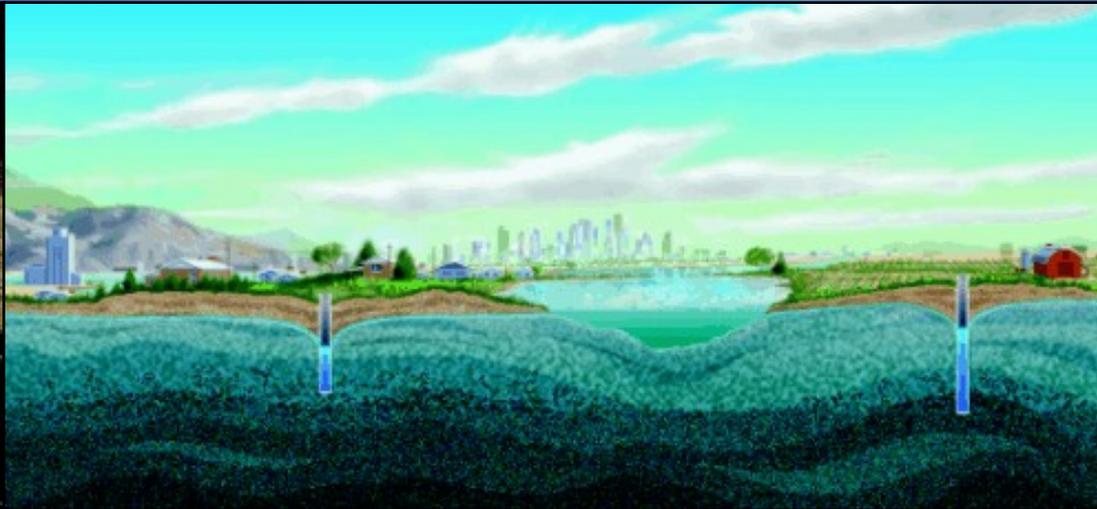


# DWR's Sustainable Groundwater Management Implementation

## - Basin Boundary Regulations - Informational Update



California Water Commission  
August 19, 2015  
Los Angeles, CA

# Presentation Overview

- **Draft Regulations Process Update**
- **Draft Regulations Discussion**
- **Next Steps**

# Draft Regulations Process Update

# Basin Boundary Regulations Process

Jan-April

April-May

July-Sept

Oct-Nov

## Scoping

- Notify OAL
- Collect Issues from Stakeholders
- Coordinate with SWRCB & CWC

## Draft Framework

- Public Listening Sessions
- Present and Receive Input from Advisory Groups and Public

## Draft Emergency Regulations

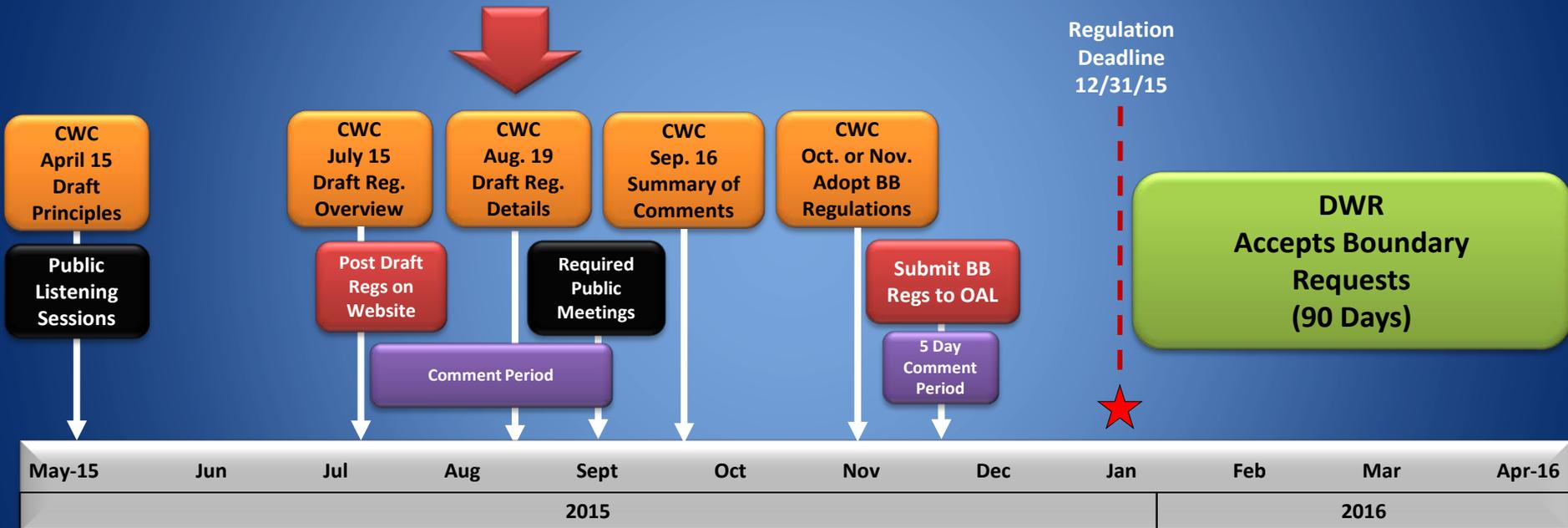
- Required Public Meetings
- Present and Receive Input from Advisory Groups and Public

## Adopt Emergency Regulations

- CWC Approval
- Noticing and Submittal to OAL

Input and Feedback from the CWC and SWRCB

# Basin Boundary Regulations Estimated Timeline



# How to Provide Input

- **DWR Welcomes Feedback on Draft Regulations**

- Email & Written Comments
- CWC Meetings (Aug.-Oct.)

- **DWR will be Holding Three Public Meetings**

- Sacramento (8/31)
- Bakersfield (9/2)
- Orange County (9/3)

The screenshot shows the California Department of Water Resources website. The main heading is "Public Comments - Basin Boundary Regulations". Below this, there is a section titled "How to Provide Input" which states: "During the comment period, DWR is soliciting feedback on the draft emergency regulations. Please submit comments by email to DWR at [sgmps@water.ca.gov](mailto:sgmps@water.ca.gov) or send a hardcopy via postal mail, to the following address, postmarked by September 12, 2015." The address listed is: California Department of Water Resources, Attn: Sustainable Groundwater Management Section, P.O. Box 942936, Sacramento, CA 94236. Below this is a section titled "Comments Received on Basin Boundary Emergency Regulations" which includes a table with columns for "Comment Received From", "Comment", and "Date". The table shows one entry. To the right of the main content is a sidebar titled "GROUNDWATER HOME" with a sub-heading "SUSTAINABLE GROUNDWATER MANAGEMENT" and a list of links including "Basin Boundary Regulations", "Groundwater Sustainability Agencies", "Groundwater Sustainability Plan Regulations", "Initial Basin Prioritization", "Communication and Outreach", "Statewide SGMA Calendar", "Region Office Contacts", "Resources", and "Facilitation Support Services".

