



EASTERN SAN JOAQUIN COUNTY GROUNDWATER BASIN AUTHORITY

1810 EAST HAZELTON AVENUE
STOCKTON, CALIFORNIA 95205
(209) 468-3531
(209) 468-2999/FAX

GBA MEMBERS

CALIFORNIA WATER SERVICE COMPANY
CENTRAL DELTA WATER AGENCY
CENTRAL SAN JOAQUIN
WATER CONSERVATION DISTRICT
CITY OF LODI
CITY OF STOCKTON
NORTH SAN JOAQUIN
WATER CONSERVATION DISTRICT
STOCKTON EAST WATER DISTRICT
SAN JOAQUIN COUNTY
SOUTH DELTA WATER AGENCY
SOUTH SAN JOAQUIN IRRIGATION DISTRICT
WOODBIDGE IRRIGATION DISTRICT
SAN JOAQUIN FARM BUREAU FEDERATION
ASSOCIATE MEMBER

Board of Directors Meeting

AGENDA

**California Water Service Company, Conference Room
1602 East Lafayette Street, Stockton, California**

Wednesday, August 12, 2015

9:30 a.m.

Pledge of Allegiance & Roll Call

Approval of Minutes for the Meeting of July 8, 2015

SCHEDULED ITEMS

A. Discussion Items

1. Update on the Proposition 84 Integrated Regional Water Management Round 3 Implementation Grant Application to the California Department of Water Resources – Brandon Nakagawa

B. Action Items:

1. Discussion and Possible Action to Convene the Sustainable Groundwater Management Act (SGMA) Workgroup for the Eastern San Joaquin County Groundwater Basin (See Attached) – Brandon Nakagawa and Carolyn Lott

C. Communications/Articles/Announcements (See Attached):

1. July 8-2015 GBA Letter of Support for AB 647 (Eggman).
2. July 16, 2015 DWR Presentation to CSAC/RCRC SGMA Workgroup.
3. July 21, 2015 DWR Water Available for Groundwater Replenishment [WC 10721(c)] – SGMA Discussion Paper.
4. DWR SGMA Draft Basin Boundary Emergency Regulations - Factsheet

Public Comment (Non-Agenda)

Next Regular Meeting:

September 9, 2015, at 9:30 a.m.

California Water Service Company, Conference Room
1602 East Lafayette Street, Stockton, California

Adjournment

Action may be taken on any item

Agendas and Minutes may also be found at <http://www.gbawater.org>

Note: If you need disability-related modification or accommodation in order to participate in this meeting, please contact San Joaquin County Public Works Water Resource Staff at (209) 468-3089 at least 48 hours prior to the start of the meeting.



Eastern San Joaquin County Groundwater Basin Authority Board Meeting Summary Wednesday, July 8, 2015

Follow-up Items:

- Staff to bring the Regional Flood Management Plan, when adopted, to the Board for inclusion in the IRWMP
- Staff to agendaize action to include the City of Stockton and Cal Water conservation projects in the IRWMP
- Staff to provide example of successful Prop 84 application – see link: DWR posts all applications on this site. Crosscheck with awards list: http://www.water.ca.gov/irwm/grants/archives_p84.cfm Scroll down to Submitted Applications. Specifically, the 2014 Drought Grant Solicitation applications can be found here: http://www.water.ca.gov/irwm/grants/docs/Archives/Prop84/Submitted_Applications/P84_2014Drought/

Pledge: Director Holman, Jr. led the Pledge of Allegiance.

Roll Call:

The GBA Board Meeting was called to order at 9:32 a.m., on July 8, 2015, by Chairperson Chuck Winn at California Water Service Company, Conference Room, 1602 East Lafayette Street, Stockton. Also in attendance were Directors Tom Flinn, Elbert Holman, Jr., Dale Kuil, Alternate Director Greg Milleman, Directors Alan Nakanishi, Dante Nomellini, Mel Panizza, and Secretary Mike Selling. Role was taken and a quorum was present. .

Minutes:

Motion: A motion to approve the minutes for the meeting of June 10, 2015 was made by Director Kuil and seconded by Director Holman, Jr. The motion passed unanimously.

SCHEDULED ITEMS

A. Discussion Items:

1. Presentation on the Spring 2015 Groundwater Monitoring Report – Gerardo Dominguez

Mr. Dominguez said that the Flood Control District and Groundwater Monitoring Agency have been conducting monitoring since 1971. For Spring 2015, the region is still about six inches below average for rainfall. A significant number of wells have dropped during the monitoring period of Spring 2014 through Spring 2015. Overall the wells have dropped approximately 6.5 feet on average. There was a little increase near Lodi near the Mokelumne River.

The groundwater contour map also shows the change in elevation of groundwater. In the southern part of the county, the cross section graph shows

levels close to fall 1992 and it should be noted it was only spring when measurements were taken this year.

Chair Winn asked if there is a way to evaluate what is left below the groundwater level lines. Mr. Nakagawa said there are rigorous ways to measure the quantity of water left and this could be considered as something to be undertaken during Sustainable Groundwater Management Act (SGMA) discussions. He said what the State is interested in is what is sustainable. Chair Winn added there is discussion about additional storage, but the actual inventory is unknown.

Director Flinn asked about NSJWCD and Mr. Dominguez said the drop was only 1.85 feet as compared to the average of 6.5 feet across the region. The river is dictating the recharge in adjacent areas. The more water that runs down the river, the more seeps into the aquifer. Mr. Jeff Shields noted the more water that runs down the river, the less is in reservoirs for reserve which can cause more pumping.

2. Update on the Request for Qualifications for On-call Geotechnical Services for Sustainable Groundwater Management Act Governance Discussions – Mike Callahan

A draft of the Request for Qualifications (RFQ) was reviewed during last month's meeting. The revised RFQ was sent out on Monday. Some consultants have already notified the County of their interest. The intent is to establish a list of geotechnical consultants who can provide services, in a timely fashion, to answer questions during the SGMA process. If Board members are contacted by consultants, it is requested that the consultants be referred to Mr. Callahan. There is a committee that has been formed to review the RFQs. It is stated explicitly in the RFQ that contacting GBA members to try to influence the process is grounds for disqualification.

B. Action Items:

1. Discussion and Possible action to Support Assembly Bill 647 (Eggman) Groundwater Recharge as a Beneficial Use (See Attached) – Brandon Nakagawa

Chair Winn said he commends the efforts of the legislators. Mr. Nakagawa said the Board did take action to support AB 647 when it was introduced in the Assembly. Originally the Bill was very simple and stated that water put in the ground through recharge is a beneficial use of water. There were a number of changes requested by other interests and committees. But, to the credit of Stockton East and San Joaquin County legal counsel, there has been negotiated language that is acceptable, even though compromises have had to be made. The Bill needs to either be supported by ACWA or ACWA needs to stay neutral. There may be a push to turn it into a two-year bill. It is important the GBA show solidarity which is why it is recommended that a letter of support be sent to the Chair of the Senate Water Committee.

Director Nakanishi asked how the amendment (pre-1914 water right holders) would have to be approved by the State. Mr. Nakagawa said it would be hard to justify recharging pre-1914 water in a dry year. The interest of the region is to recharge post-1914 water in a wet year.

Mr. Shields said SSJID would consider putting pre-1914 water into the ground. Mr. Kurtis Keller said, according to the legislation, if there was groundwater recharge under a pre-1914 water right and one wanted to leave it in the ground for more than 5 years before it was put to beneficial use, approval of the State Water Resources Board would be required. There is an accounting component.

Mr. Shields questioned what incentive SSJID has to conserve water if it going to be taken by state water contractors. He said SSJID would like to do groundwater recharge projects. But if it considered abandoned water after five years, the district is not going to do recharge projects.

Mr. Keller said this is a valid criticism of the changes brought forward by opponents of the legislation. Their concern is that entities will hoard water through groundwater storage. The situation is junior water right holders looking at senior right holders potentially hoarding water that otherwise would be accessible.

Director Flinn asked if even though language of the current legislation is somewhat flawed, is it still a step forward. Mr. Keller said “yes.”

Mr. Scot Moody added he has been pushing support of the legislation at the legislative committee of ACWA. He said the only leverage the region has to get any support from ACWA is that ACWA supported SGMA and this legislation is a tool the region needs to work towards sustainability as reflected in SGMA.

Motion: Director Nakanishi moved and Director Flinn seconded a motion to approve sending the letter of support for Assembly Bill 647 (Eggman). The motion passed with Director Kuil opposed.

2. Discussion and Possible Action to Submit a Proposition 84 Integrated Regional Water Management Round 3 Implementation Grant Application to the California Department of Water Resources (See Attached) – Brandon Nakagawa

Mr. Nakagawa said this is a difficult decision to make as it is an expensive proposition to put together the application and in the past GBA applications have not scored well plus there was the California Statewide Groundwater Elevation Monitoring Program (CASGEM) compliance issue. He said there is only \$6.6 million left in award dollars for the funding region. He noted there has been considerable discussion offline about whether to submit an application and discussion was also heard during the Coordinating Committee last month. There was no consensus.

