



DEPARTMENT OF WATER RESOURCES

Water Diversion Measurement Workshop

July 21, 2011

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Water Use and Efficiency Branch
DWR, DSIWM



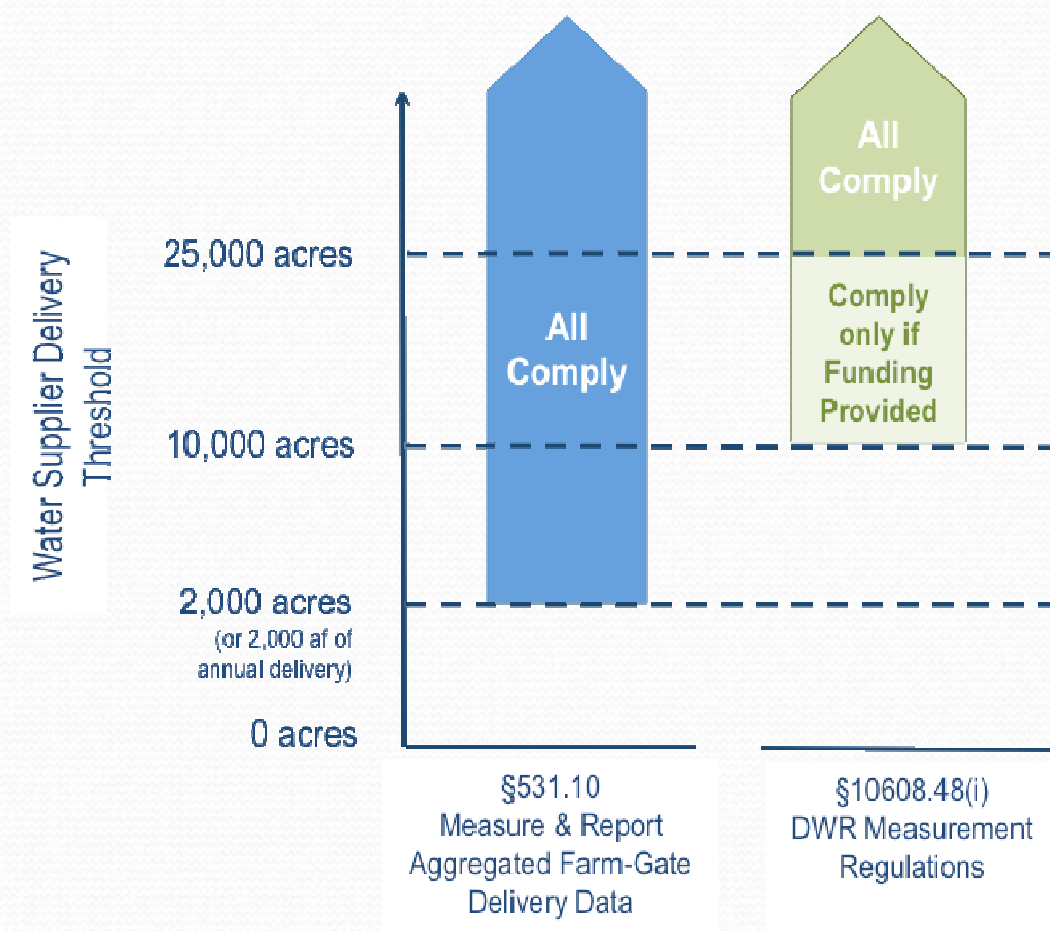
Topics of the Presentation

- The Statute
- The Rulemaking Process
- Stakeholder Process and Issues
- The Regulation Components

SBX7-7 requirement

- *The department shall adopt regulations that provide for a range of options that agricultural water suppliers may use or implement to comply with the measurement requirement*
- *Agricultural water suppliers shall implement all of the following critical efficient management practices:*
 - *(1) Measure the volume of water delivered to customers with sufficient accuracy to comply with subdivision (a) of Section 531.10 and to implement paragraph (2).*
 - *(2) Adopt a pricing structure for water customers based at least in part on quantity delivered.*