[http://www.water.ca.gov/groundwater/sgm/basin\\_boundaries.cfm](http://www.water.ca.gov/groundwater/sgm/basin_boundaries.cfm)

# Overview of Draft Regulations

# SGMA Requirements

*WC §10722*

- **Emergency Regulations to Establish a Process For Local Agencies to Request Changes to Existing Basin Boundaries**
  - **DWR Shall Adopt by January 1, 2016**
  - **Instructions to Local Agencies on Submittal of:**
    1. Information demonstrating proposed basin can be sustainably managed
    2. Technical information on boundaries and conditions in proposed basin
    3. Consultation with interested local agencies and public water systems in the affected basins
    4. Other information DWR deems necessary to justify revision
  - **Methodology and Criteria on how to assess:**
    1. Likelihood proposed basin can be sustainably managed
    2. Whether proposed basin would limit the SGM of adjacent basins
    3. Whether there is a history of SGM of groundwater levels in the proposed basin

# Key Points

## Regulatory Intent

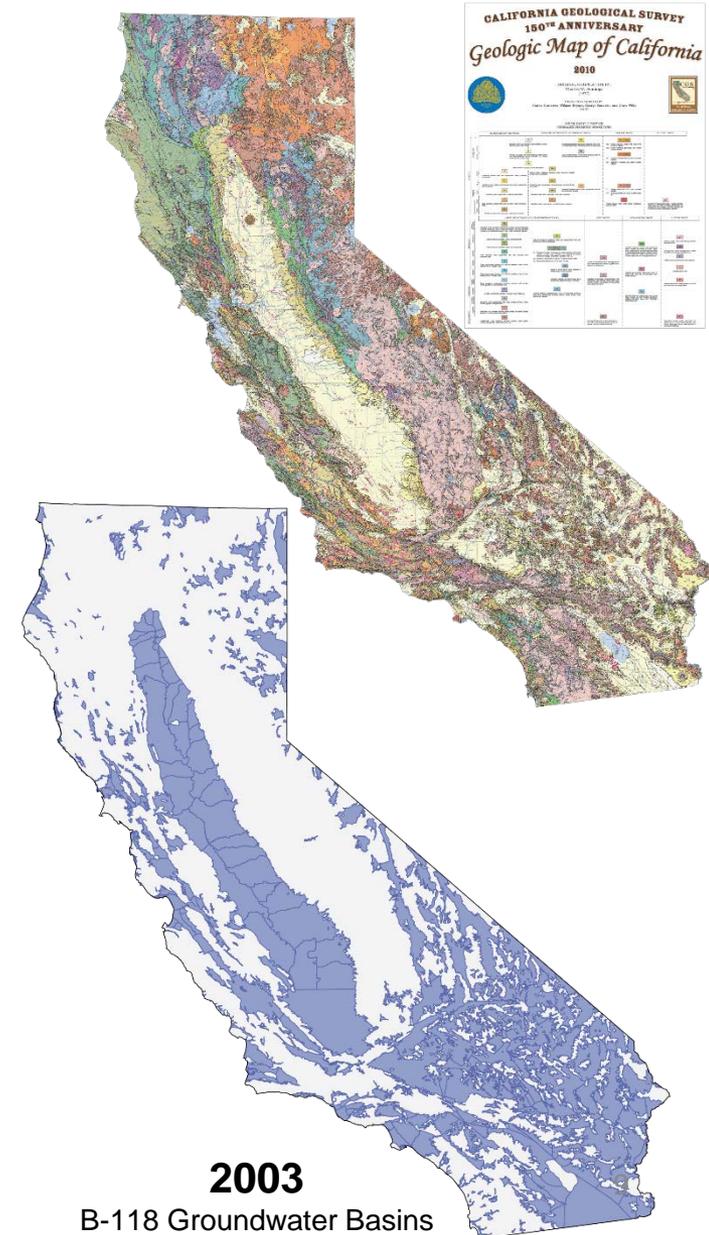
- Statewide Sustainable Groundwater Management
- Open and Transparent Process

## Technical

- Complex Statewide Hydrogeology
- Basin Boundaries Last Updated in 2003
- Previous Boundaries used for Voluntary Planning
- Varying Levels of Detail in Existing B-118 Dataset
- Results in High Variability of Potential Modifications

## Administrative

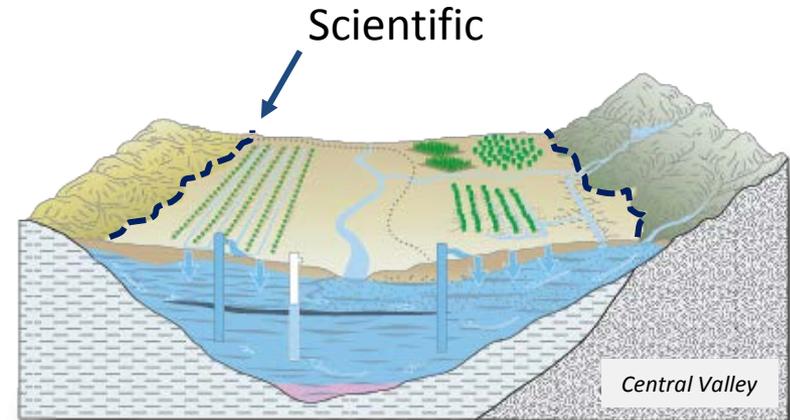
- Only Local Agencies can Request Modifications
- Local Agency Requests are Voluntary



# Key Definitions

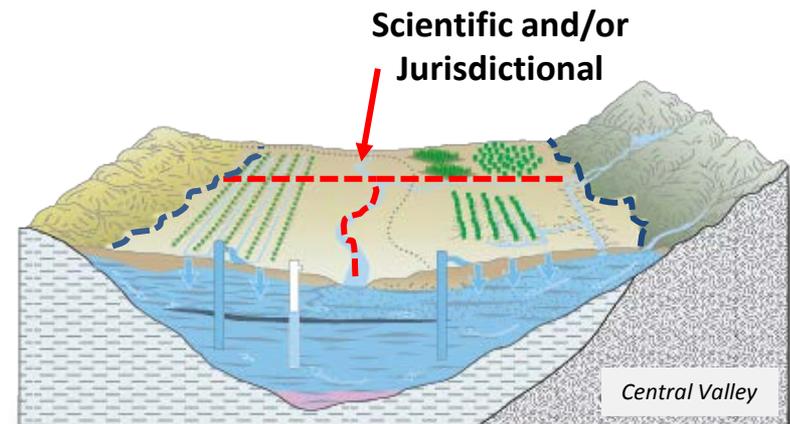
## ➤ SGMA Definitions

➤ **Groundwater Basin** – An alluvial aquifer or a stacked series of alluvial aquifers with reasonably well-defined boundaries in a lateral direction and having a definable bottom