Mr. Nakagawa said the District is now officially designated as a CASGEM monitoring agency and therefore compliant with requirements and there are two SSJID projects that are nearly shovel-ready. He added the SSJID Board voted to support including their projects in the application. SSJID is providing in-kind services from Stantec. There has been interest from other entities to be included such as the County with the Micke Grove Park project, but staff is recommending it not be included as there is still engineering work and cost analysis that has to be done. Stockton East was interested in a 33 acre recharge pond project. It was submitted in Round One, but it did not score well as it was not clearly enough defined. Much work has been done to provide additional information. However, there is still work to be done on this project and there are only 21 working days before the application is due. Mr. Nakagawa said staff would recommend adding it to the application with the condition that it be removed if sufficient work cannot be completed in the 21 days.

Mr. Nakagawa concluded by saying putting an application together requires a lot of money to be allocated from the GBA budget along with the in-kind resources. He said it is with reluctance that staff makes the recommendation to move forward.

Director Nakanishi said he understood staff's hesitancy, but noted the districts with a strong desire to pursue the funding must also be willing to provide the matching funds if they receive the grant.

Director Flinn asked if staff thought about the NSJWCD north pump station. Mr. Nakagawa said there are plans and specs and eligibility issues and it may be better suited for Prop 1. He added it would be prudent for the group to spend time and money to get projects ready for Prop 1. Mr. Nakagawa said there is \$250,000 in the line item that is mainly earmarked to be used for SGMA work and funding the Prop 84 application will take \$40,000 out of that line item.

Mr. Shields asked if there was an audit of the awards given previously by something like the Public Policy Institute. Mr. Nakagawa said the Department of Water Resources (DWR) audits the process of implementation. Mr. Shields said the work put into this application should be transferrable to Prop 1 if the application is not funded in this final round / Prop 84-Round 3.

Alternate Director Milleman thought there was discussion about DWR focusing on communities that are in need of water. If this is the focus, then perhaps there is a reason to wait until Prop 1 funding becomes available. He said he would be interested in visually seeing a successful grant application from the last round and look at it as compared to the GBA. He requested staff bring information back to the next meeting.

Mr. Jeff Shaw with Stantec noted that missing the cut-off for funding during the last round by only one point offers an opportunity to tell a better story. He added that funding projects that are “shovel-ready” should be a priority.

Director Flinn asked if these projects are getting a “leg-up” since it is unknown whether the GBA will continue funding grant applications. He noted his concern that while projects being put forward may be “shovel-ready” and good for the community, he is not sure the projects are grant ready. Mr. Nakagawa shared that the GBA may not be able to fund all the applications in the future.

Chair Winn said this is a large amount of money from the available funds. He added that he is a firm believer that experience is a great teacher. It is always a risk.

Mr. John Moynier from Stantec said his firm can work directly with GEI to bring our abilities to the table to help with the application.

Motion: Director Nomellini offered, and Director Flinn seconded, a motion to submit a Round 3 Prop 84 grant application to DWR. The motion passed with Director Kuil abstaining.

3. Discussion and Possible Action to Enter into an Agreement with GEI Consultants for the Preparation of the Round 3 Implementation Grant Application (See Attached) – Brandon Nakagawa

Mr. Nakagawa said this proposed Agreement is the companion document which serves to support the approved action to submit the grant proposal. There are two SSJID projects and perhaps the Stockton East project dependent upon the ability to provide sufficient information within the time constraints.

Motion: Director Nomellini moved, and Director Panizza seconded a motion to enter into an agreement with GEI Consultants for preparation of the Round 3 implementation grant. The motion carried unanimously.

C. Communications/Articles/Announcements (See Attached):

1. June 10, 2015 Letter from the Department of Water Resources Designating San Joaquin County as the CASGEM Monitoring Entity

Mr. Nakagawa referenced the letter from DWR stating the county is now compliant with CASGEM.

2. June 19, 2015 Letter of Support for AB 647 (Eggman) Groundwater Recharge as a Beneficial Use from the Board Supervisors to Senator Fran Pavely, Chair of the Senate Natural Resources and Water Committee

3. June 19, 2015 GBA Application to DWR for Facilitation Services for Governance Discussions for the Implementation of the Sustainable Groundwater Management Act

Mr. Nakagawa said there should be a decision on the funding within the next few weeks. Chair Winn introduced Ms. Lott who made a few comments about the

importance of the process moving forward in assuring local control and transparency.

Public Comment Non-Agenda: The chair opened the public comment period. No comments were heard.

Adjournment: The chair adjourned the meeting at 11:17 a.m.

Next Regular Meeting: **August 12, 2015, at 9:30 a.m.**
California Water Service Company, Conference Room
1602 East Lafayette Street, Stockton, California

Submitted by:
Carolyn Lott, Senior Facilitator, Principal
Carlson Consulting



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- WOODBIDGE IRRIGATION DISTRICT
- SAN JOAQUIN FARM BUREAU FEDERATION ASSOCIATE MEMBER

CHARLES WINN
CHAIRMAN

MICHAEL SELLING
SECRETARY

MEETING ATTENDANCE RECORD

Meeting: GBA - BOARD MEETING

Location: CALIFORNIA WATER SERVICE COMPANY Date: 07/8/2015 Time: 9:30 A.M.

NAME	AFFILIATION	E-MAIL ADDRESS	PHONE
REGINA RUBIER	CITY OF STOCKTON	REGINA.RUBIER@STOCKTON.CA.GOV.COM	937.8782
Antonio S. Tovar	City of Stockton	antonio.tovar@stockton.gov.com	937-8790
Zac Crawford	ENGEQ	zcrawford@engeq.com	(925) 510-4056
Greg Gibson	City of Lathrop	ggibson@ci.lathrop.ca.us	(209) 941-2742
Cathy Lee	SEWD	clee@sewd.net	444.3119
MARC WILLIAMSON	GR1	MWILLIAMSON@GR1CONSULTANTS.COM	916/431-4559
KURTIS KELLER	NAB	kkeller@neumiller.com	2099488200
SCOT MOODY	SIWA		
Steven Wiesner	Kleinfeiber	swiesner@Kleinfeiber.com	209.948.1345
Neal Colwell	KSN, Inc.	ncolwell@ksninc.com	2099460268
Walter Sadler	NSJWCD	wesadler@gmail.com	(916) 213-2300
Linda Turkatte	SJC EHD	lturkatte@sjcehd.com	(209) 468-3912
Adrienn Ellsaesser	SJC EHD	aellsaesser@sjcehd.com	209/468-0343
Christine Campbell	Delicato Family Vineyards	Christine.campbell@delicato.com	209-8243675
Tom Francis	EBMUD	tfrancis@ebmud.com	510 227 1303
JEFF SHAW	STANTEC	JEFF.SHAW@STANTEC.COM	916.524.3405
JOHN MOYNIER	STANTEC	JOHN.MOYNIER@STANTEC.COM	916-660-6693
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SAM Bologna	SSJID	sbologna@ssjid.com	(209) 249-4617
JEFF SHIELDS	SSJID	JSHIELDS@SSJID.COM	249-4645

GBA BOARD MEETING: JULY 8, 2015

NAME	AFFILIATION	E-MAIL ADDRESS	PHONE
Bob Granberg	City of Stockton	rbart.granberg@stocktongov.com	209-937-8779
Bob Elliott	San Joaquin County	belliott@sjgov.org	209-468-3113
Walter Ward	Stanislaus County	wward@envres.org	209-525-6710
Scott Tyrrell	SJC	styrrell@sjgov.org	468-0181
Julianne Phillips	SJFB	jphillips@sjfb.org	209-931-4931
John Lambie	E-PUR	jlambie@e-purwater.com	209-451-5933
JOHN FREEMAN	CAL WATER	jfreeman@calwater.com	209-547-7910
HELLY V. LLAZPANDO	SJ-PW-WR	KRVillalpando@sjgov.org	209-468-3073
Lynn Hoffman	SJ-PW-WR	lhoffman@sjgov.org	209-468-3551
Michael Callahan	SJC PW	mcallahan@sjgov.org	468-9360
Mike Selling	SJC DPW	mselling@sjgov.org	468-3053
Brandi Nakagawa	SJC PW		
Carolyn Lett	Carbon Community	carolyn.lett@carboncommunity.net	408-200-2444
Gerardo Dominguez	SJC PW	gdominguez@sjgov.org	209-755-7796
Greg Milleman	Cal Water	gmilleman@calwater.com	(661) 476-0574
DALE KUIL	SSJIO		206-670-5829
CHUCK WIND	SJC		
Elbert Holman	City of Stockton		209-423-3778
Tom Flinn	NSJ/InCD	tomflinn@comcast.com	209-354-0446
ALAN NAKAGAWA	LCM		209-3671800

