Atascadero Basin GSP Development
Section 6 – Water Budgets

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July 1, 2020
Section 6 – Water Budgets

- Surface and groundwater budgets (satisfies SGMA GSP Regulations §354.18)

- Water budgets include:
  - Inventory all inflows (recharge) and outflows (discharge)
  - Estimate groundwater storage surplus/deficit
  - Estimate basin yield

- Three water budgets:
  - Historical (1981-2011) – describes past conditions, very informative
  - Current (2012-2016) – relatively uninformative for planning purposes except as an indication of future drought impacts
  - Future (2020-2070) – most informative water budget, used for GSP planning purposes

- Water budget years identical to Paso Basin water budget years to maintain consistency with use of the Paso Basin model
Historical Water Budget Summary

Atascadero Subbasin Historical Groundwater Water Budget (1981-2011)
Current Water Budget Summary

Atascadero Subbasin Current Groundwater Water Budget (2012-2016)

INFLOWS AND OUTFLOWS (ACRE-FEET)

INFLOWS
- Streamflow Percolation
- Agricultural Irrigation Return Flow
- Deep Percolation of Direct Precipitation
- Subsurface Inflow into Subbasin
- Wastewater Pond Percolation
- Nacimiento Water Project Percolation
- Urban Irrigation Return Flow

OUTFLOWS
- Total Groundwater Pumping
- Subsurface Flow out of Subbasin
- Riparian Evapotranspiration

CLIMATIC PERIOD CLASSIFICATION
- Drought
- Variable
- Wet Period

WATER YEAR

Historical Cumulative Change in Storage

EXPLANATION
- Cumulative Change in Groundwater Storage
- Annual Change in Groundwater Storage

CLIMATE PERIOD CLASSIFICATION
- Drought
- Variable
- Wet Period
Current Cumulative Change in Storage

EXPLANATION
- Cumulative Change in Groundwater Storage
- Annual Change in Groundwater Storage

CLIMATE PERIOD CLASSIFICATION
- Dry
- Average/Alternating
- Wet
Cumulative Change in Storage
Period of Record (1981-2016)
Summary of Water Budgets

- Estimated groundwater budgets

<table>
<thead>
<tr>
<th>Groundwater Budget</th>
<th>Groundwater Storage</th>
<th>Basin Yield</th>
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</thead>
<tbody>
<tr>
<td>Historical (1981-2011)</td>
<td>+ 1,900 AFY</td>
<td>16,900 AFY</td>
</tr>
<tr>
<td>Current (2012-2016)</td>
<td>- 3,100 AFY</td>
<td>9,600 AFY</td>
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<tr>
<td>Future (2020-2070)</td>
<td>TBD</td>
<td>TBD</td>
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- Key terms
  - Groundwater Storage (long-term GW outflow - GW inflow)
  - Basin Yield (total pumping + change in storage)
Questions?