Modified from Faunt, 2009

➤ **Groundwater Subbasin** – A subbasin is created by dividing a groundwater basin into smaller units using geologic and hydrologic barriers or institutional boundaries



Modified from Faunt, 2009

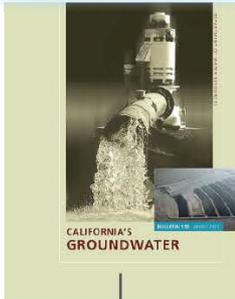
# Summary of Regulation Articles

1. **Introductory Provisions:** Provides the authority and intent of the subchapter.
2. **Definitions:** Provides definitions to key terms used in the regulations.
3. **Boundary Modification Categories:** Provides a description for characterizing the type of modification being requested.
4. **Procedures for Modification Request or Protest:** Procedures for requesting basin boundary modifications and protesting a modification request.
5. **Supporting Information:** Description of the required information to support the proposed basin modification.
6. **Methodology and Criteria:** Description of the criteria by which information provided in article 5 will be evaluated.
7. **Adoption of Boundary Modification:** Procedure for the adoption of boundary modifications by DWR.

# Basin Boundary Modification Process

## Article 1 & 2

All basins begin with existing Bulletin 118 boundaries.

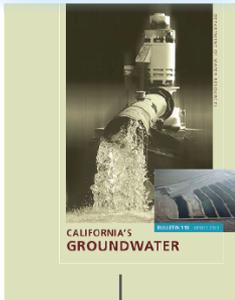


Boundary modification desired by local agency?

# Basin Boundary Modification Process

## Article 1 & 2

All basins begin with existing Bulletin 118 boundaries.



Boundary modification desired by local agency?

NO

GSA/GSP formed in existing basin(s)

Approved Boundaries Published in California's Groundwater **Bulletin 118** 2017 Update

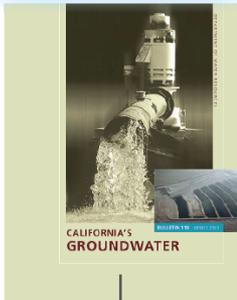
Jan 1<sup>st</sup>, 2016

13  
Q1, 2017

# Basin Boundary Modification Process

## Article 1 & 2

All basins begin with existing Bulletin 118 boundaries.



## Article 3 & 4

| Reason         | Type of Modification |
|----------------|----------------------|
| Scientific     | Hydrogeologic        |
| Jurisdictional | Internal             |
|                | Consolidation        |
|                | Subdivision          |

Local agencies may submit multiple modification types in a single request.

Boundary modification desired by local agency?

YES

NO

GSA/GSP formed in existing basin(s)

Approved Boundaries Published in *California's Groundwater Bulletin 118 2017 Update*

Jan 1<sup>st</sup>, 2016

14  
Q1, 2017

# Types of Modification

*Article 3*

- **Scientific** - Based on Geologic or Hydrologic Conditions that Define the Basin
- **Jurisdictional** - Promote the Adoption and Implementation of Effective Sustainable Management Plans and Enhance Local Management of Groundwater.

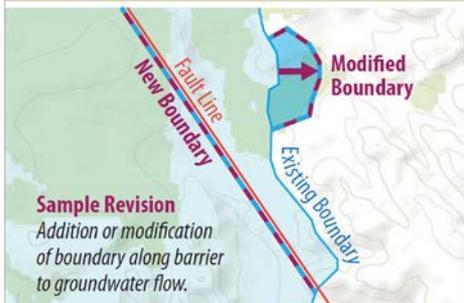
# Types of Modification

## Article 3

### Scientific

### Jurisdictional

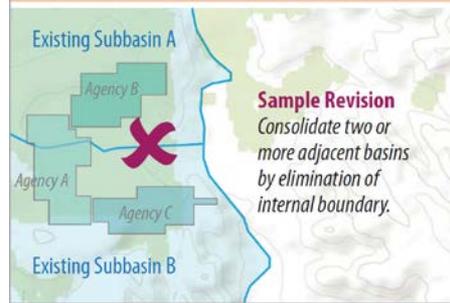
#### Scientific



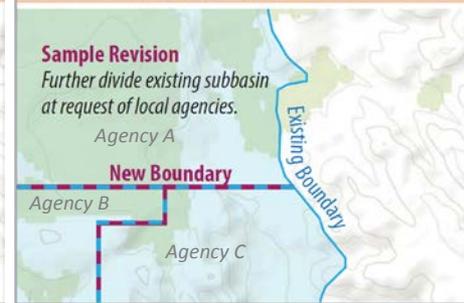
#### Internal (Jurisdictional)



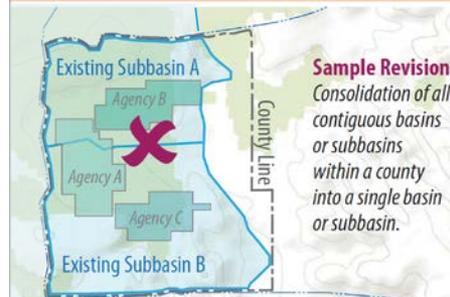
#### Consolidation (Jurisdictional)