Dante John Namellois CIOWA
 209 483-3388

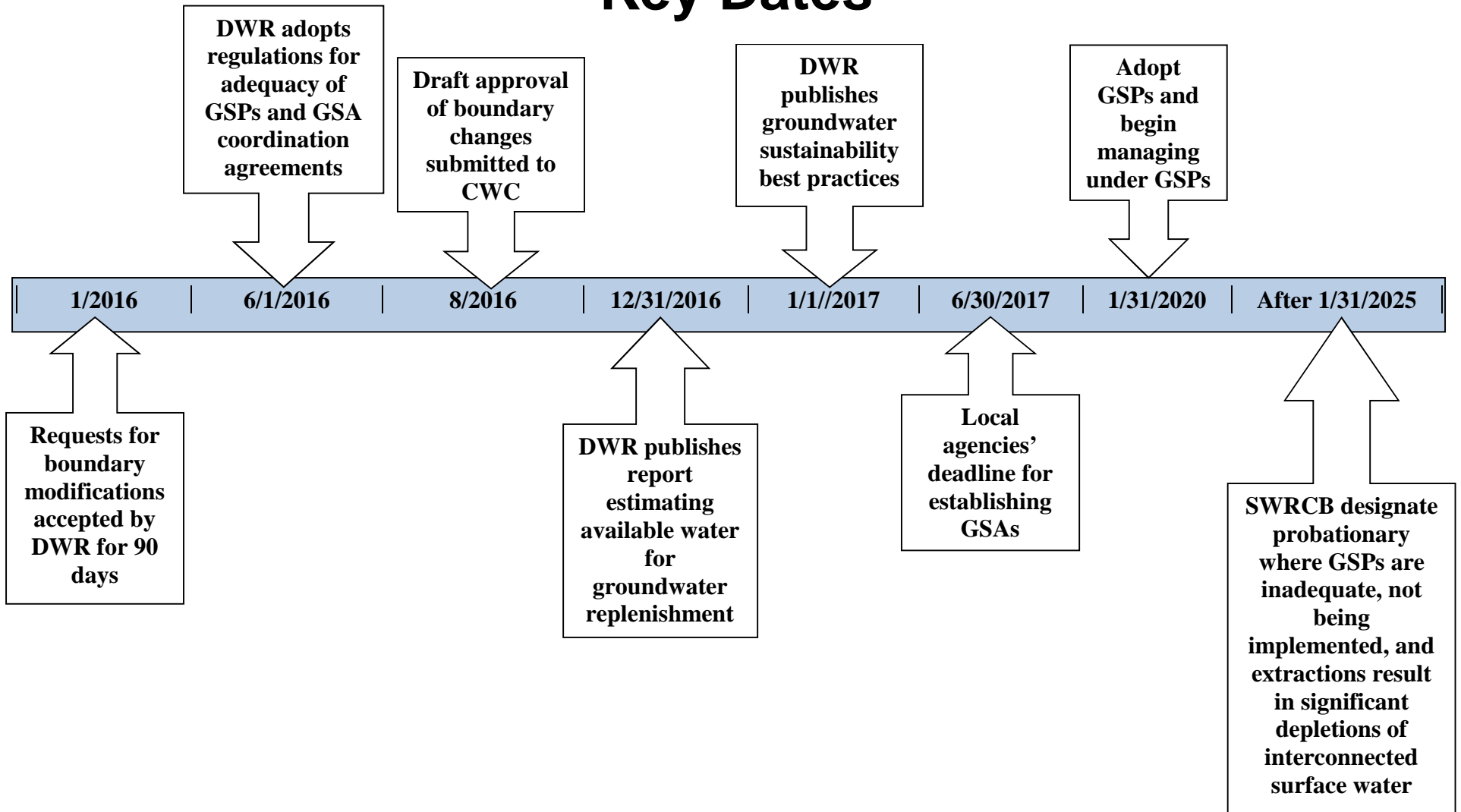
Max Franz SEWD

ERIC SCHMID LOCKEFORD CSD
 727-5035

ATTACHMENT B.1.

Sustainable Groundwater Management Act

Key Dates





Draft Eastern San Joaquin GBA SGMA Process Highlights

Decision Points	Workgroup Focus
GBA Authorizes SGMA Workgroup	Present plan to GBA
Initial Invitation List Developed	Identify potential intra-basin members, associate members, interested parties, and inter-basin stakeholders Invitations sent out
WG Meetings Begin	WG Meeting - Hold organizational meeting (Why-overview of SGMA and responsibilities of GSAs, overview of process and decision points) Distribute draft WG charter and WG member ID forms
	WG Meeting - Develop charter to include decision-making process, submission of WG member ID forms, discussion "Who's missing?"
Adopt Charter Authorize Boundary Revision Application	WG Meeting – Discussion boundary/ies revision request
Submission of Revision Request	WG Meeting – GSA roles and responsibilities, GSA early interest survey (Who's considering being a GSA?)
GSA Early Interest Survey Results	WG Meeting – Analysis & discussion of sub-basin coverage based on GSA early interest survey WG Meeting – Readiness to self-identify GSAs, discussion of what's needed to help with decision. Role of GSA sub-basin integrating body if multiple GSAs
	WG Meeting – Provision of information needed to support GSA decisions
Deadline for GSA Self-Identification Set	WG Meeting – Readiness to self-identify GSAs, discuss deadline for self-identification WG Meeting - Revisit sub-basin coverage. Introduce GSA sub-basin integration governance model
Approval of GSA/s	WG Meeting – Discuss how to complete sub-basin coverage (if needed) WG Meeting – Sample GSA resolution, by-laws, & other required information for filing with state
	WG Meeting - Discuss GSA sub-basin integration governance models (JPA, MOU, etc.), policy board, advisory group, financing. Relationship and coordination with existing policy boards (GBA, AWC, BOS, Water Districts, etc.)and inter-basin stakeholders/GSAs
Submission of GSA/s Information to State	WG Meeting – Continued discussion on integration governance, legal review of draft document, discussions draft workplan and budget WG Meeting – GSA coordination agreement requirements
Adoption of GSA Integration Documents	WG Meeting - Agreement on GSA integration governance & formation documents

Note: This provides for the option of multiple GSAs and assumes boundary revision granted if sought. Additional meetings may be required based on level of agreement. Target formation date is 12/2016

ATTACHMENT C.1.



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CHAIRMAN

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ASSOCIATE MEMBER

July 8, 2015

The Honorable Fran Pavley
Chair, Senate Natural Resources and Water Committee
State Capitol Room 5046
Sacramento, California 95814

**SUBJECT: ASSEMBLY BILL 647 (EGGMAN) BENEFICIAL USE: STORING OF WATER
UNDERGROUND – SUPPORT**

Dear Chair Pavely:

On behalf of the Eastern San Joaquin County Groundwater Basin Authority (GBA), I am pleased to convey our support for Assembly Bill 647 (AB 647). Current law does not recognize groundwater recharge as a beneficial use despite it being a necessary tool for the purposes of protecting groundwater quality, preventing land subsidence, and providing crucial dry-period water supplies through groundwater storage. All of these things can be accomplished under AB 647 while still leaving groundwater recharge for storage purposes effectively under the jurisdiction of the State Water Resources Control Board until its ultimate beneficial use. With only minor absorbable costs to the State, AB 647 will confirm into law what most Californians already know: groundwater recharge is not only a beneficial use of water, but a critical component to meeting the requirements set forth in the Sustainable Groundwater Management Act of 2014.

For the reasons stated, the GBA is pleased to support AB 647 and respectfully requests your aye vote when this bill is heard before your committee on July 14, 2015. Should you have any questions, please contact Brandon Nakagawa, Water Resources Coordinator at (209) 953-7460.

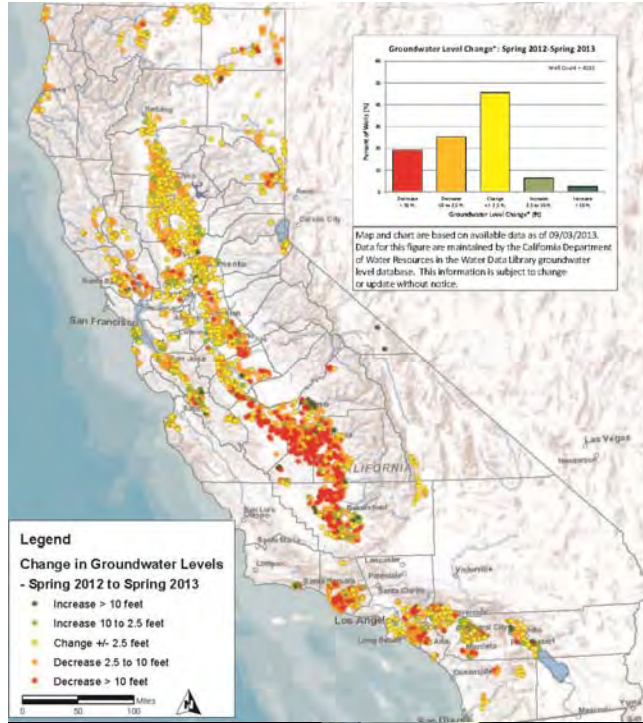
Sincerely,

CHUCK WINN
Chairman, Eastern San Joaquin County
Groundwater Basin Authority

CW:KV:me
WR-15G018-ME1

c: The Honorable Susan Eggman
Paul J. Yoder, Shaw/Yoder /Antwih, Inc.
Eastern San Joaquin County Groundwater Basin Authority
Brandon Nakagawa, Water Resources Coordinator

ATTACHMENT C.2.