Relationship of Applicability of Agricultural Water Measurement Provisions





Furthermore

- Must Report 2 critical EWMP (measurement & Volumetric pricing)
- Stipulates reporting other EWMP's locally cost effective
- Report AWMP to DWR
- Reporting Provisions for Fed contractors
- Reporting Provisions for AWMC MOU signatories



Water-Use-Reporting "DOST"

Summary
Forms

SWRCB
D

DPH

DWR

CPUC

DSC

UWMP

AWMP

PWSS

531.1

Other - SBX7.7
Compliance

CA Water Plan
Update

Welcome: Gwen Huff Huff for Gwen's Test Agency

Manage UWM Plan Details

Basic Plan Information

Service Area *

County Being Reported *

Plan Year *

If your UWM Plan year does not follow calendar year, please enter from and to dates

Plan Start Date

Plan End Date

☐ Are you applying for a DWR
grant or loan?

Associated Wholesalers

Associated Retailer

Remarks

UWM Plan Details

Plan Prepared By *

Plan Created On *

Save Plan Details

Exit To Home Page

View Details

Upload UWMP and Supporting Documents

Select File *

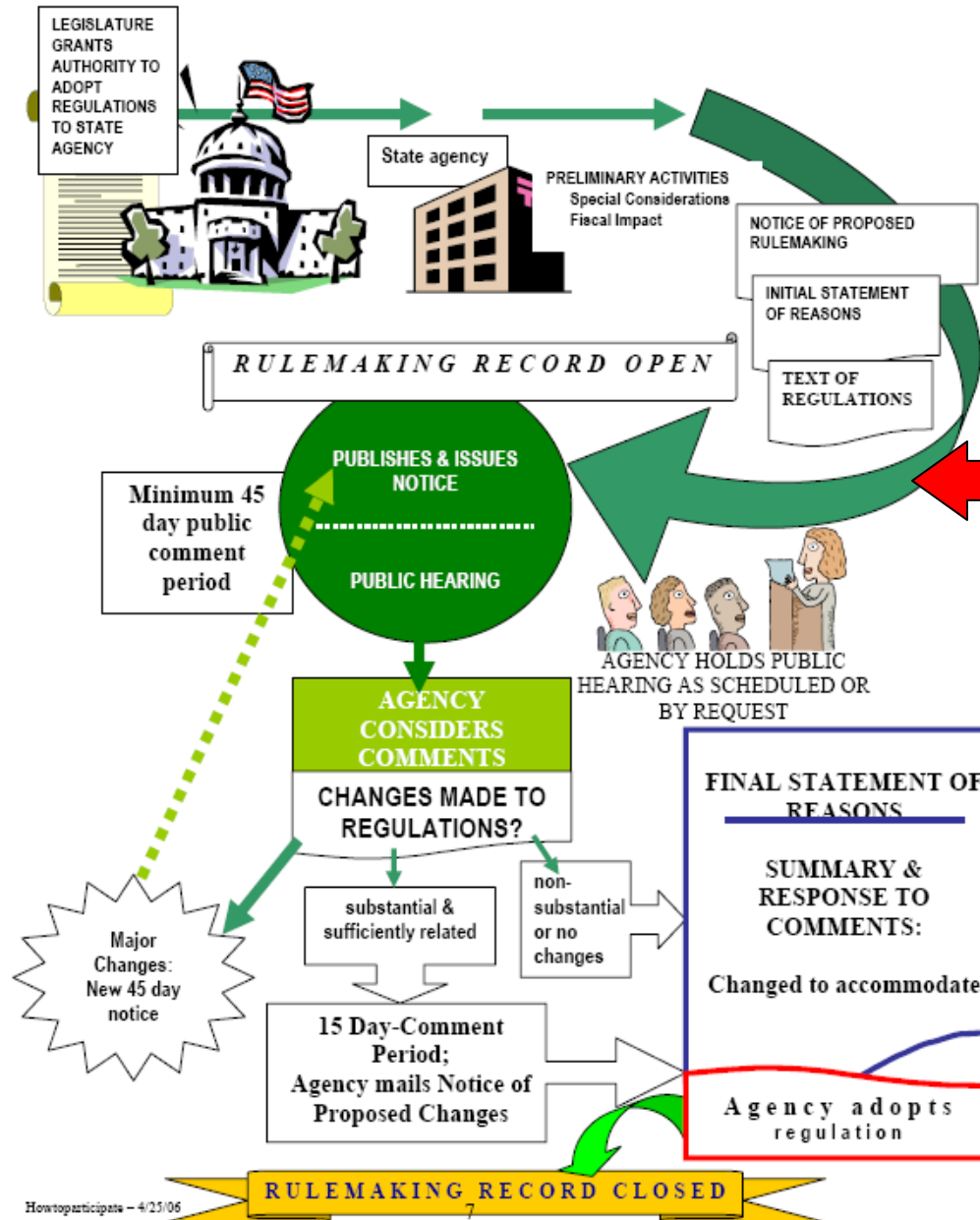
File Category *

Remarks

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The Rulemaking

The Rulemaking Process



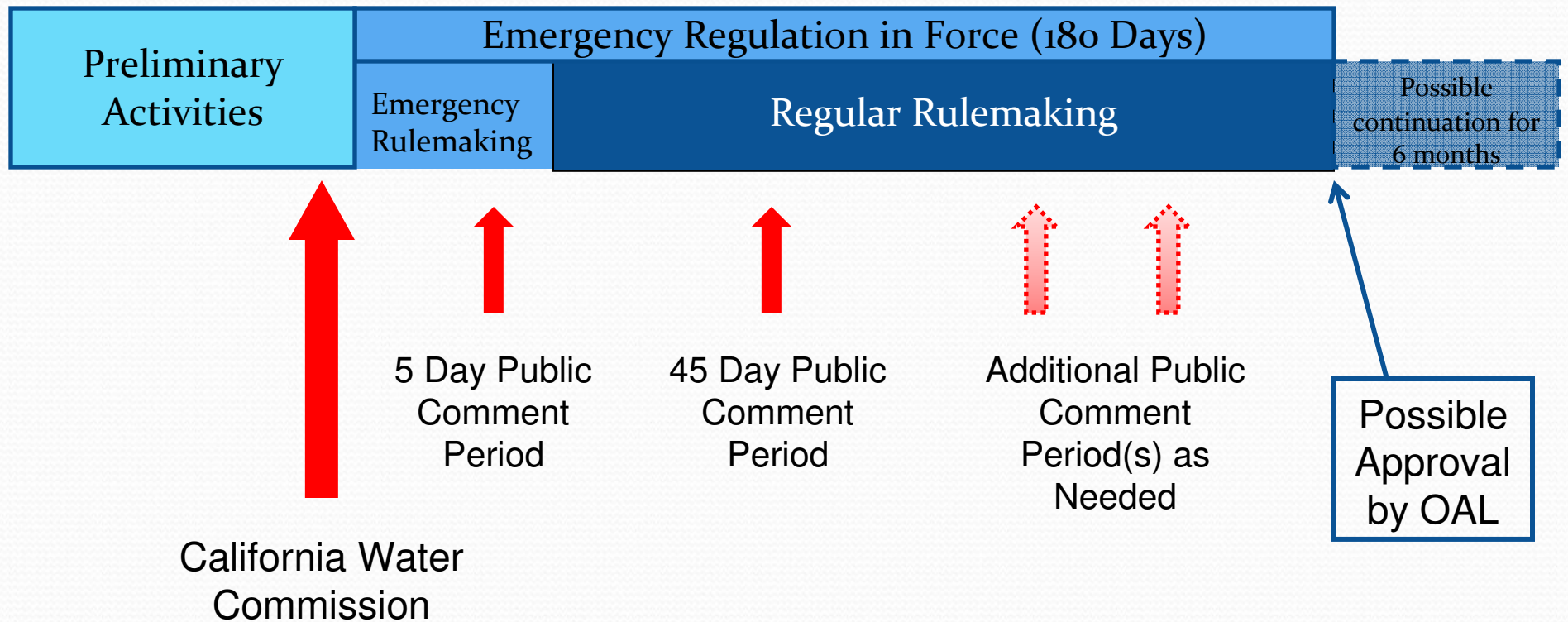
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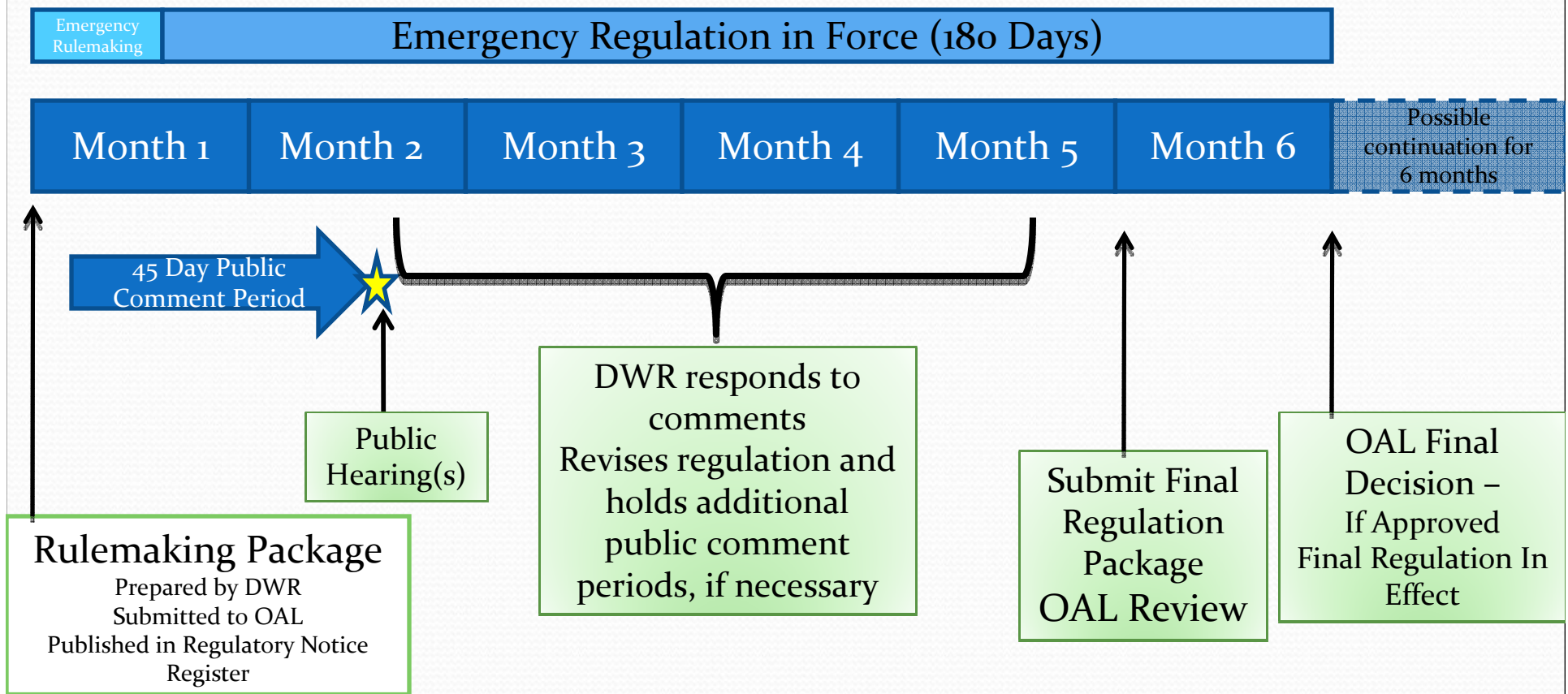
Preliminary Activities

- Workgroup and Stakeholder Meetings
- Data Analysis
- Draft of Regulation
- Approval by DWR Management and Legal Counsel
- Approval by California Water Commission