#### Subdivision (Jurisdictional)

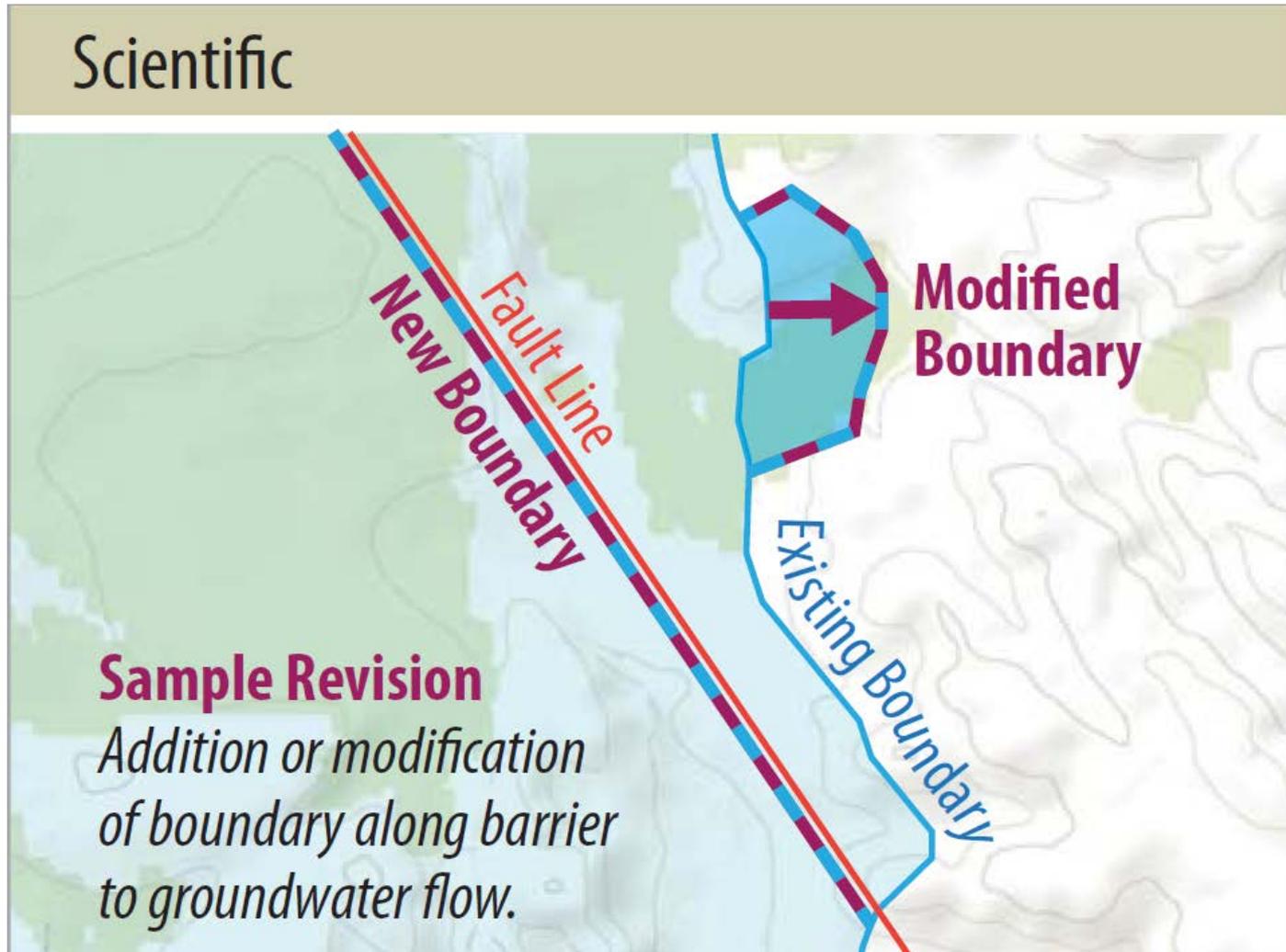


#### County Consolidation (Jurisdictional)



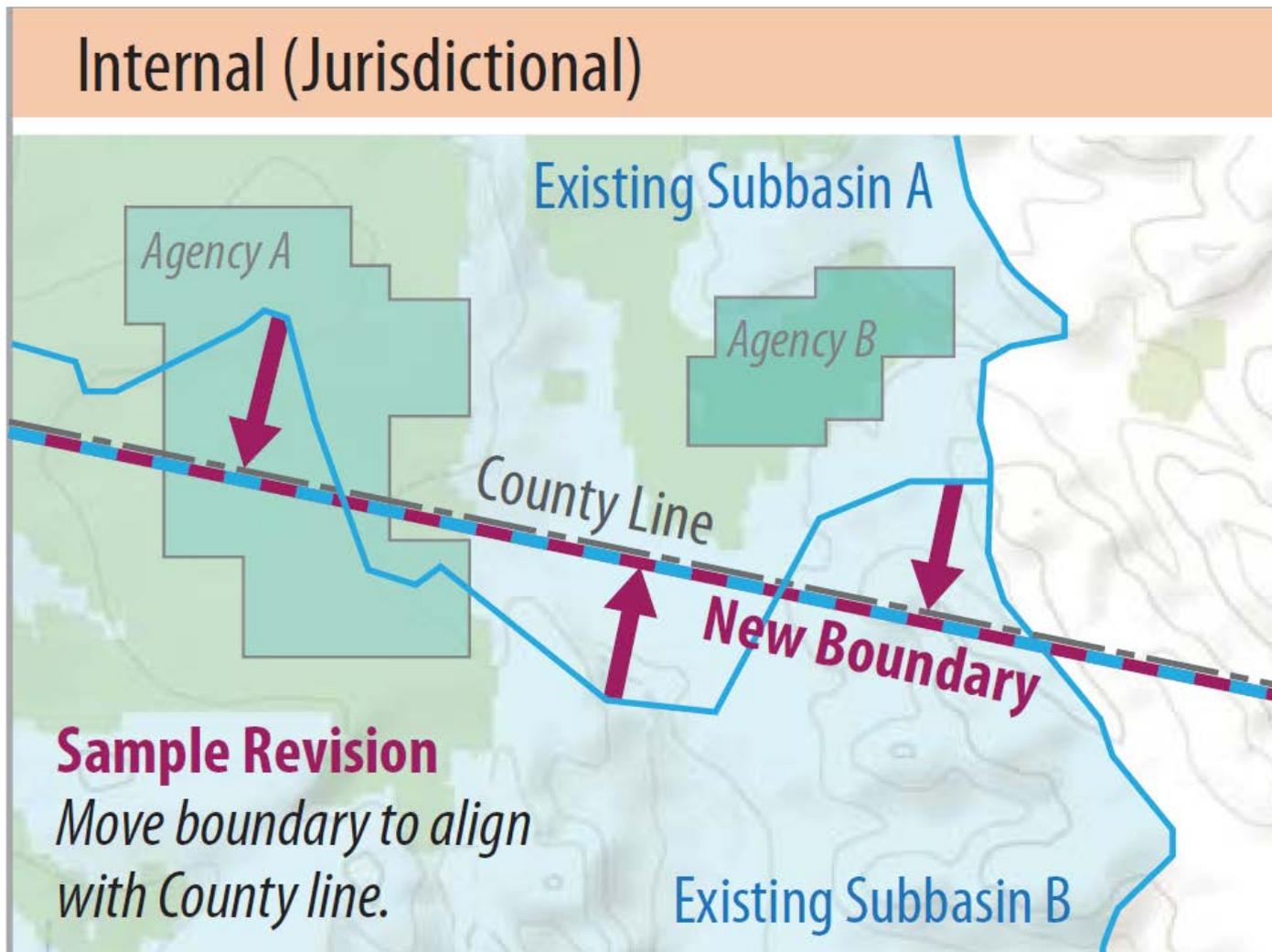
# Types of Modification

Article 3



# Types of Modification

Article 3



# Types of Modification

## Article 3

### Consolidation (Jurisdictional)

Existing Subbasin A

Agency B



Agency A

Agency C

Existing Subbasin B

#### **Sample Revision**

*Consolidate two or more adjacent basins by elimination of internal boundary.*

### County Consolidation (Jurisdictional)

Existing Subbasin A

Agency B



Agency A

Agency C

Existing Subbasin B

County Line

#### **Sample Revision**

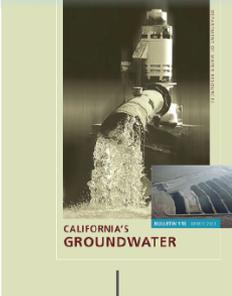
*Consolidation of all contiguous basins or subbasins within a county into a single basin or subbasin.*



# Article 5 \*Draft Regulations Required Components Checklist

## Article 1 & 2

All basins begin with existing Bulletin 118 boundaries.



