Industrial Process Water Regulation

Department of Water Resources
Manucher Alemi

USC Meeting
Irvine Ranch Water District
October 15, 2010.

Outline

- The Statutory Requirement
- Review of data analyses and draft criteria
- Rule making process and calendar

The Statute

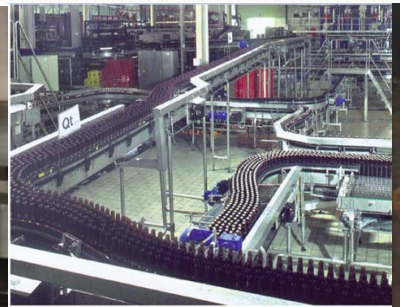
- *Section 10608.24 (e)* "When developing the urban water use target pursuant to Section 10608.20, an urban retail water supplier that has a **substantial percentage** of industrial water use in its service area, may exclude process water from the calculation of gross water use to avoid a **disproportionate burden** on another customer sector."

DWR shall adopt regulations for implementation of the provisions relating to process water.

The regulation is deemed an EMERGENCY

Process Water

water used by industrial water users for producing a product or product content, or water used for research and development.

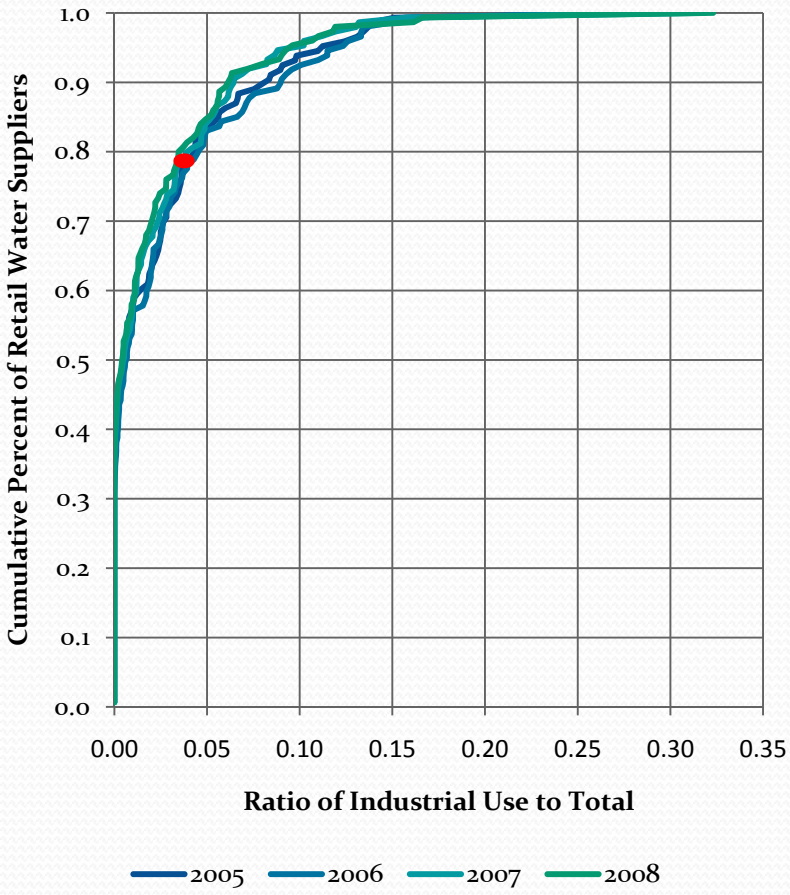


Preparing draft regulation

- Conducted literature search for the use of “substantial percentage”.
- Analyzed water use data obtained from the California Urban Water Conservation Council (CUWCC).
- Convened a Process Water Work Group and received comments from stakeholders.