Opportunities for Public Comment

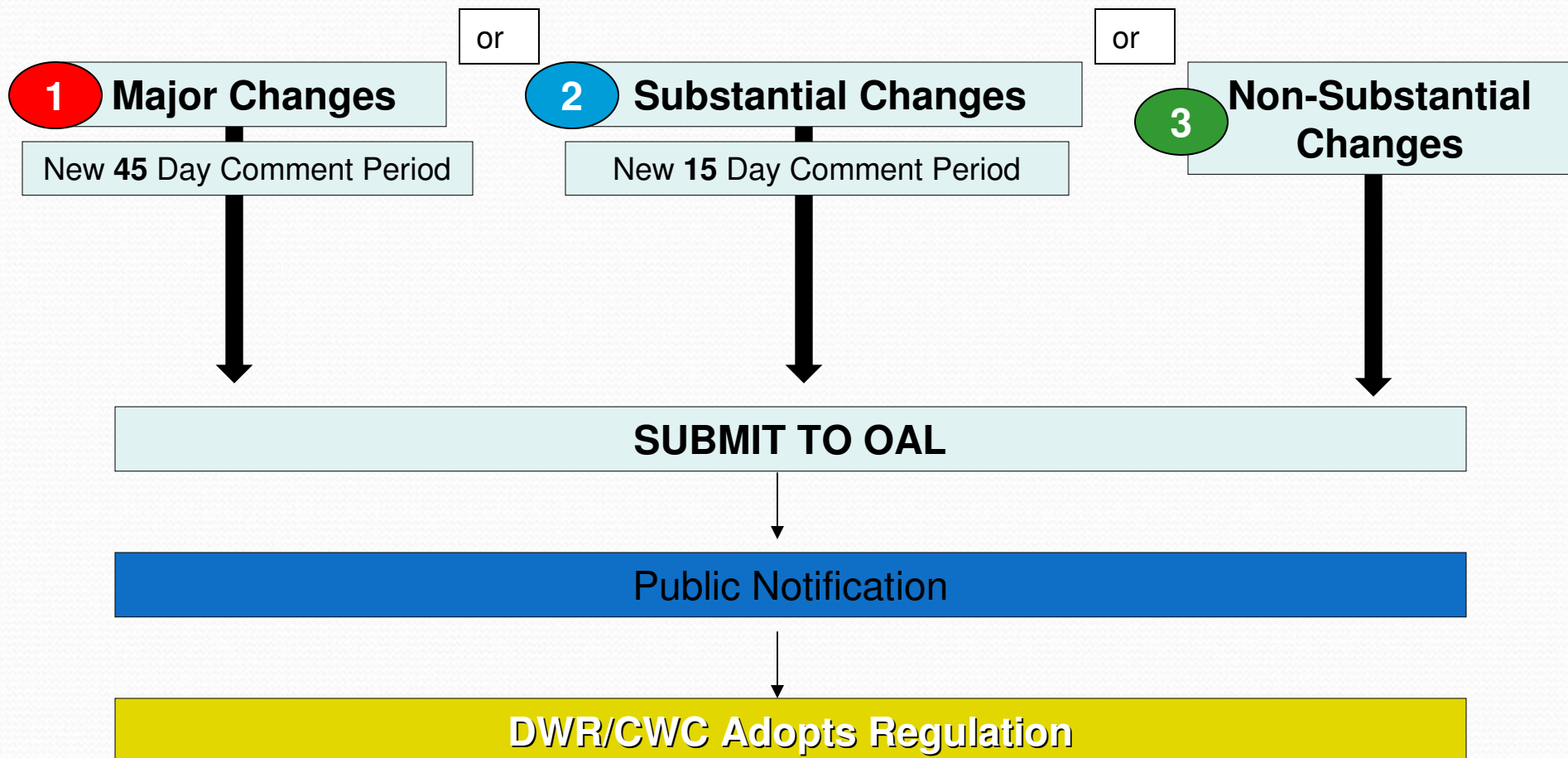


Regular Rulemaking



DWR Process for Revisions

Intake of Public Comments



Stakeholder Concerns

Agricultural Stakeholder Committee Discussions

- Follow authorization of statute.
- Applicability
 - Proposed text for CVP water suppliers
- Accuracy Standards
- Verification of Measurement Devices
- Prescribe Device Type
- Farm gate vs. Upstream measurement
- Implementation (phased vs. date certain)
- Costs