## Article 3 & 4

Stakeholder input opportunities shown in blue.

### Required Components of Submittal

Information required is dependent upon type of modification.

(1) Local Info

Agency Information and Resolution  
Notification & Consultation

| Reason         | Type of Modification | Agency Information and Resolution | Notification & Consultation |
|----------------|----------------------|-----------------------------------|-----------------------------|
| Scientific     | Hydrogeologic        | ✓                                 | ✓                           |
| Jurisdictional | Internal             | ✓                                 | ✓                           |
|                | Consolidation        | ✓                                 | ✓                           |
|                | Subdivision          | ✓                                 | ✓                           |

Local agencies may submit multiple modification types in a single request.

If any required components are missing, request may not be approved and original boundaries will be used.

Boundary modification desired by local agency?

YES

NO

GSA/GSP formed in existing basin(s)

Approved Boundaries Published in California's Groundwater Bulletin 118 2017 Update

# Notification of Boundary Modifications

## **DWR**

---

- Email Notification
- Post Requests on Website
- Searchable Table
- Interactive Map

## **Requesting Agency**

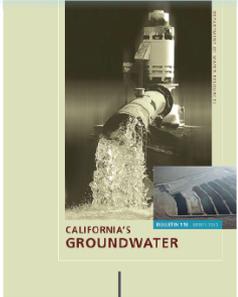
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- Board Resolution
- Notification and Consultation
  - ✓ Methods
  - ✓ Correspondence
  - ✓ Public Meetings
  - ✓ Public Comments

# Article 5

## Article 1 & 2

All basins begin with existing Bulletin 118 boundaries.



## Article 3 & 4

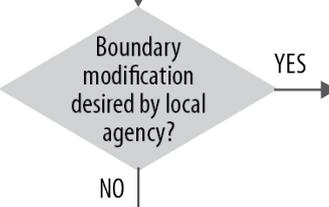
Stakeholder input opportunities shown in blue.

### Required Components of Submittal

Information required is dependent upon type of modification.

(1) Local Info (2) Local Support

| Reason         | Type of Modification | Agency Information and Resolution | Notification & Consultation | Affected Agencies and Systems | Majority of Affected Agencies/Systems | All Agencies in Existing Basin |
|----------------|----------------------|-----------------------------------|-----------------------------|-------------------------------|---------------------------------------|--------------------------------|
| Scientific     | Hydrogeologic        | ✓                                 | ✓                           |                               |                                       |                                |
| Jurisdictional | Internal             | ✓                                 | ✓                           | ✓                             |                                       |                                |
|                | Consolidation        | ✓                                 | ✓                           |                               | ✓                                     |                                |
|                | Subdivision          | ✓                                 | ✓                           |                               |                                       | ✓                              |



Local agencies may submit multiple modification types in a single request.

If any required components are missing, request may not be approved and original boundaries will be used.

GSA/GSP formed in existing basin(s)

Approved Boundaries Published in California's Groundwater Bulletin 118 2017 Update

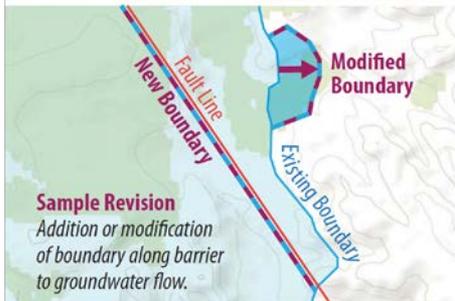
# Local Support

§ 344.8

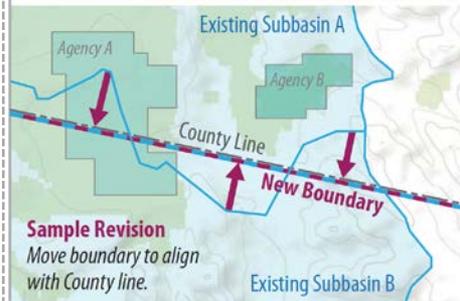
## Scientific

## Jurisdictional

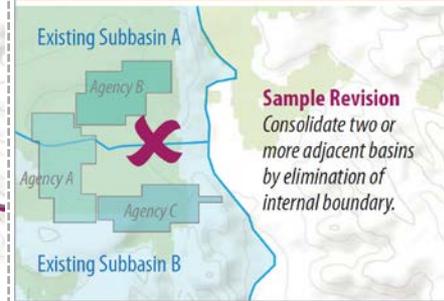
### Scientific



### Internal (Jurisdictional)



### Consolidation (Jurisdictional)

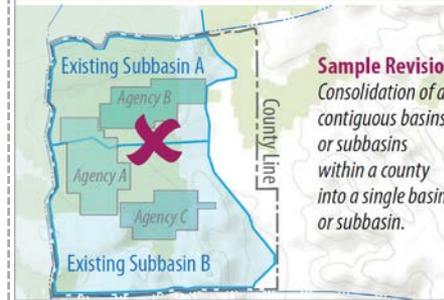


### Subdivision (Jurisdictional)



*Affected*

### County Consolidation (Jurisdictional)



*Majority of Affected*

*All*

*In Existing Basin*

Local Agency & Public Water System Support

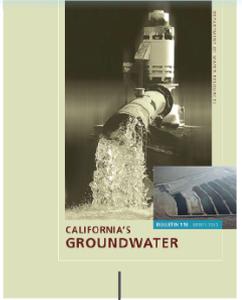
Notification and Public Meeting(s)

Protest Provision

# Article 5

## Article 1 & 2

All basins begin with existing Bulletin 118 boundaries.



## Article 3 & 4

Stakeholder input opportunities shown in blue.

### Required Components of Submittal

Information required is dependent upon type of modification.

| Reason         | Type of Modification | Required Components of Submittal  |                             |                               |                               |                                |                                           |                                    |                                |                                 |                 |
|----------------|----------------------|-----------------------------------|-----------------------------|-------------------------------|-------------------------------|--------------------------------|-------------------------------------------|------------------------------------|--------------------------------|---------------------------------|-----------------|
|                |                      | (1) Local Info                    | (2) Local Support           | (3) Technical Information     |                               |                                |                                           |                                    |                                |                                 |                 |
|                |                      | Agency Information and Resolution | Notification & Consultation | Affected Agencies and Systems | Majority of Affected Agencies | All Agencies in Existing Basin | Desc. of Basin Boundaries (Map, GIS data) | Existing Water Management in Basin | Hydrogeologic Conceptual Model | Historic and Current Conditions | Technical Study |
| Scientific     | Hydrogeologic        | ✓                                 | ✓                           |                               |                               |                                | ✓                                         |                                    | ✓                              |                                 | ✓               |
| Jurisdictional | Internal             | ✓                                 | ✓                           | ✓                             |                               |                                | ✓                                         | ✓                                  |                                |                                 |                 |
|                | Consolidation        | ✓                                 | ✓                           |                               | ✓                             |                                | ✓                                         | ✓                                  | ✓                              |                                 |                 |
|                | Subdivision          | ✓                                 | ✓                           |                               |                               | ✓                              | ✓                                         | ✓                                  | ✓                              | ✓                               |                 |



Local agencies may submit multiple modification types in a single request.