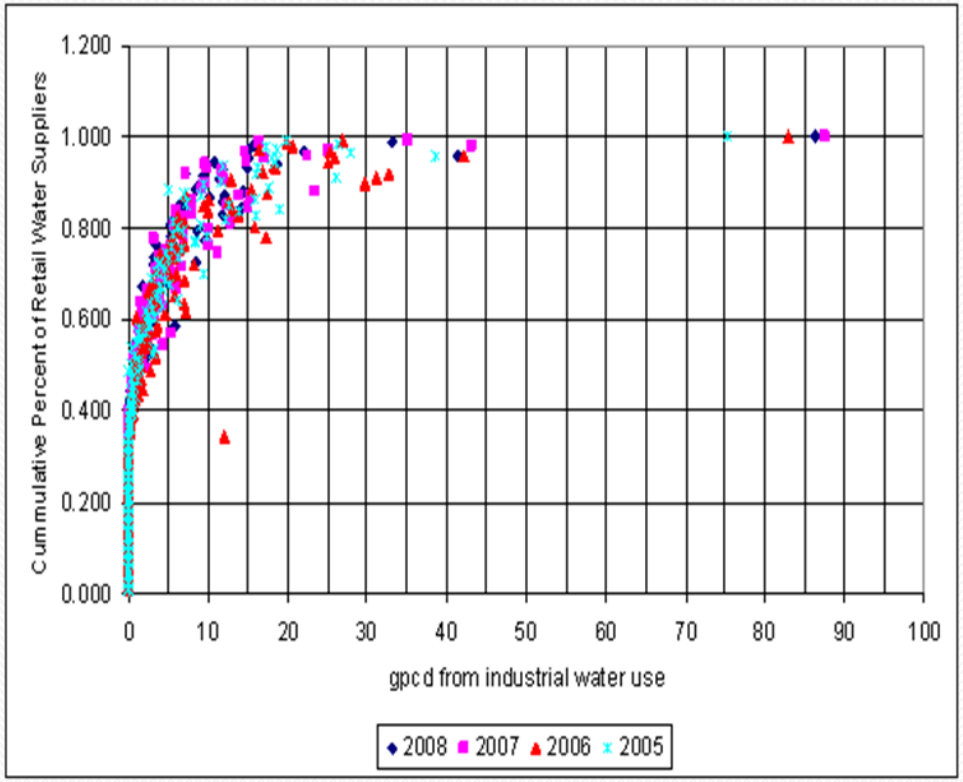
Analysis &Draft Criteria

1. A DWR consultant suggested using 4% as a threshold for a substantial percentage of industrial water use because 20% of suppliers would be able to deduct.



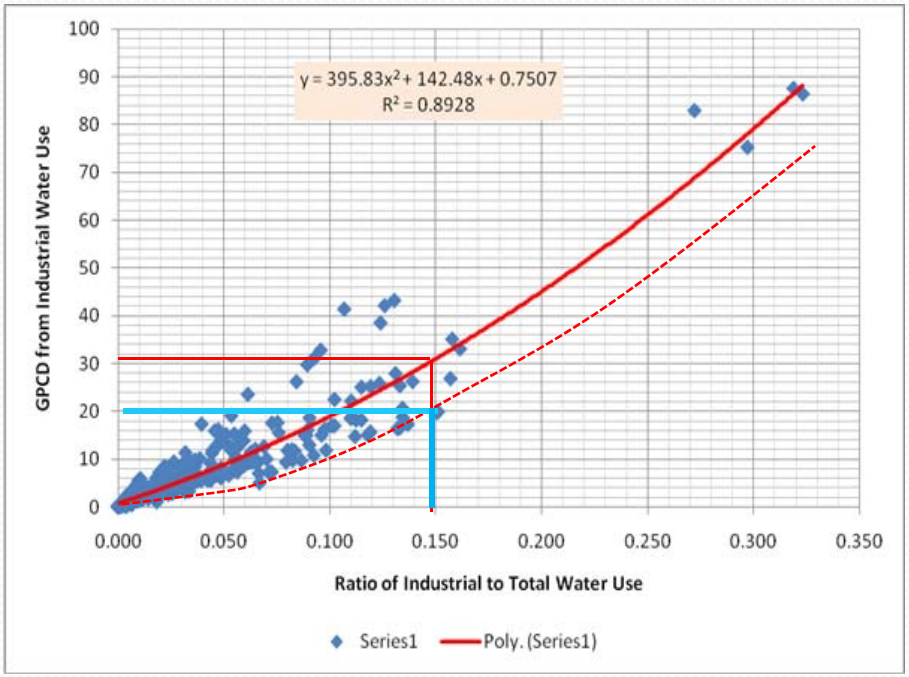
Draft Criteria … (cont.)