July 16, 2015

County Advisory Group

California
Department of Water Resources



Draft presentation – for discussion purposes only

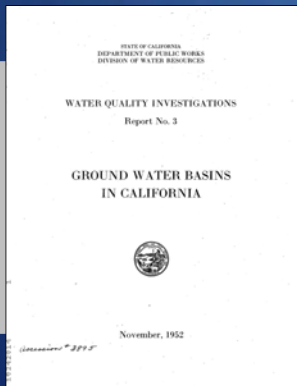
Presentation Outline

- Basin Boundary Draft Regulations Update
- GSP/Alt Regulations Outreach Approach and Overview of Summer Meetings
- GSP Regulations – Topic Discussions
 - Approach for GSP Development and Implementation
 - Pre-Existing Conditions and Undesirable Results
 - Measurable Objectives and Interim Milestones
 - Land Use and County Involvement

Groundwater Basin Boundary Revision Regulations - Update

CA Groundwater Basins

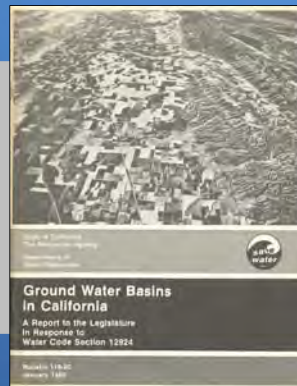
- Groundwater Basins & Subbasins Are Defined in DWR Bulletin 118 Using the Best Available Data
- Revisions to Basin Boundaries Have Occurred During B-118 Updates (Water Code § 12924)



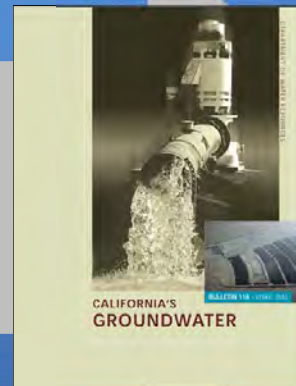
1952



Bulletin 118
1975



Bulletin 118
1980

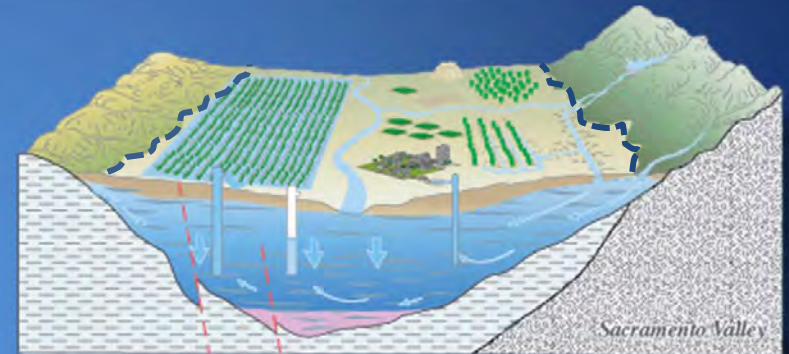


Bulletin 118
2003

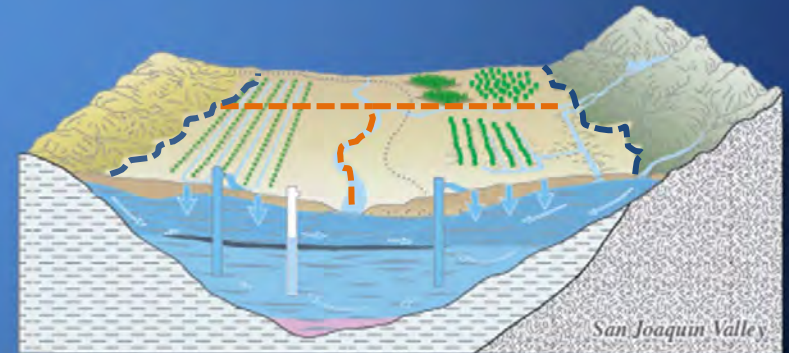
Draft presentation – for discussion purposes only

Groundwater Basins & Subbasins

- **SGMA Definition**
- **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
- **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



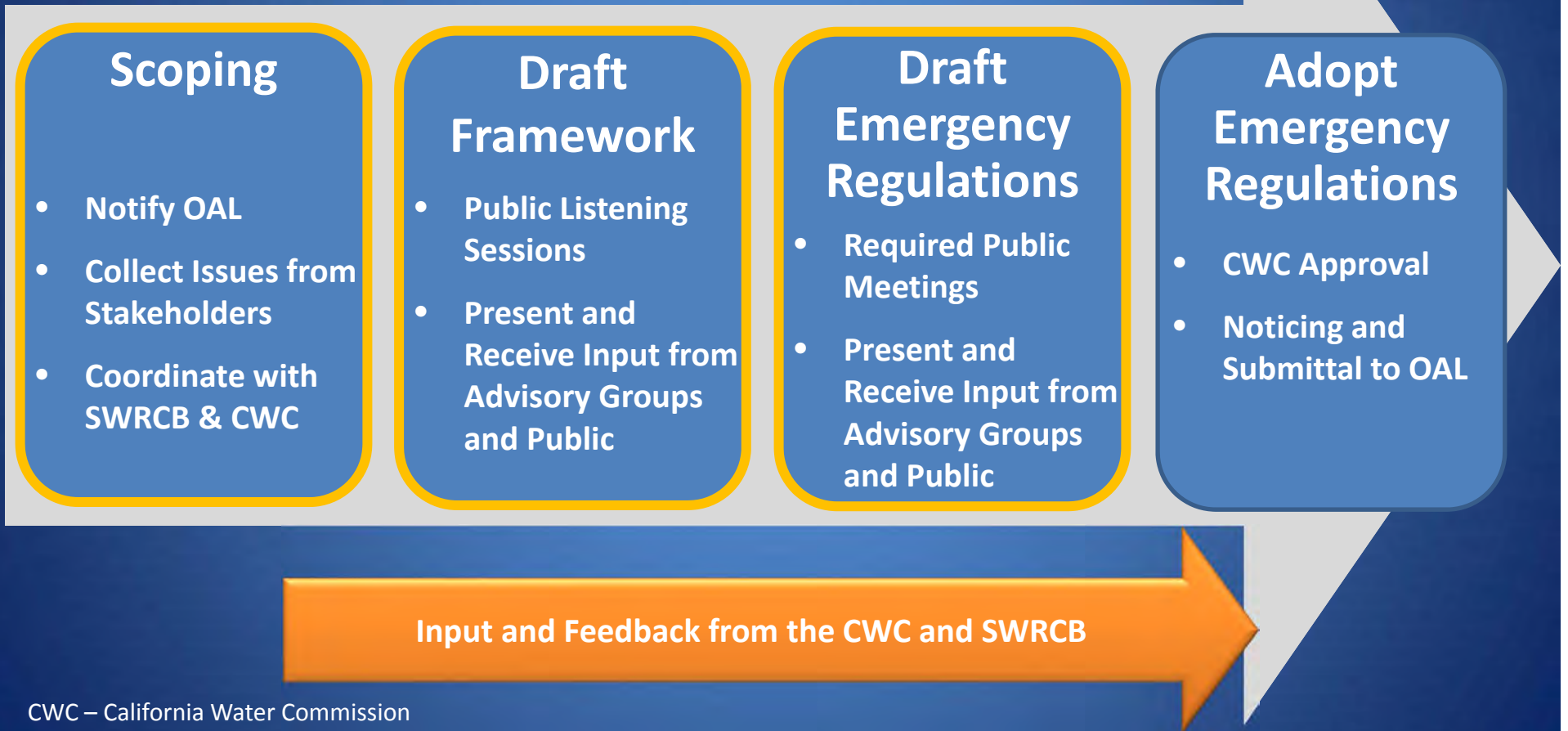
Modified from Faunt, 2009

SGMA Requirements

- **Emergency Regulations to Establish a Process For Local Agencies to Request Revisions 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 parties in 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 basin
 3. Whether there is a history of SGM of groundwater levels in the proposed basin