If any required components are missing, request may not be approved and original boundaries will be used.

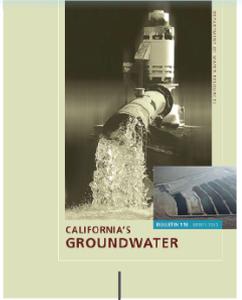
GSA/GSP formed in existing basin(s)

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# Article 5

## Article 1 & 2

All basins begin with existing Bulletin 118 boundaries.



## Article 3 & 4

Stakeholder input opportunities shown in blue.

**Required Components of Submittal**  
Information required is dependent upon type of modification.

(1) Local Info (2) Local Support (3) Technical Information

Request Review Process

| Reason         | Type of Modification | Agency Information and Resolution | Notification & Consultation | Affected Agencies and Systems | Majority of Affected Agencies | All Agencies in Existing Basin | Desc. of Basin Boundaries (Map, GIS data) | Existing Water Management in Basin | Hydrogeologic Conceptual Model | Historic and Current Conditions | Technical Study | Opportunity for Protest 1 |
|----------------|----------------------|-----------------------------------|-----------------------------|-------------------------------|-------------------------------|--------------------------------|-------------------------------------------|------------------------------------|--------------------------------|---------------------------------|-----------------|---------------------------|
| Scientific     | Hydrogeologic        | ✓                                 | ✓                           |                               |                               | ✓                              |                                           | ✓                                  |                                | ✓                               |                 | ✓                         |
| Jurisdictional | Internal             | ✓                                 | ✓                           | ✓                             |                               | ✓                              | ✓                                         |                                    |                                |                                 |                 | ✓                         |
|                | Consolidation        | ✓                                 | ✓                           |                               | ✓                             | ✓                              | ✓                                         | ✓                                  |                                |                                 |                 | ✓                         |
|                | Subdivision          | ✓                                 | ✓                           |                               |                               | ✓                              | ✓                                         | ✓                                  | ✓                              |                                 |                 | ✓                         |

Local agencies may submit multiple modification types in a single request.

If any required components are missing, request may not be approved and original boundaries will be used.

Review process may determine modification is not acceptable.

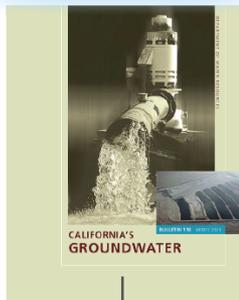
GSA/GSP formed in existing basin(s)

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1. A formal protest submittal requires the same technical Information as a boundary revision request, based on type of revision.

## Article 1 & 2

All basins begin with existing Bulletin 118 boundaries.



Boundary modification desired by local agency?

NO

YES

## Article 3 & 4

Stakeholder input opportunities shown in blue.

| Reason         | Type of Modification | Agency Information and Resolution | Notification & Consultation | Affected Agencies and Systems | Majority of Affected Agencies | All Agencies in Existing Basin | Desc. of Basin Boundaries | Existing Water Management (Map, GIS data) | Hydrogeologic Conceptual Model | Historic and Current Conditions | Technical Study | Opportunity for Protest 1 | DWR Review & Public Notification |
|----------------|----------------------|-----------------------------------|-----------------------------|-------------------------------|-------------------------------|--------------------------------|---------------------------|-------------------------------------------|--------------------------------|---------------------------------|-----------------|---------------------------|----------------------------------|
| Scientific     | Hydrogeologic        | ✓                                 | ✓                           |                               |                               |                                | ✓                         |                                           | ✓                              |                                 | ✓               | ✓                         | DRAFT APPROVAL                   |
| Jurisdictional | Internal             | ✓                                 | ✓                           | ✓                             |                               |                                | ✓                         | ✓                                         |                                |                                 |                 | ✓                         |                                  |
|                | Consolidation        | ✓                                 | ✓                           |                               | ✓                             |                                | ✓                         | ✓                                         | ✓                              |                                 |                 | ✓                         |                                  |
|                | Subdivision          | ✓                                 | ✓                           |                               |                               | ✓                              | ✓                         | ✓                                         | ✓                              | ✓                               |                 | ✓                         |                                  |

Local agencies may submit multiple modification types in a single request.

If any required components are missing, request may not be approved and original boundaries will be used.

Review process may determine modification is not acceptable.

GSA/GSP formed in existing basin(s)

Approved Boundaries Published in California's Groundwater Bulletin 118 2017 Update

## Article 5

## Article 6

### Required Components of Submittal

Information required is dependent upon type of modification.

(1) Local Info (2) Local Support (3) Technical Information

Request Review Process

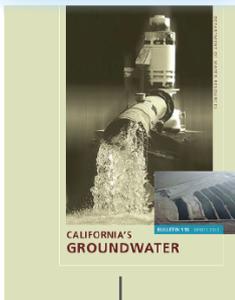
Jul, 2016

Jan 1<sup>st</sup>, 2016

27  
Q1, 2017

## Article 1 & 2

All basins begin with existing Bulletin 118 boundaries.



## Article 5

## Article 6

Sep, 2016

## Article 3 & 4

Stakeholder input opportunities shown in blue.

### Required Components of Submittal

Information required is dependent upon type of modification.

(1) Local Info (2) Local Support (3) Technical Information

Request Review Process

| Reason         | Type of Modification | Agency Information and Resolution | Notification & Consultation | Affected Agencies and Systems | Majority of Affected Agencies | All Agencies in Existing Basin | Desc. of Basin Boundaries | Existing Water Management (Map, GIS data) | Hydrogeologic Conceptual Model | Historic and Current Conditions | Technical Study | Opportunity for Protest 1 | DWR Review & Public Notification | CA Water Commission Review |
|----------------|----------------------|-----------------------------------|-----------------------------|-------------------------------|-------------------------------|--------------------------------|---------------------------|-------------------------------------------|--------------------------------|---------------------------------|-----------------|---------------------------|----------------------------------|----------------------------|
| Scientific     | Hydrogeologic        | ✓                                 | ✓                           |                               |                               |                                | ✓                         |                                           | ✓                              |                                 | ✓               | ✓                         |                                  |                            |
| Jurisdictional | Internal             | ✓                                 | ✓                           | ✓                             |                               |                                | ✓                         | ✓                                         |                                |                                 |                 | ✓                         |                                  |                            |
|                | Consolidation        | ✓                                 | ✓                           |                               | ✓                             |                                | ✓                         | ✓                                         | ✓                              |                                 |                 | ✓                         |                                  |                            |
|                | Subdivision          | ✓                                 | ✓                           |                               |                               | ✓                              | ✓                         | ✓                                         | ✓                              | ✓                               |                 | ✓                         |                                  |                            |

Local agencies may submit multiple modification types in a single request.