2. DWR, using a gpcd of industrial water use as an indicator of a burden on non-industrial water use sectors, suggested a threshold of 10% at the second work group meeting.



Draft Criteria … (cont.)

3. Based on comments received from the work group and further data analysis, DWR raised the threshold to 15% and added sliding scales (tiers) to address comments received.



Draft Criteria … (cont.)

- The tiers suggested by DWR were based on:
  - ranges of percentage of industrial water use to gross water use, and
  - quartiles of per capita water uses of non-industrial water sectors.
- Based on wide ranging comments DWR received to these suggestions and further data analysis, DWR prepared a revised criteria.

Further Data Analysis

- Designed to assess the effects of using different thresholds, and their combinations, on:
  - volumes of water and percentage of total volume of water that would be deducted, and
  - number of suppliers and percentages of total suppliers that may be able to deduct.
- The same CUWCC data was used (2005-2008).
- Each data point was treated as independent.

Volume – Average of Annual Values

Scenario	Total Volume Deducted (AF)	Percentage of Total Water Deducted to Gross Water Use
Pct Industrial >10%	53,616	1.03
Pct Industrial >12%	27,865	0.54
Pct Industrial >15%	21,100	0.42
Pct Industrial >10% or gpcd-ind>12	78,978	1.54
Pct Industrial >10% or gpcd-ind >20	55,147	1.06
Pct Industrial >12% or gpcd-ind >15	62,534	1.20
Pct Industrial >12% or gpcd-ind >20	31,814	0.62
Pct Industrial >15% or gpcd-ind >20	29,641	0.57
Pct Industrial >15% or gpcd-ind >30	22,584	0.44

Suppliers – Average of Annual Values

Scenario	Number of Suppliers that Would Deduct.	Percentage of Suppliers that Would Deduct to Total Number of Suppliers
Pct Industrial >10%	9	5.97
Pct Industrial >12%	5	3.59
Pct Industrial >15%	2	1.53
Pct Industrial >10% or gpcd-ind>12	18	12.12
Pct Industrial >10% or gpcd-ind >20	10	6.83
Pct Industrial >12% or gpcd-ind >15	13	8.88
Pct Industrial >12% or gpcd-ind >20	8	5.29
Pct Industrial >15% or gpcd-ind >20	7	4.61
Pct Industrial >15% or gpcd-ind >30	4	2.56

Summary Results

- Differences between the percentages of process water that would be deducted as a result of the scenarios analyzed here are small (0.4 – 1.5%).

Summary Results (cont.)

- Changing the threshold percentage industrial water use from 15% to 12% and the gpcd of industrial water use from 20 to 15 would only result in 0.6% more process water deduction overall but 4% more suppliers would be able to deduct.

Applicability

- Substantial percent of industrial water, OR
- Deduction avoids burden on other sectors

Basis for the Criteria

- Simpler, easier to implement, and addresses most of the issues raised by the work group members. It is based on:
  - percentage industrial water use to total water use as an indicator of substantial percentage,
  - per capita industrial water use as an indicator of disproportionate burden,
  - per capita non-industrial water use as an indicator of prior conservation efforts, and
  - economic burden to disadvantaged community.