Basin Boundary Regulations Process

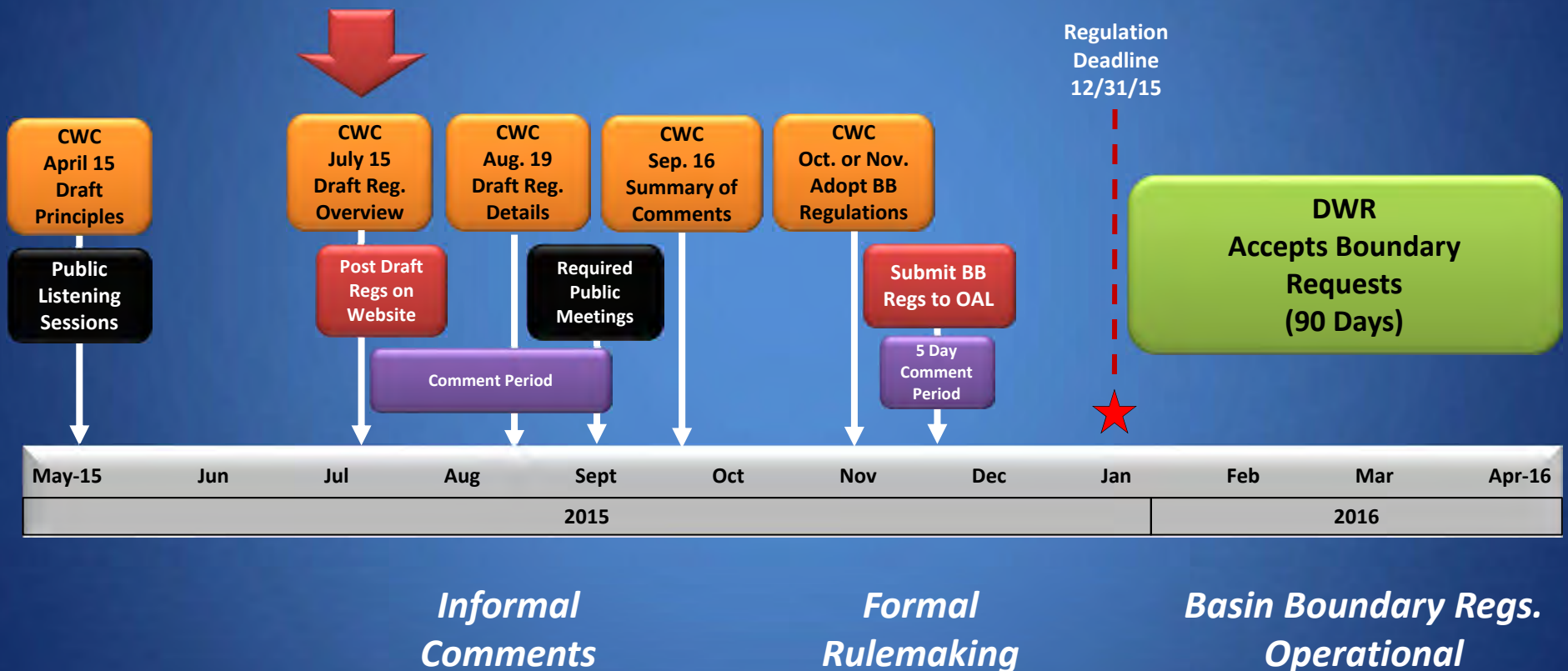
- Phases of Implementation



CWC – California Water Commission
SWRCB – State Water Resources Control Board
OAL – Office of Administrative Law

Draft presentation – for discussion purposes only

Basin Boundary Regulations Estimated Timeline



Draft presentation – for discussion purposes only

Draft Regulation Approach

- **Existing Boundaries and GSA Formation**
- **Local Flexibility with Adequate Justification**
 - Broad Agreement and Coordination
 - Technical Information
- **Type of Boundary Revisions**
 - Minor vs. Major Revisions
 - Basin vs. Subbasin Boundary Revisions
 - Basin Adequately Sized For Sustainable Management

GSP/Alt Regulations Outreach

Approach and Overview of

Summer Meetings

GSP/ALT Regulations Process

- Phases of Implementation

Scoping

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

Draft Framework (Topic Based)

- 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

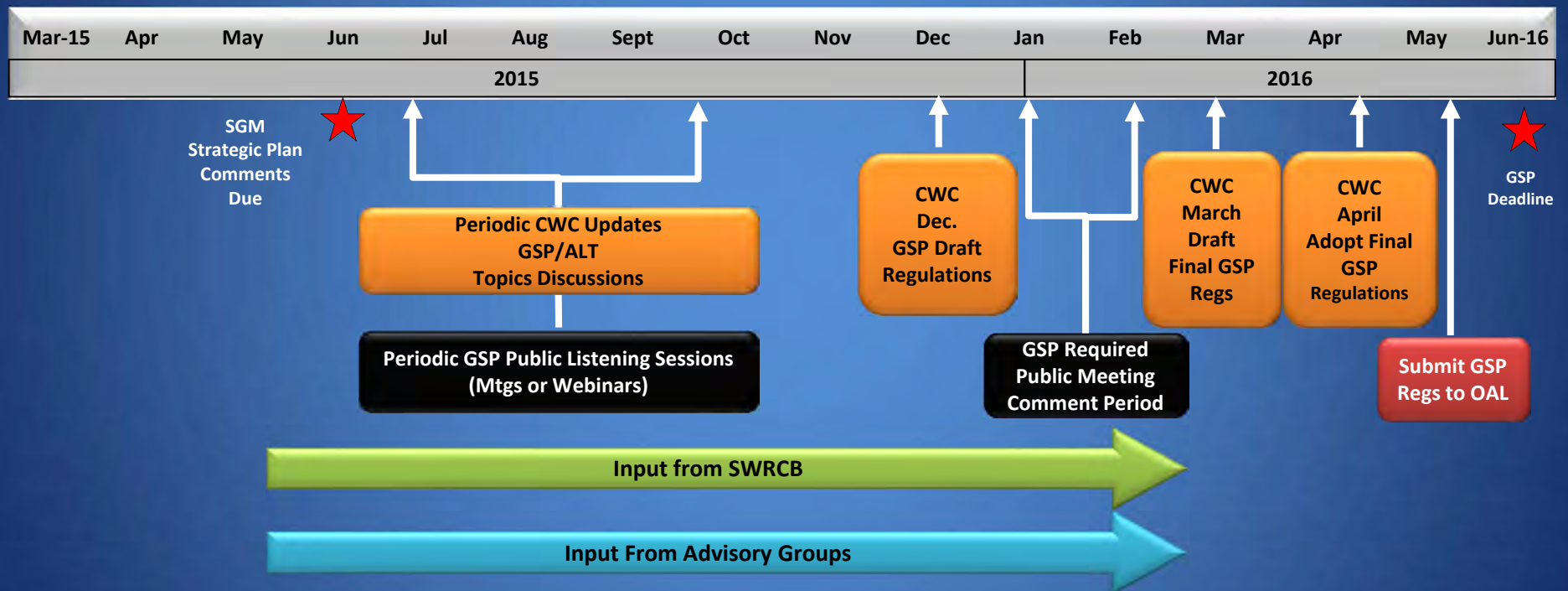
- CWC Approval
- Noticing and Submittal to OAL

Input and Feedback from the CWC and SWRCB

CWC – California Water Commission
SWRCB – State Water Resources Control Board
OAL – Office of Administrative Law

Draft presentation – for discussion purposes only

GSP/ALT Regulations Estimated Project Timeline



Draft presentation – for discussion purposes only

GSP Issue Topics for Regulation Development

Phase 1 –
Scoping
(Collection
of Issues)

All 10
Topics
(May-Jun)

Phase 2 –
Draft
Framework
(Present
and Receive
Input from
Advisory
Groups and
Public)

1st Batch
(Jun-Jul)

2nd Batch
(Jul-Aug)

3rd Batch
(Aug-Sep)



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Topic 3 – Land Use and County Involvement

(Consideration of GSP)

(Consideration of Beneficial Uses)

**(County Presumption of a GSA for
Unmanaged Areas)**

Land Use and County Issues Received

- Both counties and water agencies identified a mutual need for more communication.
 - It was suggested that there is currently very little, if any, ongoing or routine communication between counties and water agencies at this time.
- Concerns about the reality of trying to implement land use changes by GSAs that do not actively involve counties.
- Issues surrounding land use authority – land use agencies need to have a seat at the table; special districts with no land use authority need to work with counties, who do have land use authority.

Consideration of GSPs

4.1 Government Code Section 65350.5. Review and Consideration of Groundwater Requirements

Before the adoption or any substantial amendment of a city's or county's general plan, the planning agency shall review and consider all of the following:

- *(a) An adoption of, or update to, a groundwater sustainability plan or groundwater management plan pursuant to Part 2.74 (commencing with Section 10720) or Part 2.75 (commencing with Section 10750) of Division 6 of the Water Code or groundwater management court order, judgment, or decree.*

Questions and Considerations:

- How should the planning agency's consideration of a GSP be reflected in the general plan document in terms of policies and land use?

Consideration of Beneficial Uses

4.4 Water Code Section 10723.2. Consideration of All Interests of All Beneficial Uses and Users of Groundwater

The groundwater sustainability agency shall consider the interests of all beneficial uses and users of groundwater, as well as those responsible for implementing groundwater sustainability plans. These interests include, but are not limited to, all of the following:

(d) Local land use planning agencies.

Questions and Considerations:

- What does “consideration of local land use planning agencies interests” mean in practice?
- How will local land use interests be reconciled with potentially incompatible GSP objectives?

County Presumption of a GSA for Unmanaged Areas

4.5 Water Code Section 10724. Presumption That County Will Manage Areas Not Covered By a Groundwater Sustainability Agency; Extraction Reporting to State Board if County Does Not Manage Those Areas

Questions and Considerations:

- How will the counties approach the decision to decide on whether or not it will be the GSA for areas within the same basin but not covered by another GSA?

Additional Authorities of GSAs

4.6 Water Code Section 10726.4. Additional Authorities of Groundwater Sustainability Agency

(a) A groundwater sustainability agency shall have the following additional authority and may regulate groundwater extraction using that authority:

- (1) “To impose spacing requirements on new groundwater well construction to minimize well interference and impose reasonable operating regulations on existing groundwater wells...”*
- (2) “To control groundwater extractions by regulating, limiting, or suspending extractions from individual groundwater wells...”*
“Those actions shall be consistent with the applicable elements of the city or county general plan, unless there is insufficient sustainable yield in the basin to serve a land use designated in the city or county general plan. A limitation on extractions by a GSA shall not be construed to be a final determination of rights to extract groundwater from the basin or any portion of the basin.

Additional Authorities of GSAs (cont.)