If any required components are missing, request may not be approved and original boundaries will be used.

Review process may determine modification is not acceptable.

Approved Boundaries Published in California's Groundwater Bulletin 118 2017 Update

GSA/GSP formed in existing basin(s)

Boundary modification desired by local agency?

YES

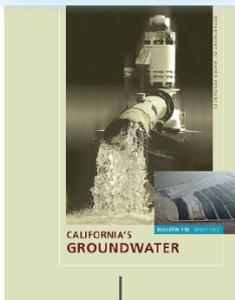
NO

Jan 1<sup>st</sup>, 2016

28  
Q1, 2017

## Article 1 & 2

All basins begin with existing Bulletin 118 boundaries.



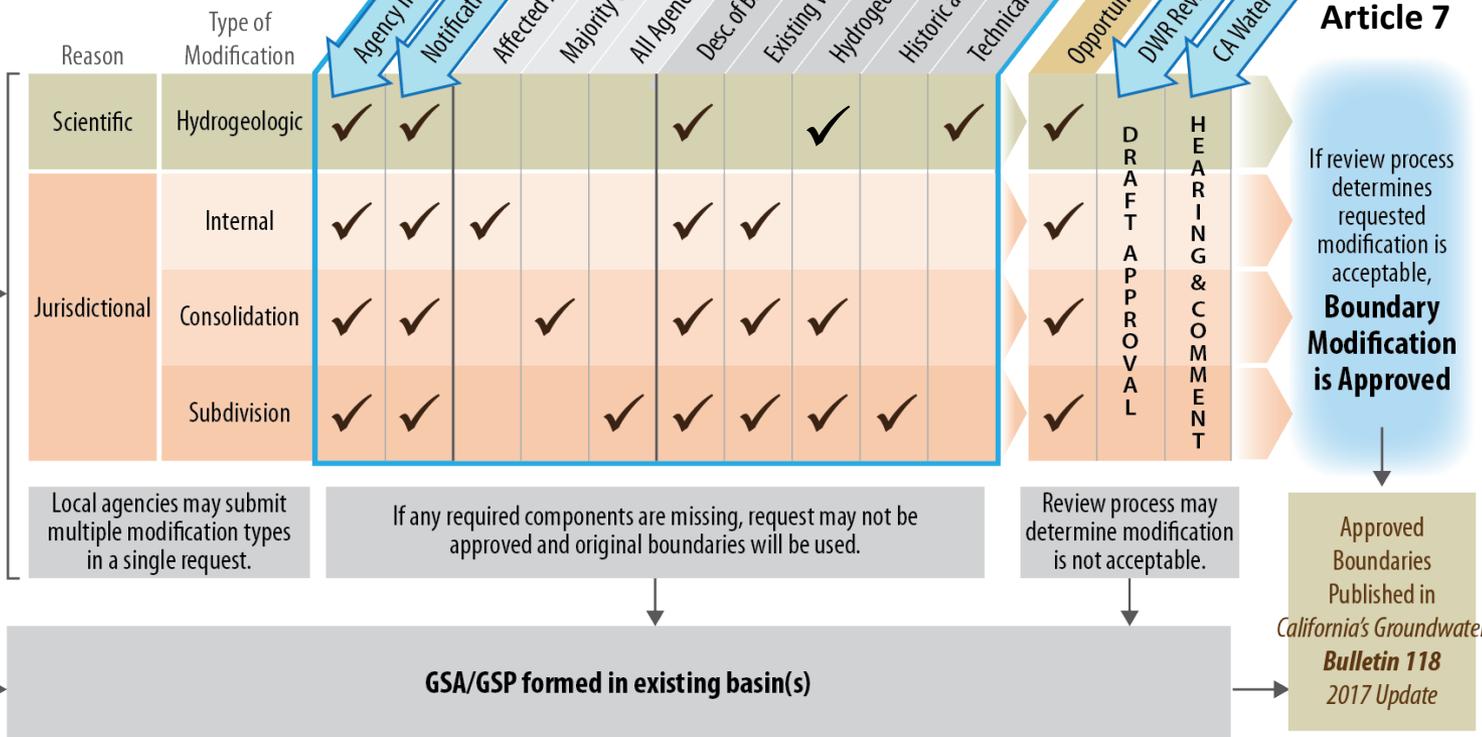
Boundary modification desired by local agency?

NO

YES

## Article 3 & 4

Stakeholder input opportunities shown in blue.