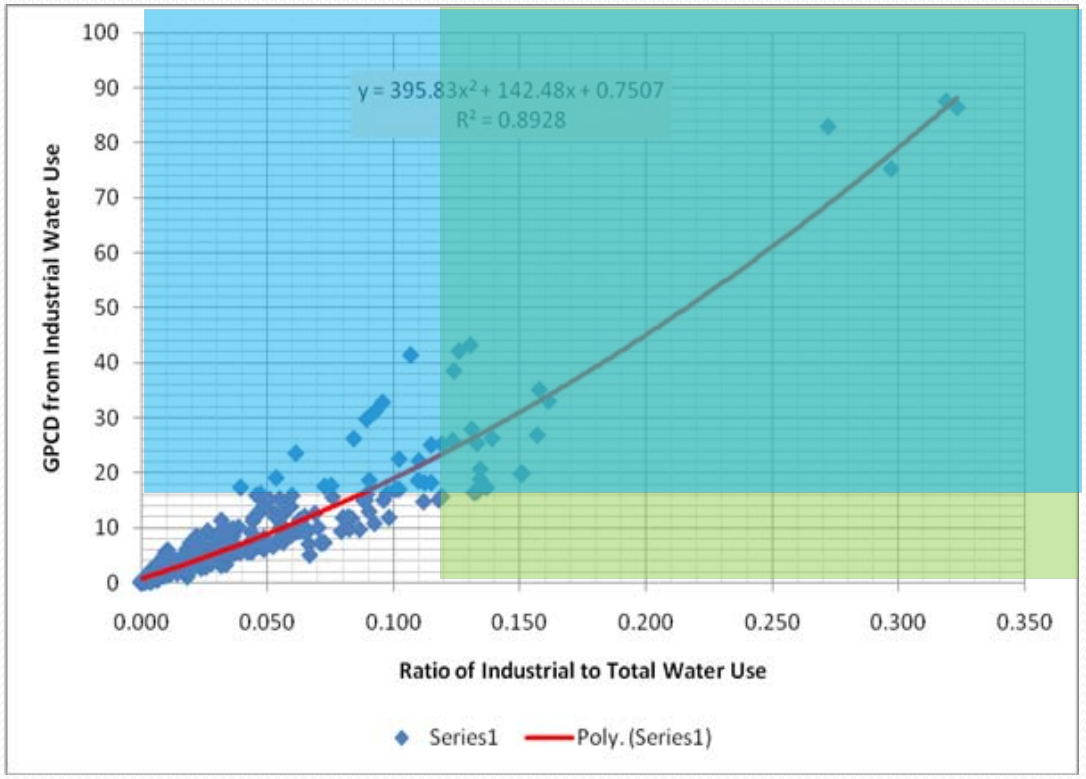
Draft Criteria

- When calculating its gross water use, an urban retail water supplier may deduct up to 100 percent of process water use if:
  a) Total industrial water use is equal to or greater than 12 percent of gross water use, or
  b) Total industrial water use is equal to or greater than 15 gallons per capita per day, or

Deductions Based on (a) and (b)

- Suppliers with data points in the shaded area would be able to deduct process water from gross water.

- This amounts to approximately 9% of total water suppliers.