Questions and Considerations:

- Could limitations on groundwater extractions imposed as a means to achieve sustainable groundwater goals result in *de facto* land use restrictions?
- How will GSAs quantify where and when water reductions are necessary, and communicate these reductions to basin water purveyors, and to land use agencies?
- What is the role of the GSA relative to land use agencies and water purveyors to establish a sustainability goal that may be implemented by the other agencies?

Regulations on Groundwater Sustainability Plans and Alternatives

Major Considerations

Topic 1 – Pre-SGMA Conditions and Undesirable Results

- Locally defined site specific definitions of “significant and unreasonable” within a possible minimum standard set by DWR
- Addressing undesirable results to levels observed Jan 1, 2015 may be dependent on site specific conditions and undesirable result.

Topic 2 – Measurable Objectives (MO) and Interim Milestones (IM)

- Locally defined site specific measurable objectives and interim milestones developed within a framework set by DWR.
- Important planning concepts of thresholds & trigger actions are necessary to evaluate MOs at IMs.

Topic 3 – Land Use and County Involvement

- Coordination between Counties (Land Use Authority) with other new GSAs (predominately water agencies)
- County approach to presumption of a GSA in unmanaged areas.
- Challenges between new GSPs and General Plans.

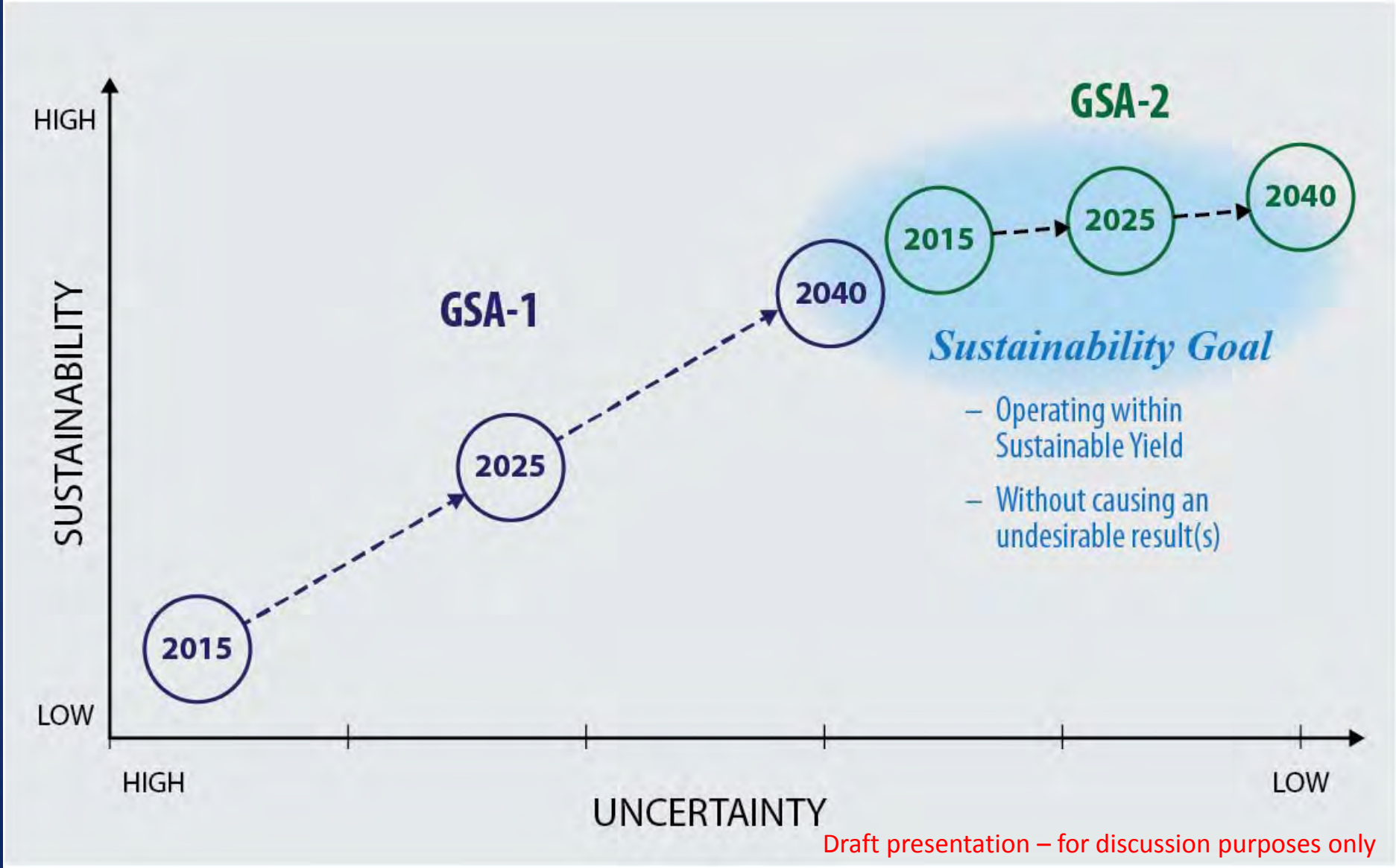
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Approach for GSP Development and Implementation

How is sustainability defined

- (t) *“Sustainability goal” means the existence and implementation of one or more groundwater sustainability plans that achieve sustainable groundwater management by identifying and causing the implementation of measures targeted to ensure that the applicable basin is operated within its sustainable yield.*
- (u) *“Sustainable groundwater management” means the management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results.*
- (v) *“Sustainable yield” means the maximum quantity of water, calculated over a base period representative of long-term conditions in the basin and including any temporary surplus, that can be withdrawn annually from a groundwater supply without causing an undesirable result.*

How is sustainability defined (cont.)



Topic 1 – Pre-SGMA Conditions and Undesirable Results

(Groundwater Levels and Storage)

(Seawater Intrusion)

(Water Quality)

(Land Subsidence)

(Depletions of Interconnected Streams)

Undesirable Results Definition

(w) “Undesirable result” means one or more of the following effects caused by groundwater conditions occurring throughout the basin:

- Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply if continued over the planning and implementation horizon.*
- Significant and unreasonable reduction of groundwater storage.*
- Significant and unreasonable seawater intrusion.*
- Significant and unreasonable degraded water quality, including the migration of contaminant plumes that impair water supplies.*
- Significant and unreasonable land subsidence that substantially interferes with surface land uses.*
- Depletions of interconnected surface water that has significant and unreasonable adverse impacts on beneficial uses of the surface water.*

Undesirable Results Issues Received

- Inelastic land subsidence cannot be reversed. What will be the requirement to address any subsidence impacts realized between January 1, 2015 and the date of GSP adoption and/or start of GSP implementation (i.e. January 31, 2020 or 2022)?
- Will the regulations have enough flexibility to allow GSAs to draw down groundwater levels where groundwater levels are relatively high for the purposes of conjunctively using the basin or creating future storage?
- Will DWR establish a minimum standard for significant and unreasonable undesirable results?

Pre-SGMA Definition

10727.2. Required Plan Elements

A groundwater sustainability plan shall include all of the following:

- (b) (4) The plan may, **but is not required to**, address undesirable results that **occurred before**, and have not been corrected by, **January 1, 2015**. Notwithstanding paragraphs (1) to (3), inclusive, a groundwater sustainability agency has discretion as to whether to set measurable objectives and the timeframes for achieving any objectives for undesirable results that occurred before, and have not been corrected by, **January 1, 2015**.*