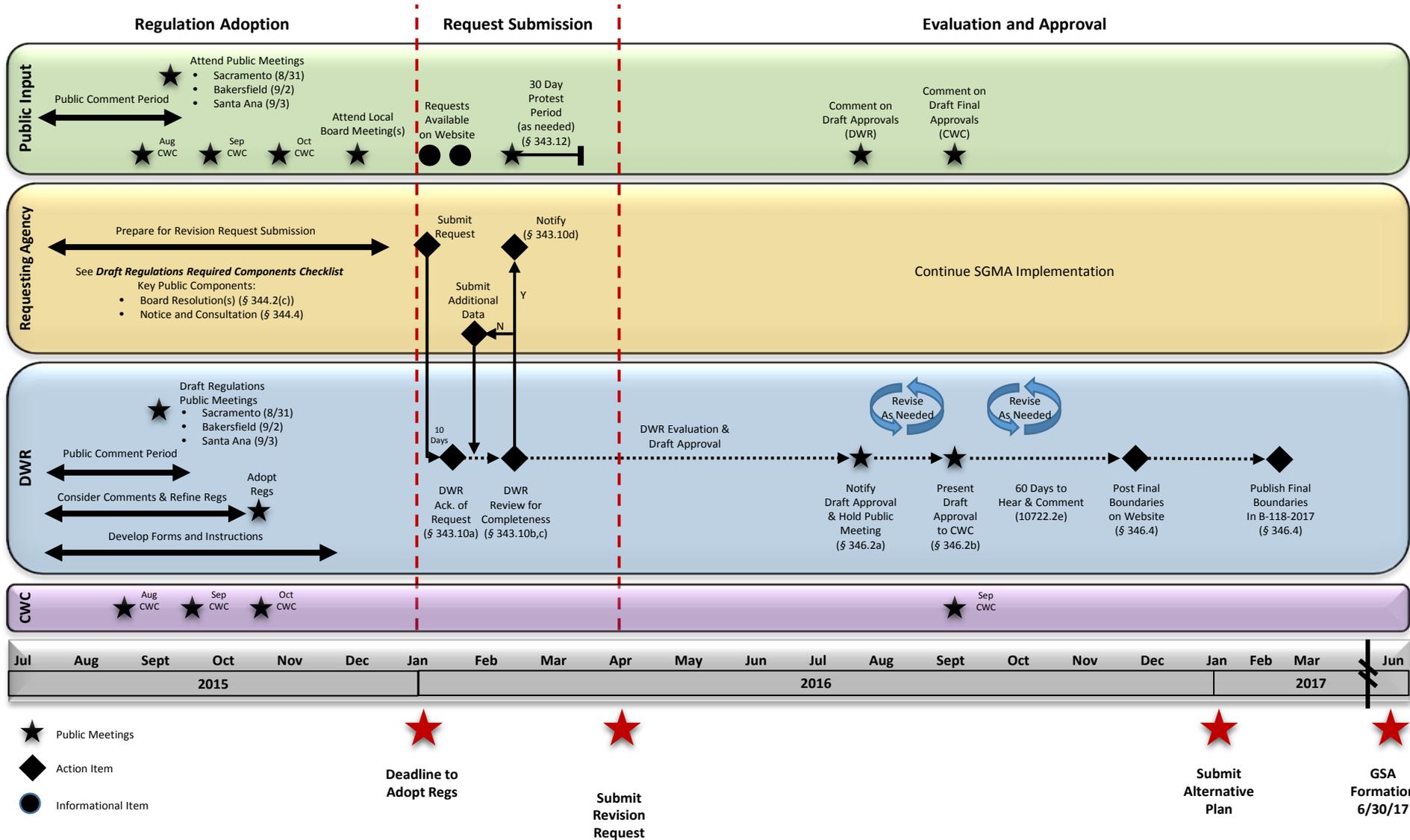


# Next Steps

- **July** – Posted Draft Regulations on Website
  - Initiated Public Comment Period (July to September)
- **Aug. – Sep.** – Public Meetings to Consider Public Comments
- **September** – Present Summarized Public Comments to CWC
- **October** - Present Proposed Emergency Regulations to CWC for adoption.
- **October – November** - Submit Adopted Emergency Regulations to Office of Administrative Law.
- **January 1, 2016** – DWR Starts Accepting Boundary Modification Requests (90 day period).
- **Sep. 2016\*** – Draft Approval of Boundaries and Present to CWC

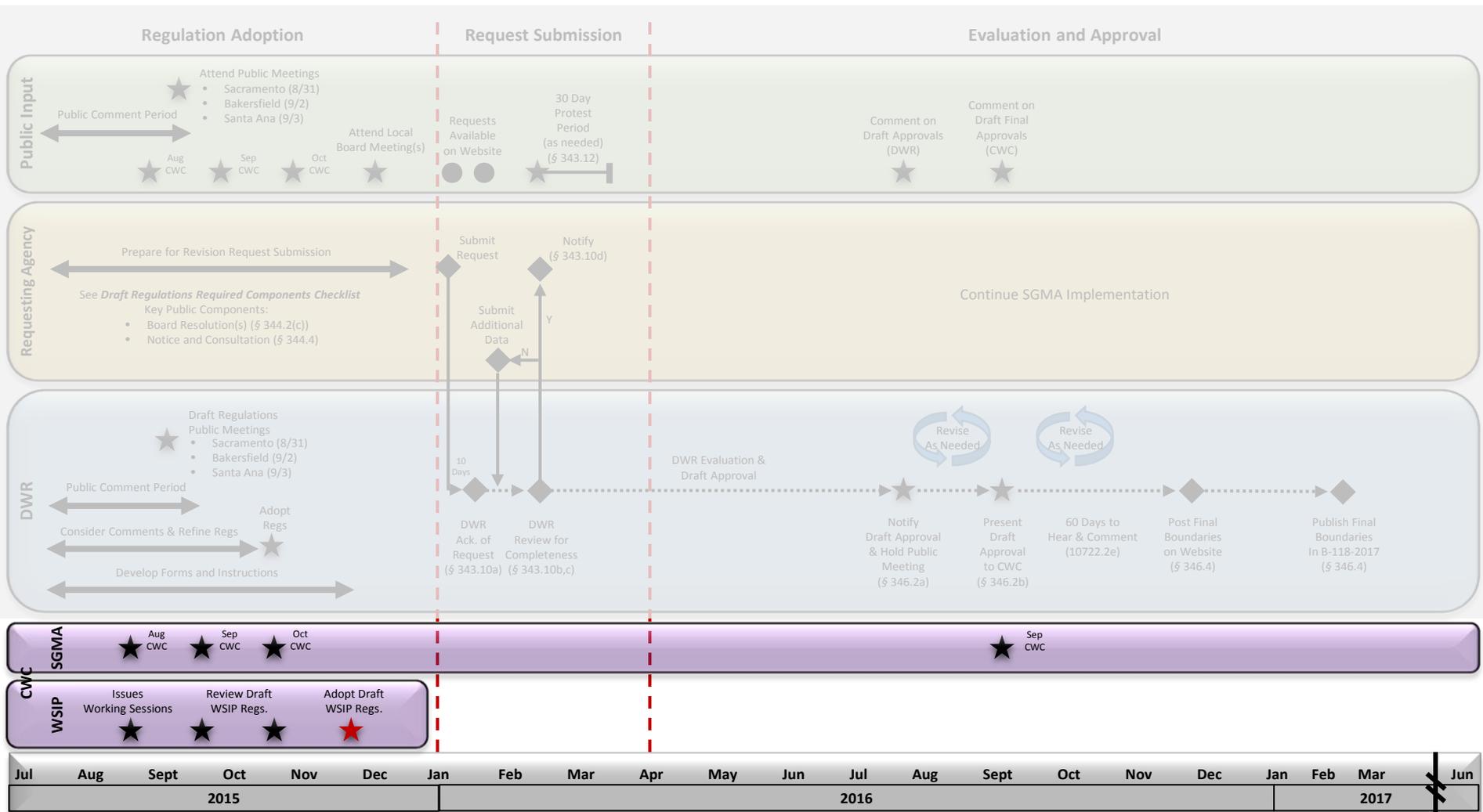
*\*Estimated – Subject to Change*

# Draft Basin Boundary Regulations & Implementation Timeline



# Draft Basin Boundary Regulations & Implementation Timeline

## With WSIP Near-Term Actions



- ★ Public Meetings
- ◆ Action Item
- Informational Item

★  
Deadline to Adopt Regs

★  
Submit Revision Request

★  
Submit Alternative Plan

★  
GSA Formation 6/30/17

# Thank You

- **DWR Sustainable Groundwater Management (SGM)**  
<http://www.water.ca.gov/groundwater/sgm/index.cfm>
- **Subscribe to DWR SGM Email List**  
<http://www.water.ca.gov/groundwater/sgm/subscribe.cfm>
- **DWR Basin Boundary Regulation Website**  
[http://www.water.ca.gov/groundwater/sgm/basin\\_boundaries.cfm](http://www.water.ca.gov/groundwater/sgm/basin_boundaries.cfm)
- **DWR Water Management Planning Tool**  
<https://gis.water.ca.gov/app/boundaries/>
- **Questions or Comments for DWR**  
[sgmps@water.ca.gov](mailto:sgmps@water.ca.gov)