Ag stakeholders Proposed

- An alternative was proposed by some members of the Agricultural Stakeholder Committee to use the Option (a) numeric accuracy standards for Option (b), namely:
 - $\pm 12\%$ for an existing device
 - $\pm 5\%$ in the laboratory for new or replacement devices with laboratory certification
 - $\pm 10\%$ in the field for new or replacement devices with non-laboratory certification

Option c- CVP water suppliers

- Two other alternatives were discussed to potentially include as measurement Option (c) for CVP Water Suppliers
 1. Federal 2008 standard or its future amendment that complies with State regulation
 2. Federal 2008 standards or its future amendment

Velocity, flow rate, and volume

- If device measures flow rate:
 - $\text{Volume (cubic feet)} = \text{flow rate (cubic feet per second)} \times \text{duration of delivery (seconds)}.$
- If device measures velocity:
 - $\text{Volume (cubic feet)} = \text{velocity (feet per second)} \times \text{cross-section flow area (square feet)} \times \text{duration of delivery (seconds)}$

Affected Acreage, Measurement Sites and Number of Suppliers (≥ 25,000 acres)

Regions	Acres per Turnout	Potentially Affected Irrigated Acres	Potentially Affected Turnouts	Potentially Affected Lateral Sites	Potentially Affected Suppliers
Sacramento Valley	80	595,629	7,445	317	13
Delta	50	25,760	515		1
East San Joaquin Valley	40	558,387	13,960		7
West San Joaquin Valley	100	60,108	601		2
Southern San Joaquin Valley	60	1,452,402	24,207		20
Southern California, Coast, Other	70	187,840	2,683		3
Total		2,880,126	49,411	317	46

Fiscal Impacts

Costs for average-sized farm (313 acres)	
Total affected acres	2,880,126
Initial cost per affected acre	\$24.20
Annual ongoing cost per affected acre	\$8.00
Average initial cost per affected farm	\$7,570
Average annual ongoing costs per affected farm	\$2,500

Fiscal Impacts

Statewide Present Value (PV) of Cost Over a 20-Year Horizon

PV of capital and initial assessment	\$66,668,000
PV of annual O&M, capital replacement, administration & reporting	\$263,703,000
Total PV	\$333,371,000

Agricultural Water Measurement Regulation Contents

Applicability*

Range of options

- a. Farm-gate standards (5, 10, 12%)
- b. Lateral standards (5, 10, 12%)

