn Environmental Inc., “Groundwater Supply Study and integrated regional Groundwater Management Plan for the Lake Camanche Water Improvement District No.7” June 2012

- **2016**

- **2018**
  Woodard and Curran., “Eastern San Joaquin Water Resources Model (ESJWRM)” August 2018

- **2019**
  Eastern San Joaquin Draft Groundwater Sustainability Plan, Figure 3-17: Cross-Section Location Map. 2019
“The [HCM] shall be represented graphically by at least two scaled cross-sections that ... are sufficient to depict major stratigraphic and structural features in the basin.”

- A – A’: southwest/northeast line running through the middle of the basin

(1) 23-CCR Section 354.14
www.water.ca.gov/groundwater/sgm/gsp.cfm
CROSS-SECTION DEVELOPMENT PROCESS (1 OF 4)

- Cross-Section A-A’
  1. Published stratigraphy by DWR cross-section F-F’ (1974)
Cross-Section Development Process (2 of 4)

Cross-Section A-A'

1. Published stratigraphy by DWR cross-section F-F' (1974)
2. Inferred lithology from well-driller and boring logs
<table>
<thead>
<tr>
<th>Formation</th>
<th>Identifying Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alluvial Deposits</td>
<td>Unconsolidated stream deposits with little to no gravel; recent Cosumnes River deposits</td>
</tr>
<tr>
<td>Victor Formation</td>
<td>Consolidated stream deposits with gravel</td>
</tr>
<tr>
<td>Arroyo Seco Gravel</td>
<td>Hard cemented red gravel deposits</td>
</tr>
<tr>
<td>Laguna Formation</td>
<td>High energy river deposits with large gravel deposits, tan to brown and red</td>
</tr>
<tr>
<td>Mehrten Formation</td>
<td>Upper unit: Gray to black well-sorted sands with interbedded blue to brown clay; Lower unit: volcanic ashfall layers with a gray sandstone unit at the bottom</td>
</tr>
<tr>
<td>Valley Springs Formation</td>
<td>Large green clay and gravel layers that also contain volcanic deposits; “greenstone”</td>
</tr>
<tr>
<td>Ione Formation</td>
<td>Sandstone void of volcanic/ash deposits; thick white clay; blue to grey clay with lignite and coal seams</td>
</tr>
</tbody>
</table>
CROSS-SECTION DEVELOPMENT PROCESS (4 OF 4)

- Cross-Section A-A'
  1. Published stratigraphy by DWR cross-section F-F' (1974)
  2. Inferred lithology from well-driller and boring logs
  3. Stratigraphy modified to match lithologic descriptions and maps of surficial geology
  4. Topography trace from DEM
- Refined formation thicknesses and extended stratigraphy (between -500 to -1700 ft MSL) to encompass basin well depths.
- Improved understanding of possible upslope recharge areas (e.g., Laguna and Mehrten Formations).
SEPARATE FROM COSANA MODEL COORDINATION ACTIVITIES ("OFF-RAMP") WHEN IT:

- Impedes Working Group leadership in Cosumnes Subbasin model development and implementation.
- Fails to meet model design and data sharing specifications.
- Increases costs to EKI or Cosumnes Working Group.
- Constrains the ultimate model selection by Working Group.
MODEL SPECIFICATIONS Mesh Design: GSAs (1 of 5)

- Clay Water District
- Galt Irrigation District
- City of Galt including:
  - WWTP boundary
  - Sphere of influence boundary
MODEL SPECIFICATIONS

Mesh Design: GSAs (2 of 5)

- OHWD including:
  - Boundary north of the subbasin to Grant Line Road
  - Groundwater recharge project boundary (three candidate sites/fields between Deer Creek and the Cosumnes River near the Folsom South Canal).
**MODEL SPECIFICATIONS** Mesh Design: GSAs (3 of 5)

- **Sloughhouse Resource Conservation District:**
  - North of subbasin
  - Within subbasin

- **Amador including:**
  - Jackson Valley Irrigation District boundary.

- **Sacramento County.**
Census Designated Place:
- Rancho Murieta
- Wilton
- Clay
- Herald
Specify model element edges to coincide with these boundaries.
Specifically modeled streams/lakes based on data availability (flow records, geometry, etc.).

- Deer Creek
- Cosumnes River
- Badger Creek
- Laguna Creek
- Dry Creek
- Jackson Creek
- Mokelumne River
- Camanche Reservoir
MODEL SPECIFICATIONS Mesh Design: GW/SW (2 of 2)

- Minor creek traces aligned with element edges and explicitly modeled if data available.
  - Hadselville Creek
  - Arkansas Creek
  - Sutter Creek
  - Others?
MODEL SPECIFICATIONS

Mesh Design: Layering Updated Based on New Cross-Section

- Vertical resolution includes three shallow 35-ft thick layers as recommended by DWR SVSim to represent SW/GW interactions.
- Variable thickness deeper layers aligned with regional stratigraphy.
INFO TO BE PROVIDED TO CoSANA IN APRIL

- Map information - shapefiles to align element edges
  - GSA boundaries (source: SGMA Data Viewer)
  - Streams (source: National Hydrography Dataset – USGS)
  - GSA and Other Boundaries (see prior slides)

- Mesh Specifications
  - Maximum element sizes near streams and interior areas
  - Recommended width of fine mesh zones around modeled streams
  - Layering (formations/aquifers) – based on existing information
    - Modified as needed after the HCM is complete.
NEXT STEPS

- Complete stakeholder and GSA data compilation into the DMS
- Conduct data gaps analysis and develop *Draft TM #2: Data Compilation and Data Gaps Assessment* – due 5/31/2019
- Continue to build bibliography of relevant basin studies
- Continue Hydrogeological Conceptual Model and Groundwater Conditions Assessment
- Continue regional model update coordination as directed by Working Group
ESJ SUBBASIN 4/10 MEETING SUMMARY (1 OF 2)

- ESJ Board has adopted the **80,000 AFY** “groundwater pumping offset” target
  - Low-end of potential range (80,000 to 123,000 AFY)
  - Needed to rectify 38,000 AFY of overdraft
  - Does not include climate change analysis
  - Assumes focused implementation of P&MAAs
  - However, no direct nexus to policy and/or planned implementation of P&MAAs

- List of P&MAAs in development

- Draft GSP sections will begin being released in May 2019
ESJ SUBBASIN 4/10 MEETING SUMMARY (2 OF 2)

Sustainability Criteria

- ESJ groundwater authority initiating development of Sustainable Management Criteria (SMCs)
- Groundwater model being used to project water level declines under “baseline” and “sustainable yield” projected scenarios to assess risk of Undesirable Results under the given set of SMCs
- Water Levels will likely be used as proxy for most Sustainability Indicators
ESJ MODEL COORDINATION MEETING (1 OF 2)

- Meeting held on April 15, 2019
- Meeting Attendees:
  - Cosumnes: Sac County, OHWD, EKI
  - ESJ: San Joaquin County*, North San Joaquin GSA, Woodard Curran
- Key points of coordination identified:
  - Cross boundary flows
  - Sustainability criteria
  - River recharge
  - Future water levels
Meeting outcome:

- Woodard Curran agreed to provide calibrated historical model and other selected data pending a formal request.
- Established intent of ongoing coordination.

Need to have similar meetings with S. American Subbasin
GENERAL UPDATES - TSS GRANT APPLICATIONS

- DWR is requesting additional information/coordination with Amador GSA
- Limited Water Forum funds available for additional TSS grant request or to support Amador GSA