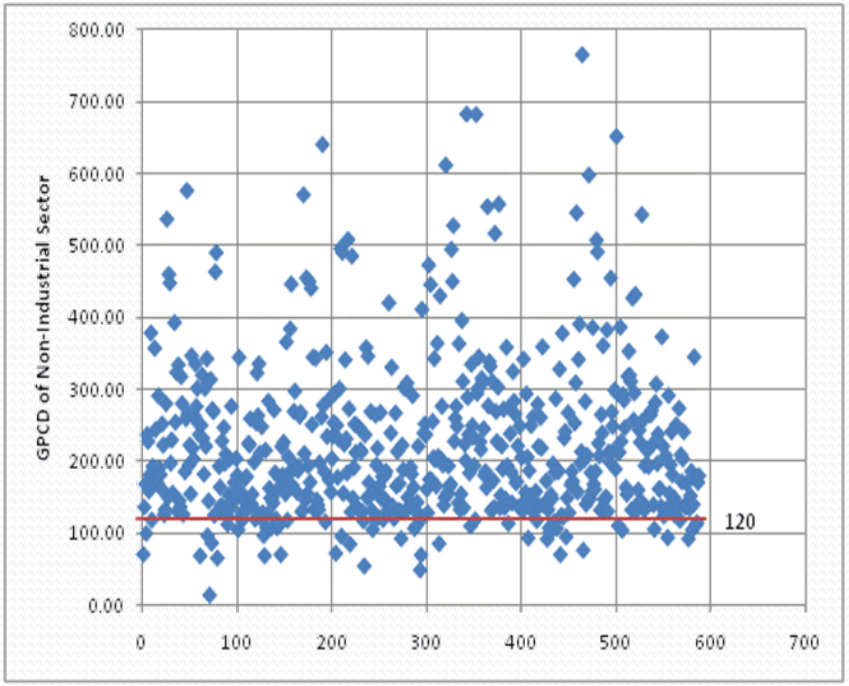


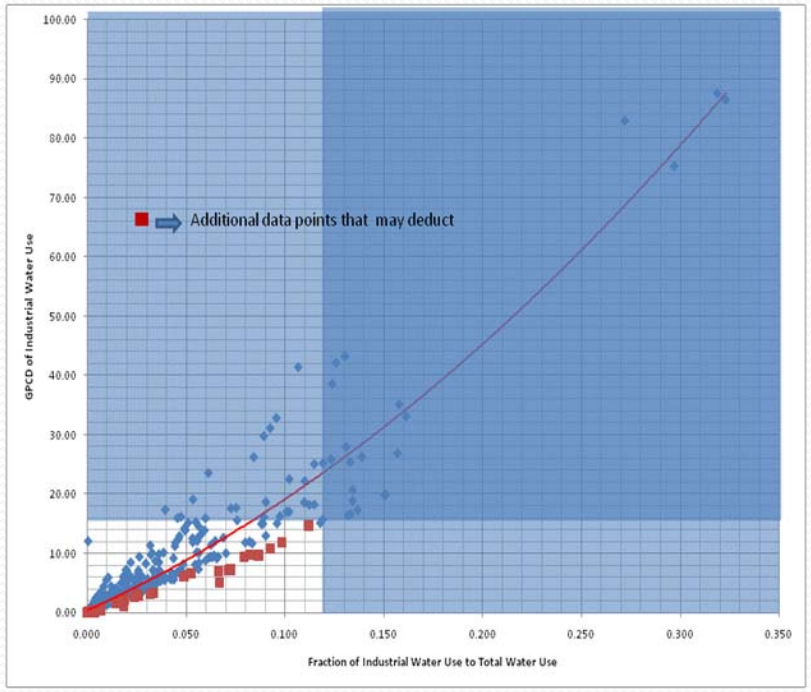
Revised Criteria (cont.)

c) Non-industrial water use is equal to or less than 120 gallons per capita per day if the water supplier has self-certified the sufficiency of its water conservation program with the Department of Water Resources under the provisions of section 10631.5 of the Water Code, or

d) The population within the suppliers' service area meets the criteria for a disadvantaged community.

Additional Deductions - (c).





Additional Deductions (cont.)

- The 120 gpcd non-industrial water use threshold proposed in (c) would enable up to 8% percent of suppliers to deduct.
- This brings the percentage of total water suppliers that may deduct process water from gross water use as a result of (a), (b), and (c) up to 17%.
- More suppliers would still be able to deduct because of criteria (d). About 34% of all water districts in California serve populations that are below 80% of the state median household income.