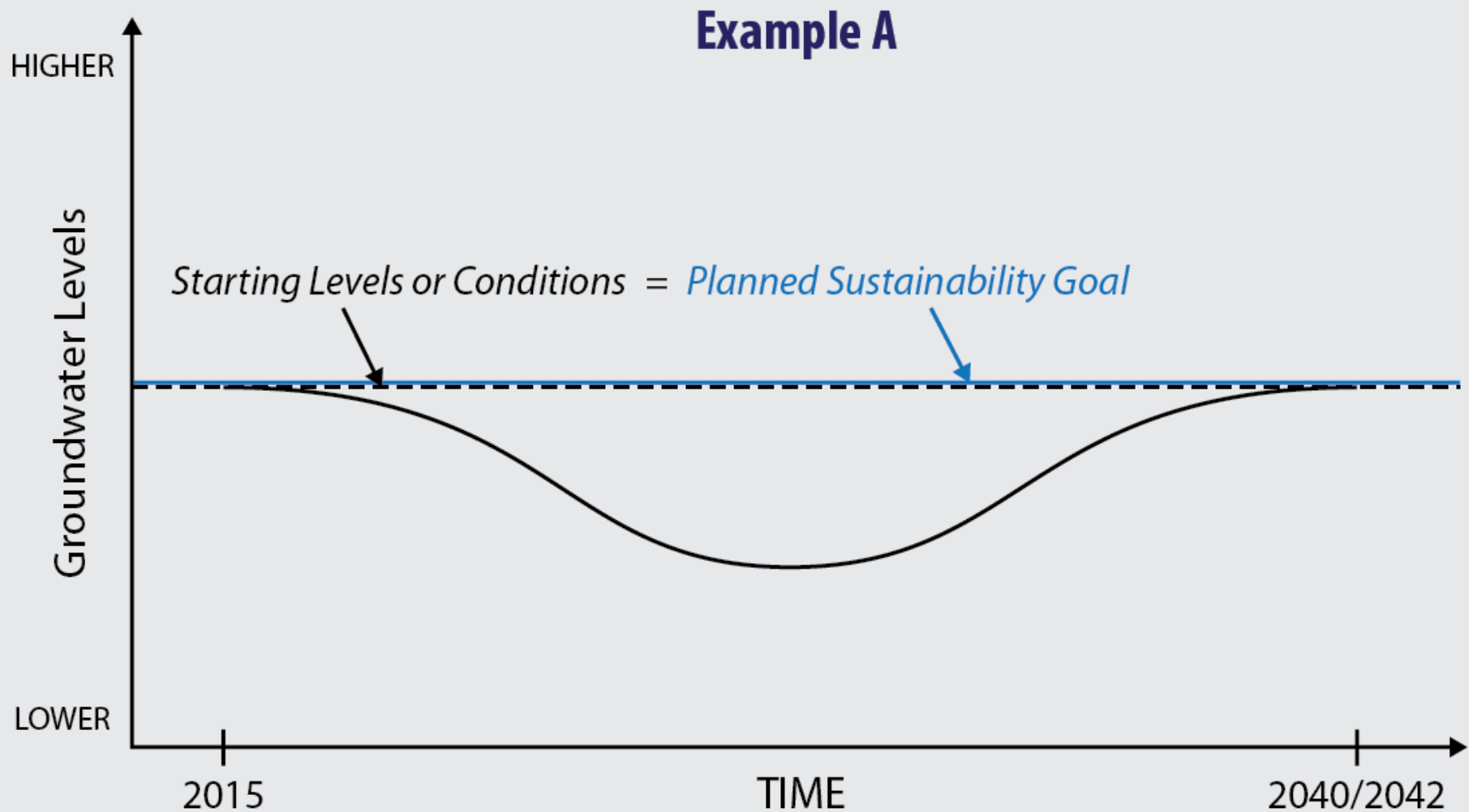
Pre-SGMA Issues Received

- Can declining groundwater-level trends prior to January 1, 2015 continue as part of the plan then level off, or should trends be required to level off immediately?
- Does this (i.e. pre-SGMA) provision equate to a voluntary requirement for GSAs to address undesirable results before January 1, 2015? Conversely, after January 1, 2015, do GSAs need to begin to address undesirable results and obtain balance or sustainability by 2040 or 2042 and avoid significant and reasonable undesirable results?
- Does this requirement to address undesirable results after January 1, 2015, apply everywhere in the GSP area, or should it only represent an average condition of the GSP area or basin?

Pre-SGMA Conditions

Paths to Sustainability

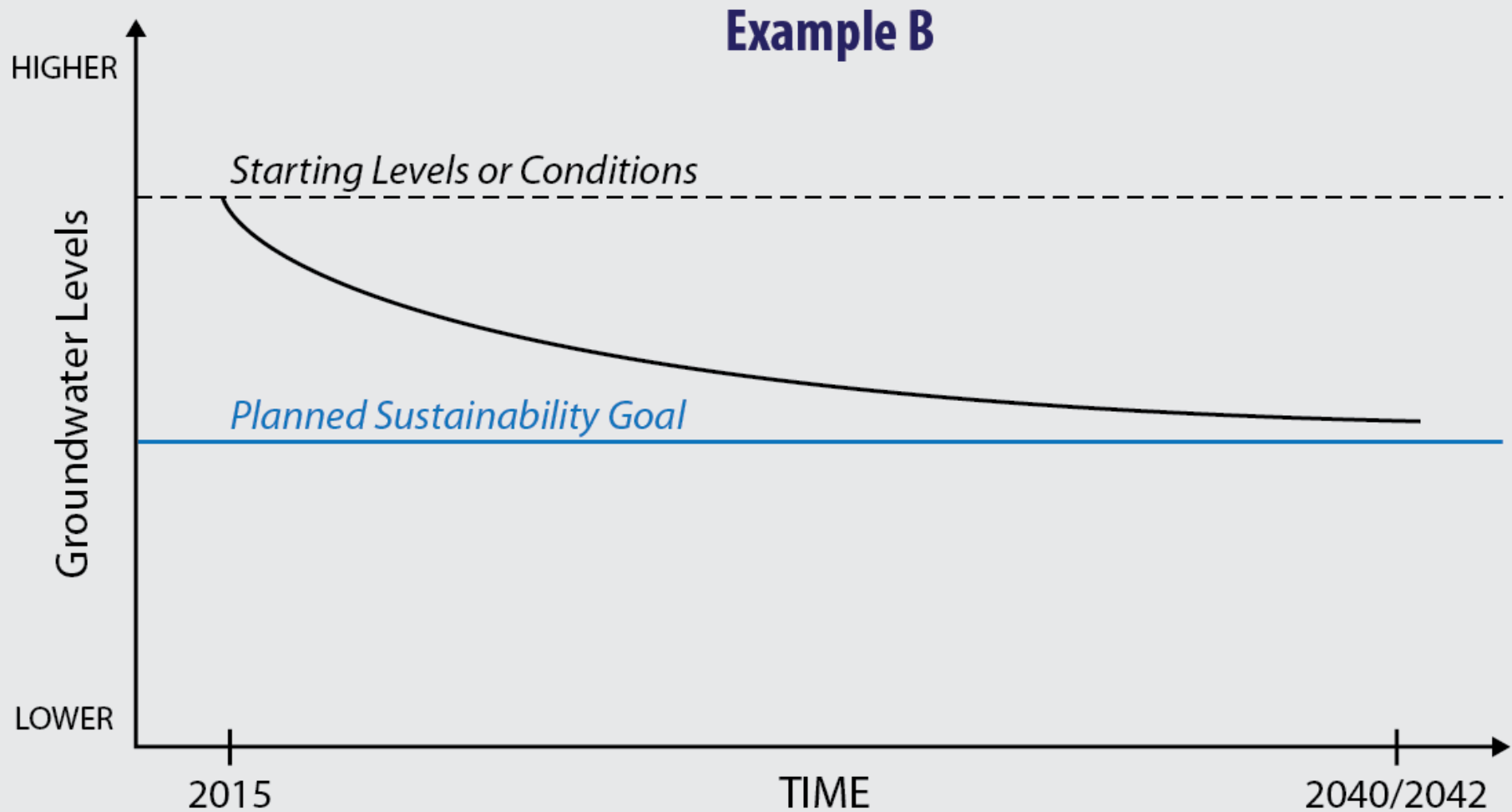
(Ex. Chronic Lowering of Groundwater Levels)



Pre-SGMA Conditions

Paths to Sustainability

(Ex. Chronic Lowering of Groundwater Levels)

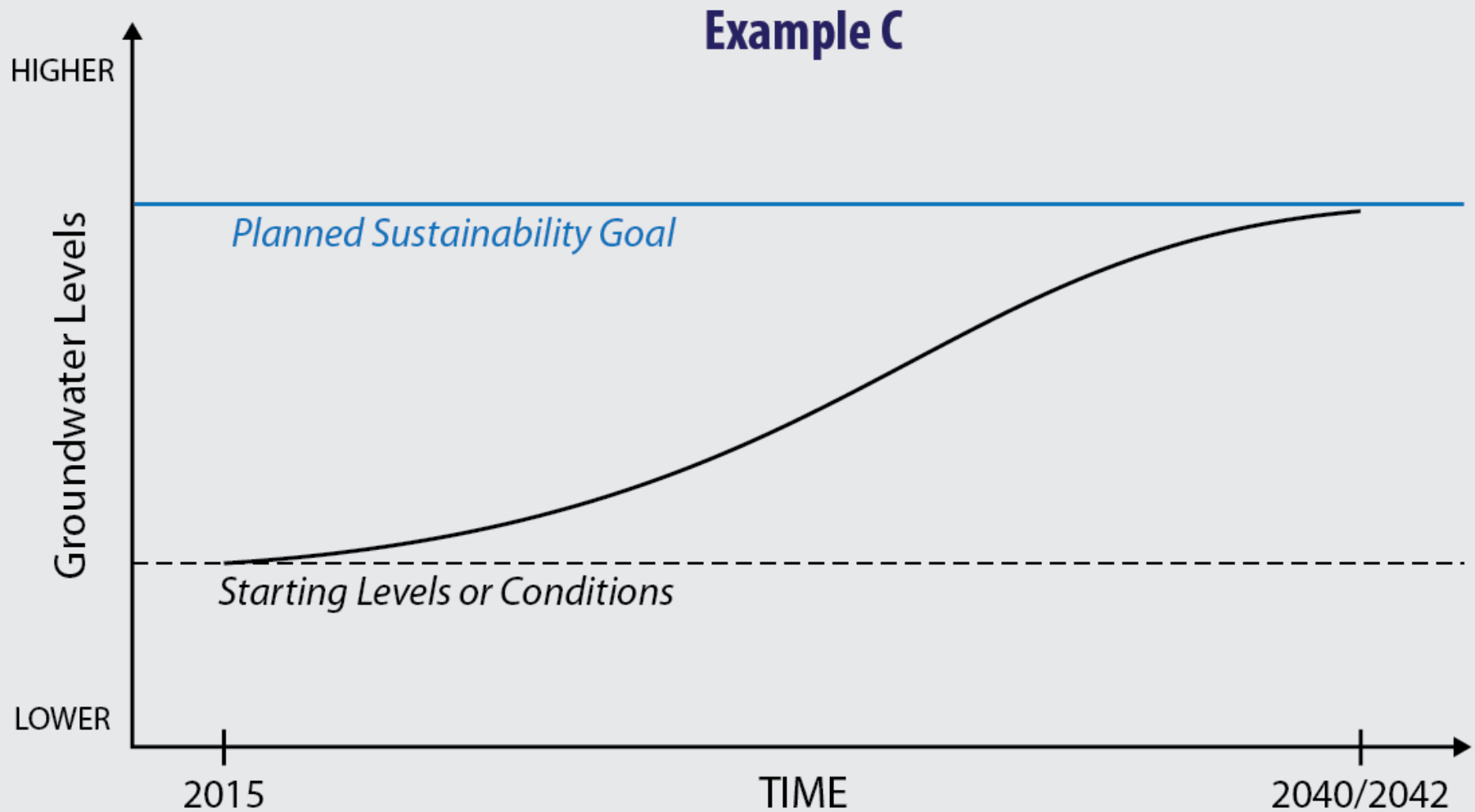


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Pre-SGMA Conditions

Paths to Sustainability

(Ex. Chronic Lowering of Groundwater Levels)



