Agenda Item 6
Progress Report
Staff Proposal for Implementing Water Use Measurement
Progress Report
Water Use Measurement

- Overview
- Rationale for Each Action
- Cost Estimate
- Outstanding Issues
- Next Steps
Overview - CALFED ROD

CALFED Record of Decision:
1) Define appropriate measurement for Ag and Urban (completed)
2) Work with legislature to implement

1.5) Staff Draft (to Authority in April):
- Admin. actions
- Budget actions
- Legislation
Overview - Timeline

- Ag Independent Panel
- Ag Proposal: 5 mo.
- Urban Definition: 12 mo.
- Urban Proposal: 4 mo.
- Authority Decision
- Refine Approach
- Draft Leg.
Need Better Demand Data

Crop ET (100%) +/-30%
Precipitation (100%) +/-10%
Diversions (40%) +/-10%
Net Groundwater (70%) +/-50%
Deliveries None

Implications
-Slows storage decisions
-Investment uncertainty
Water Conservation Incentives

Are losses on farm or in district’s distribution system?

Implications
- Can’t prioritize incentives
• Regional Profiles Approach
  – Responsive to public concerns over data integrity
  – Annually update water demand & supply data
  – Use actual data – not “representative data”
  – Better represent regional planning efforts
  – Allows ongoing quality control

Support B-160 Regional Profiles

Implications
- Reduce disputes
- Use “real data”
- Avoid “batch analysis”
Administer Water Rights

Data on Compliance (20%) +/-20%

Data on Basin Allocation (20%) +/-20%

Implications
- Leads to disputes
- Slows new permitting
Recipe for Implementable Package

- Balanced
  - Significant changes in Ag & Urban
- Fiscally realistic
  - Approach attempts to keep costs down
- Informed by Stakeholders
  - Extensive process
  - Ag, Urban, Environmental viewpoints
# Overview - Proposed Actions

<table>
<thead>
<tr>
<th>Action</th>
<th>New for Ag</th>
<th>New for Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) New reporting system</td>
<td>Data protocols, database, fewer reports</td>
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<tr>
<td>2) Measure/report Sources</td>
<td>Meas. for 20% reporting for all</td>
<td>Nothing new</td>
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<tr>
<td>3) Measure/report Deliveries</td>
<td>No new meas. reporting for all</td>
<td>Meters for 7%, no new reports</td>
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<tr>
<td>4) Crop ET &amp; Groundwater</td>
<td>ET: satellites</td>
<td>N/A</td>
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<tr>
<td>5) Science</td>
<td>Focused research &amp; adaptive management</td>
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## Draft Cost Estimate

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<td></td>
<td>Local</td>
<td>State</td>
</tr>
<tr>
<td>1) Report system</td>
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<tr>
<td>2) Meas/report Sources</td>
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<td>3) Meas/report Deliveries</td>
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<td>4) ET &amp; GW</td>
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<td>5) Science</td>
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<td><strong>Total</strong></td>
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Public Involvement Themes

• **Sounds like big brother** – Modest local changes; State “getting own house in order”

• **Moving too fast** – More refinements after Authority decision in April

• **Not moving ag far enough** – Reporting represents significant change; Consistent with USBR requirements

• **Not strong enough** – Urban cost effectiveness is consistent with “Beneficiary Pays”
Estimated Costs & Benefits
Urban Meter Retrofit

Urban Measurement – Central Valley

- Application Reduction: 20-30%
- Benefits:
  - 120 to 180 TAF reduced application (Avg 150 TAF)
  - Minor “real water” savings
- Costs: $22 to $64M/yr (Avg $43M)
- Unit Cost: $175 to 525/AF (Avg $350/AF)

At the tap
Estimated Costs & Benefits
Improved Turnout Accuracy

Application Efficiency and Marginal Cost
Eastside San Joaquin Valley

Existing efficiency (Great uncertainty)
0 AF savings

Maximum efficiency
402 TAF savings
$140/AF Other

Effects of improved measurement?
Estimated Costs & Benefits
Improved Turnout Accuracy

Agricultural Measurement

- Application Reduction (at FARM; coupled with other programs)
  - Sac Valley: 0-9% (Avg 5%)
  - E. Side San Joaquin: 0-14% (Avg 7%)
- Benefits:
  - 0 to 1,482 TAF reduced application (Avg 741 TAF)
  - Minor “real water” savings
- Costs: $22 to $84 M/yr (Avg $53M/yr)
  - ($22M is measurement; $0 to $62M is other)
- Unit Cost: $29/AF to $56/AF (Avg $43/AF)

At the river
Next Steps

Public Review of Staff Proposal
• Public Workshops in February
• WUE Subcommittee in February
• BDPAC in March
• Authority in April: Is the staff proposal ready for executive & legislative refinement?

Refine Approach (after Authority in April)
• Work with Executive & Legislative staff
Final Points

Most of this package is broadly supported

Proposed actions need to remain as a package
BDPAC Action

• Package represents appropriate level of staff work (more technical or ad hoc stakeholder work is unnecessary)
• Look to WUE Subcommittee to review & comment on refined costs & benefits
• Recommend that Authority deliberate on this topic at April meeting
  – Staff work is complete: begin working with Administration and Legislature to refine and implement
  – Periodic status reports to BDPAC and Authority