Final Workgroup comments

- Suggested that quantification and verification be less prescriptive
- Clarify the data used in the analysis
- Many expressed support for the draft regulation
- Concerns expressed:
  - Too broad inclusion of water suppliers to deduct
  - Process water definition needs to be carefully written to avoid misinterpretation.
  - Applicability of either burden or substantial percentage

Opportunities To Comment

- October 15th- Urban Stakeholders Committee
- November 9th – California Water Commission
- Formal Rulemaking – Public Comment Periods
  - End of November *(timing is tentative)*– Emergency Rulemaking
  - December 2010 – May 2011*(timing is tentative)*– Regular Rulemaking
- CII Task Force

www.water.ca.gov/wateruseefficiency/sb7/

Rulemaking Process

Rulemaking

Legislature

Water Conservation Act of 2009
SBX7-7

Department of Water Resources

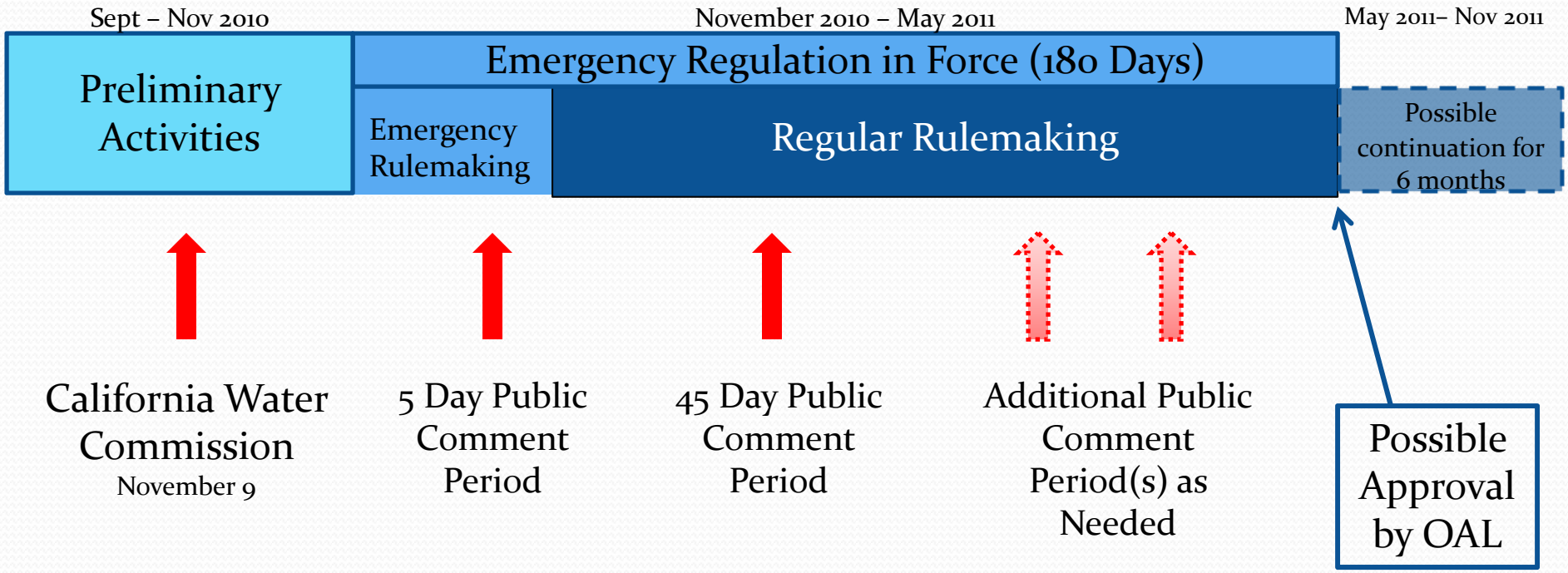
Writes Regulation with Public Review
(in accordance with Administrative Procedures Act)

California WATER COMMISSION

Office of Administrative Law (OAL)