Certification and Performance Requirements

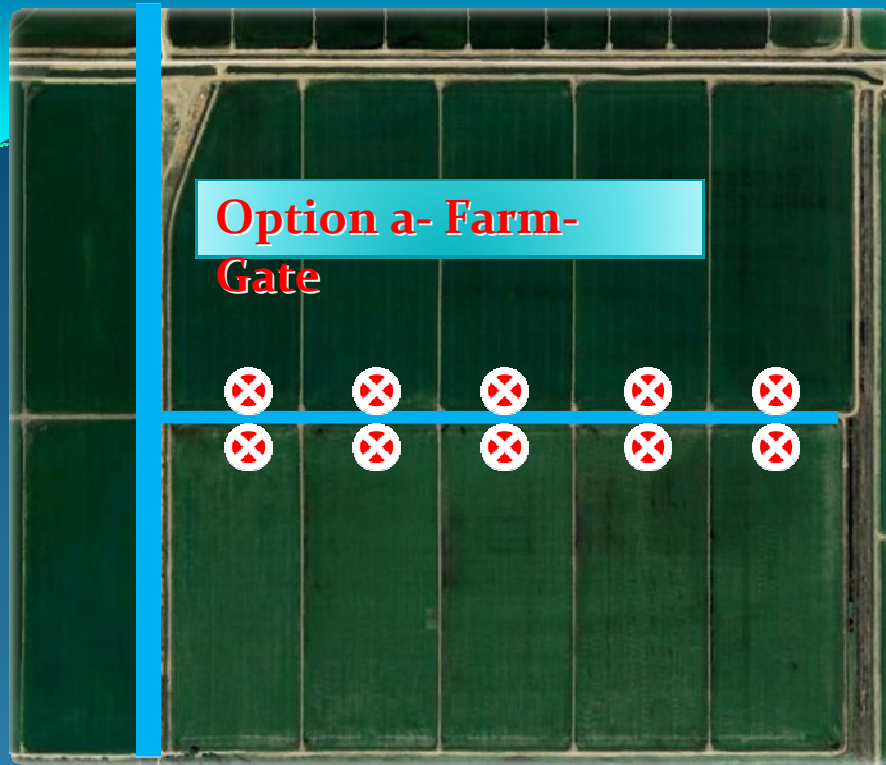
Document submittal and retention

* DWR, QSA- Exempt

Ag Water Suppliers in Four Size Categories

Categories	Number of Suppliers		Acreage	
	Number	%	Acres	%
$A < 2,000$	50	19%	49,000	1%
$2,000 \leq A < 10,000$	91	35%	486,000	7%
$10,000 \leq A < 25,000$	46	18%	680,000	10%
$A \geq 25,000$	72	28%	5,694,000	82%
Total	259	100%	6,909,000	100%

Measurement Options



Measurement device at
customer delivery point

Accuracy Standards:
Laboratory certified -5%
Non-lab certified- 10%
Field tested/inspected- 12%



Option b- Lateral



Measurement device
upstream of multiple
customers delivery
points

Accuracy Standards:
Laboratory certified -5%
Non-lab certified- 10%
Field tested- 12%

Option b- Device Accuracy at Lateral (upstream of multiple customers)

- Provide documentation in AWMPs that:
 - No legal access to customers' farm-gatesOR
 - Large flow fluctuations exist (rice), and
 - Method is suitable for pricing structure, and
 - It accounts for differences in water use, and
 - Is adopted by the suppliers' board

Certification Requirements

- Existing devices:
 - Field analysis/inspection
- New/replacement devices
 - Laboratory certification
 - Non-laboratory certification



Performance Requirements

- Installation and O&M follow Best Professional Practices
- Repair and replace if the device is non-compliant



Document Submittal

- Submit documentation in Agricultural Water Management Plans
 - Description of best professional practices
 - Compliance with option b
 - Plan and schedule of analysis or if repair/replacements not completed
 - Irrigation acreage, time, frequency of measurement, and volumetric calculations

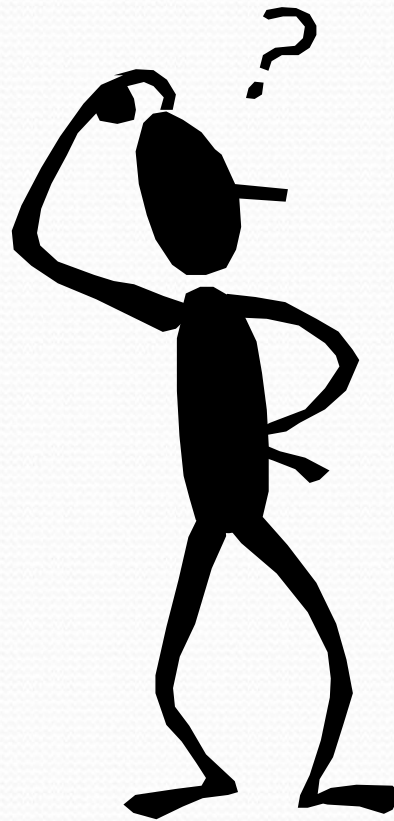


Document Retention

- Water Supplier retain
 - Records of compliance with options a and b
 - Certification records of devices
 - Records of performance
 - Field analysis results
- Retain records for two cycles of AWMP

Thank you;

Questions?



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