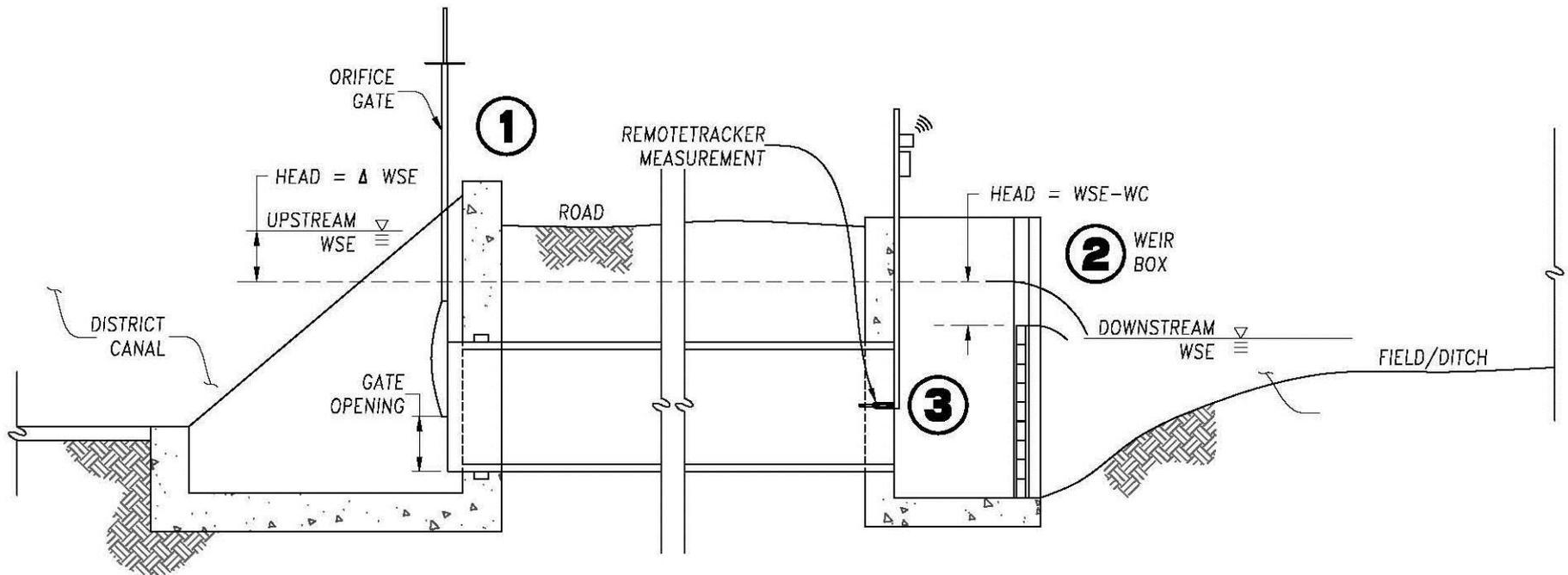


RD 108 Field Gate Measurement Pilot Project

California Water Commission

April 18, 2012

Field Gate Configuration



1. Gate Measurement



2. Weir Measurement



3. Remote Tracker Measurement

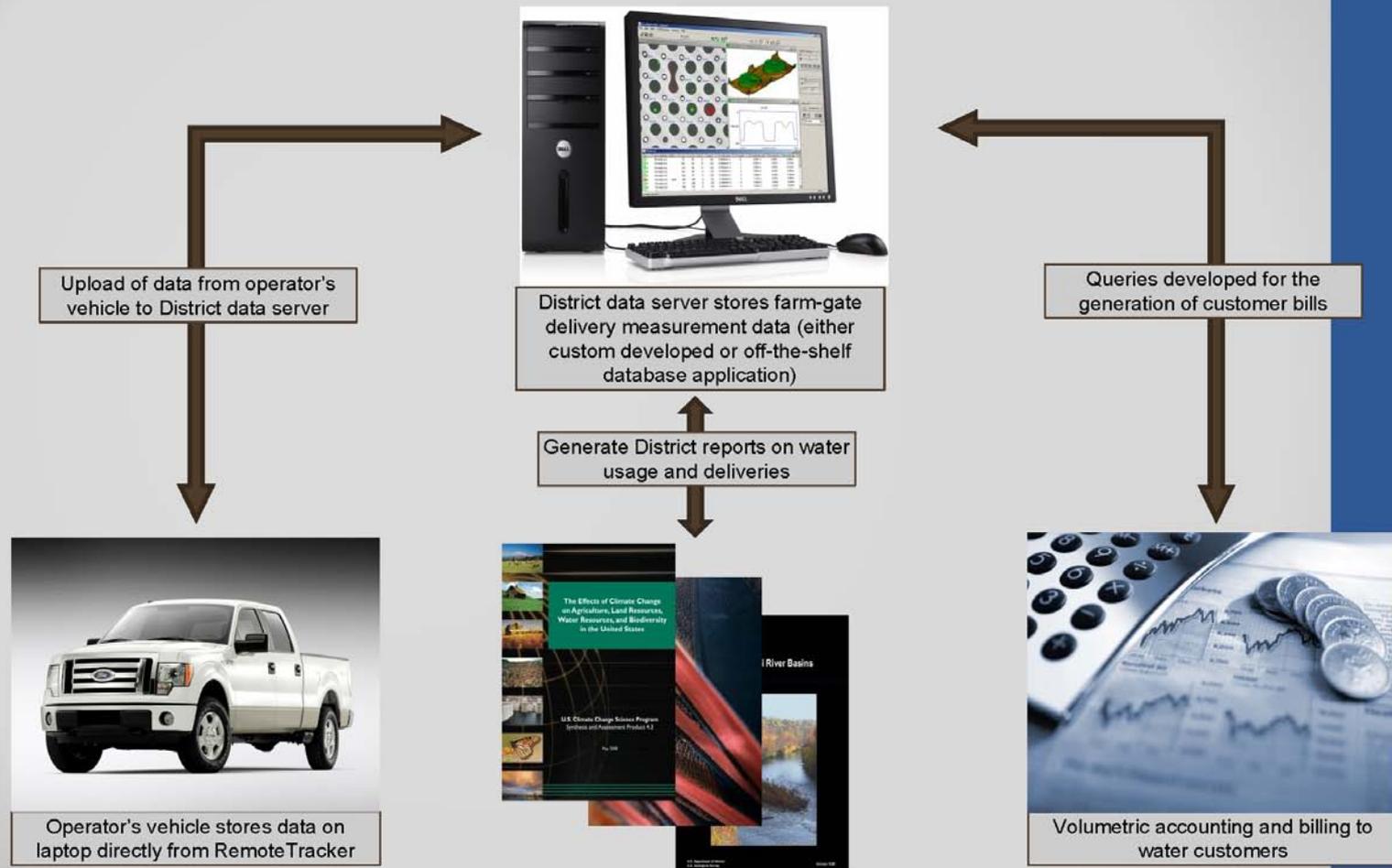


Field Computer



Data Transfer for Billing/Reporting

RemoteTracker Integration with Accounting System



Lateral Level Comparison

- District measures real time inflow and spill for Pilot Project Lateral
- This volume will be compared to the sum of the Field Gate Measurements



Challenges

- **Extremely high volumetric accuracy standard**
- **Very low available head**
 - Easy to submerge weir
 - Small water level change creates large flow change
- **Very wide range of flows (2 cfs to 30 cfs typical in RD108)**
 - Low velocity during rice “maintenance” cause sedimentation affecting remote tracker and gate measurement
 - Very high “flood up” flows are difficult to use weir and remote tracker
- **Sedimentation of pipe cross-section with row crops (infrastructure sized for rice)**
- **Remote tracker is fairly fragile and may have reliability issues (not typical application)**
- **Difficult to retrofit existing systems with lots of variability**
- **Very short window to install new infrastructure**
- **Significant capital and O&M cost**

Next Steps

1. Final design
2. Complete Implementation and Operation Costs
3. Develop accounting procedures and new rate structure
4. Must be approved under Prop 218
5. Begin Construction

Questions?