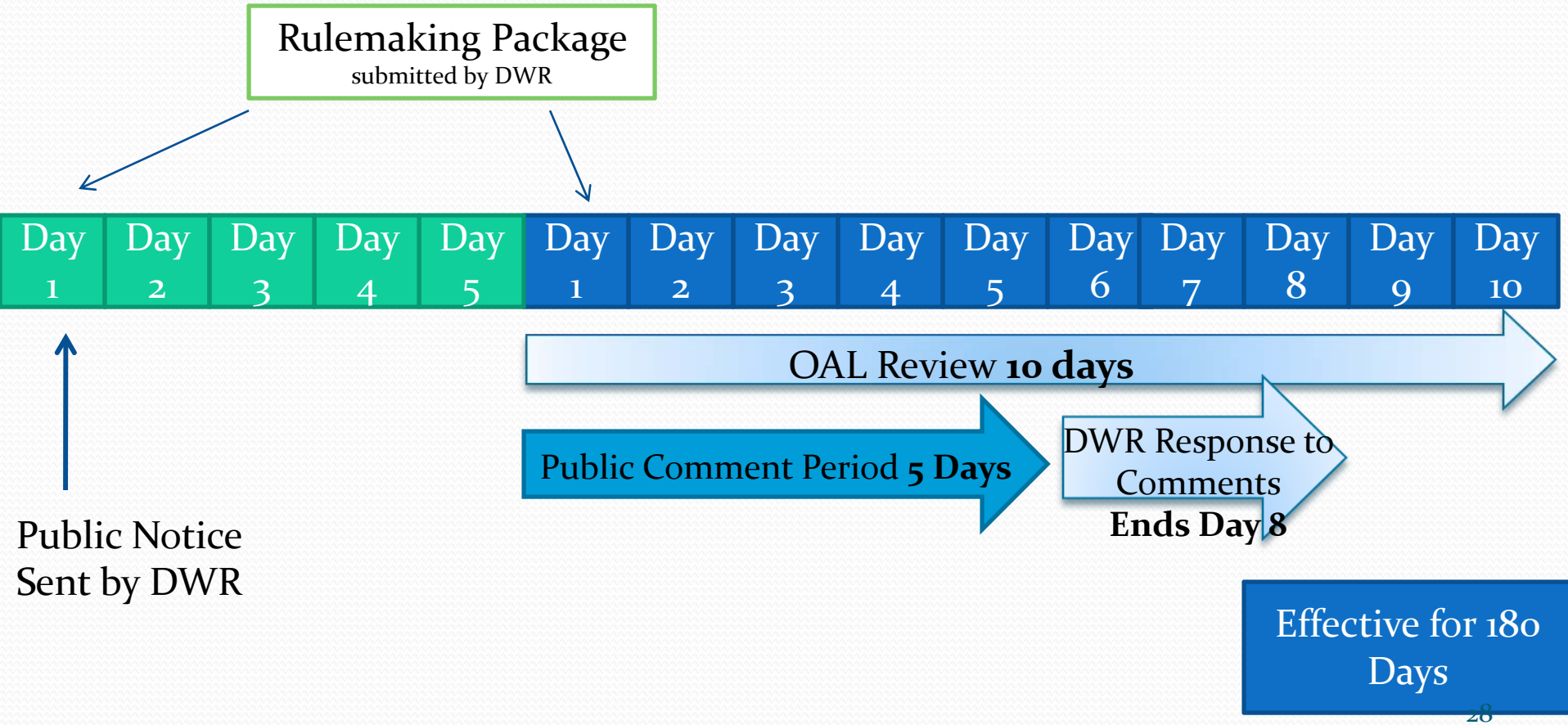
Reviews for Procedural Compliance

Opportunities for Public Comment



Emergency Rulemaking

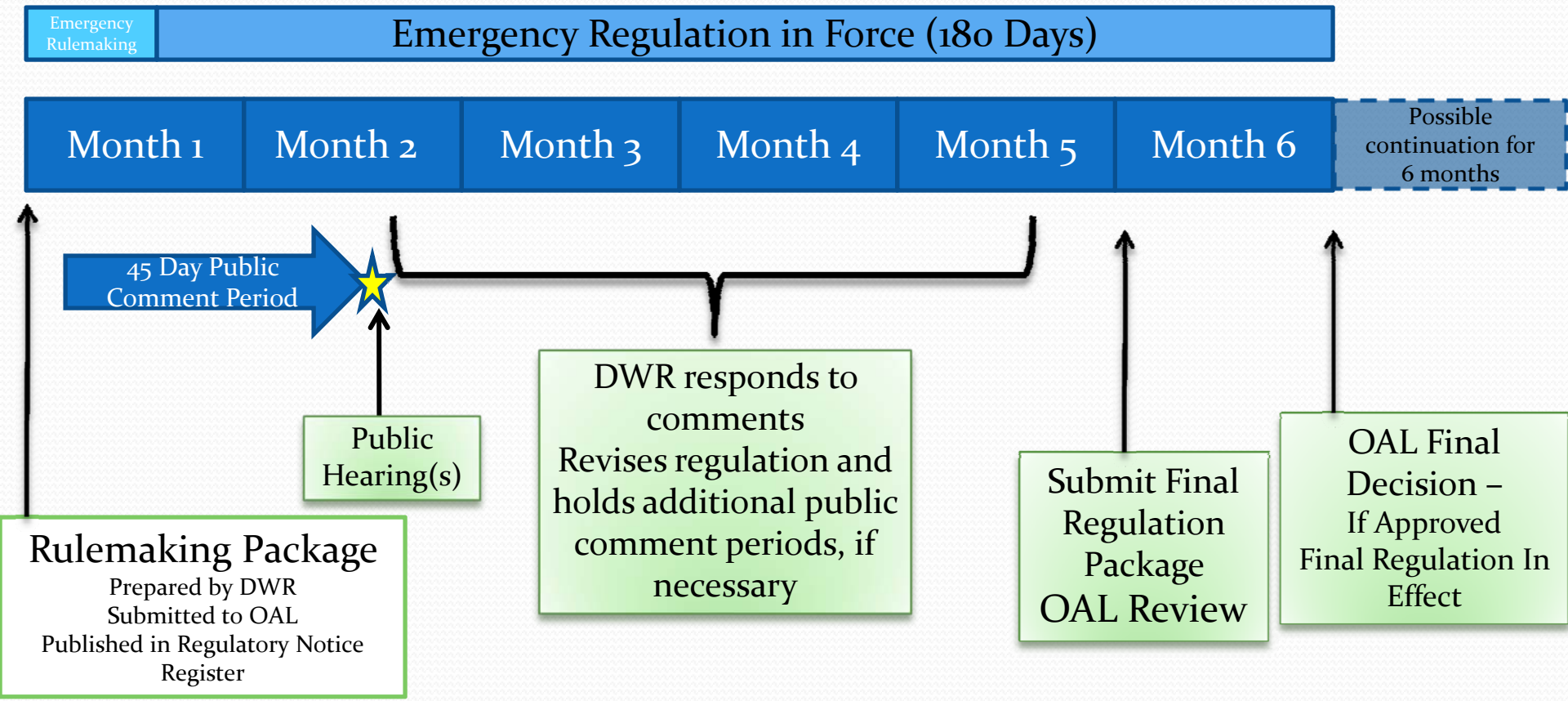
November 2010



Regular Rulemaking

November 2010

through May 2011



Next Steps

- USC Comments due 10/18/2010
- Prepare Final Draft Emergency Regulation, 10/22/2010
- DWR Legal and Management Review
- CWC review, 11/9, 2010
- If approved by CWC, submit to OAL in November
- If approved by OAL, Emergency Regulation in effect
- Begin Permanent Rulemaking process and complete within 180 days