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Pre-SGMA Questions

- Do undesirable results that occurred before January 1, 2015 not have to be addressed, but need to be fully defined and GSP actions included, that will manage undesirable results above significant and unreasonable levels by 2040 or 2042?

Undesirable Result Questions

- **Site Specific developed at Local Level** - Should “significant and unreasonable” largely be based on site-specific considerations and defined as a measurable objective (developed at the local level), and be based on broad consideration of whether implementation of the measurable objectives will avoid or minimize permanent or irreversible impacts?
- **Minimum Standard** - Should there be a minimum standard or threshold for each undesirable result established, regardless of site specific conditions?
- **Justification for Site Specific** - Will it be important to document the variability of basin conditions if site-specific definitions of significant and unreasonable undesirable results are developed locally, to support DWR’s evaluation of future thresholds for management of those undesirable results?

Undesirable Result

GW Levels and Storage

Seawater

Water Quality

Land Subsidence

Interconnected Surface Water

Initial Questions

Defining Significant and Unreasonable – What are the methods or approach GSAs can use to define significant and unreasonable levels?

Defining Minimum Standards – What Statewide minimum standard should be considered, should it be qualitative or quantitative?

Secondary Considerations and Questions

- How to approach **operating limits**?
- How to evaluate if “emptying” aquifer **threatens supply reliability**?

- **Existing SWRCB authority** in cases of threats to irreparable injury to aquifer.
- Should limited **additional advancement be allowable**?

- Which **existing water quality management programs** might complement or conflict with GSP?
- Allow for **limited groundwater quality degradation**?

- **Risk assessment** evaluation of impacts?
- **Mitigation measures** considered where impacts affect infrastructure or environment?
- Allow for **limited additional subsidence**?

- **Standardized methods** defined by industry standards or DWR?
- How will potential **environmental impacts** be identified and quantified?

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Topic 2 – Measurable Objectives and Interim Milestones

(Quantitative Thresholds)

(Triggers and Actions)

(Uncertainty)

MO and IM Definition

10727.2. Required Plan Elements

A groundwater sustainability plan shall include all of the following:

- *(b) (1) **Measurable objectives**, as well as **interim milestones** in increments of five years, to achieve the sustainability goal in the basin within 20 years of the implementation of the plan.*
- *(b) (2) A description of **how the plan helps meet each objective** and **how each objective is intended to achieve the sustainability goal** for the basin for long-term beneficial uses of groundwater.*

MO and IM Definition (cont.)

10733.2. Department to Adopt Emergency Regulations Concerning Plan Review and Implementation

- *(a) (1) By June 1, 2016, the department shall adopt regulations for evaluating groundwater sustainability plans, the implementation of groundwater sustainability plans, and coordination agreements pursuant to this chapter.*
- *(2) The regulations shall identify the necessary plan components specified in Sections 10727.2, 10727.4, and 10727.6 and other information that will assist local agencies in developing and implementing groundwater sustainability plans and coordination agreements.*

Basin Management Objective vs Measurable Objectives

Existing GMP Requirement's

- Basin Management Objectives
- Monitoring of groundwater
- Plan to involve other agencies
- Documentation of public involvement
 - Required, Recommended, and Voluntary Components

New GSP Requirements

- Physical description of the basin (water level, quality, etc.)
- Measurable objectives and interim milestones
- Description of how these objectives will be achieved
- Monitoring and management provisions
- How the plan will affect other county/city general plans

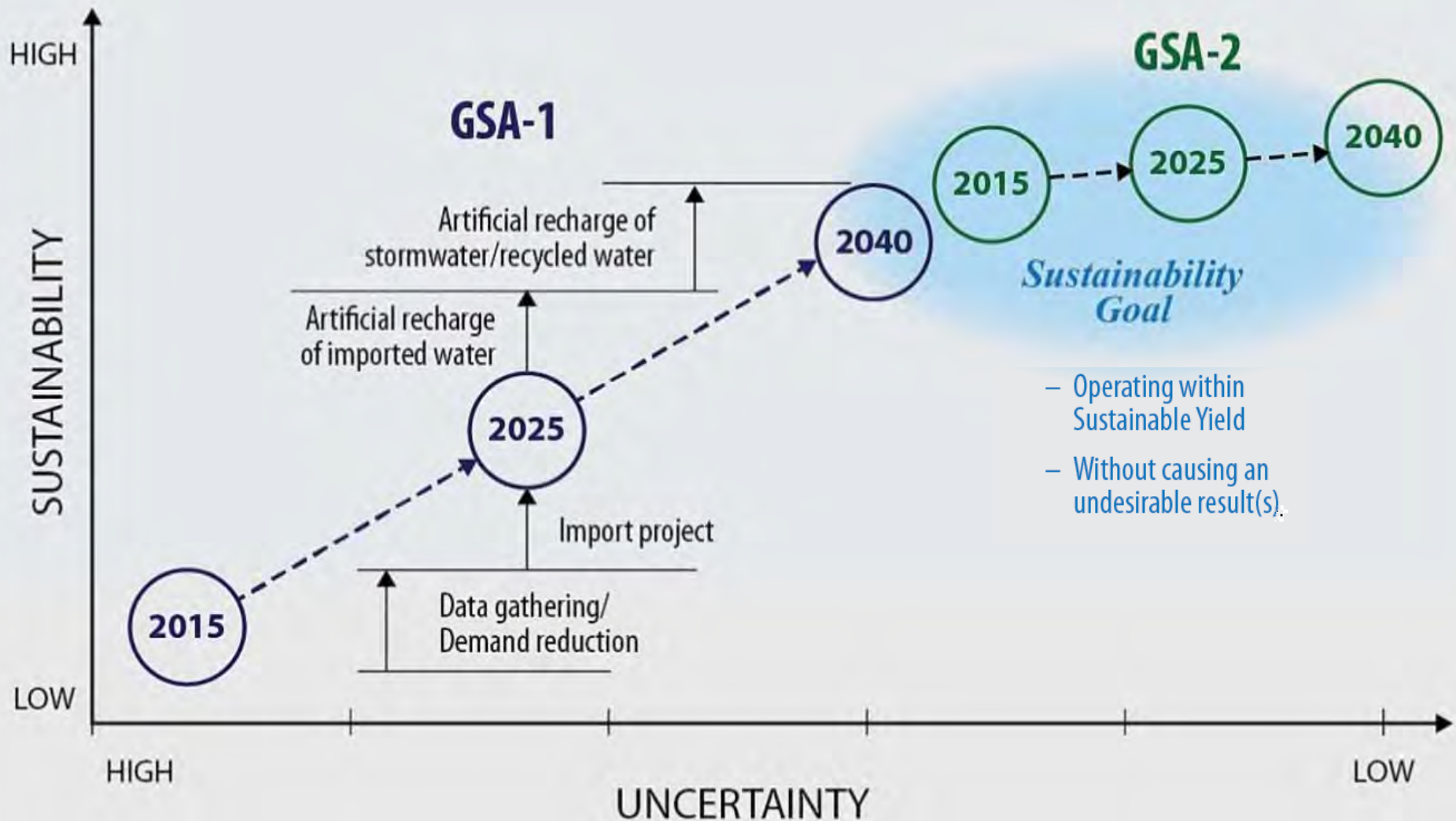
Specific new GSP requirements WC 10727.2, 10727.4, and 10727.6

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MO and IM Issues Received

- What is DWR's definition of "measurable objectives"?
- Will the measurable objectives be required to be discrete values? Or acceptable operational ranges?
- Will MO and interim milestones be evaluated on an annual basis with submission of an annual report?
- Can measurable objectives change over time?
- Will DWR provide clear guidelines for inter-basin coordination with respect to measurable objectives? One subbasin's measurable objectives may not be achievable by an adjacent subbasin. Will regulations identify requirements for coordination?

MOs and IMs Necessary to Reduce Uncertainty and Achieve or Maintain Basin Sustainability



Possible GSA Path to Sustainability

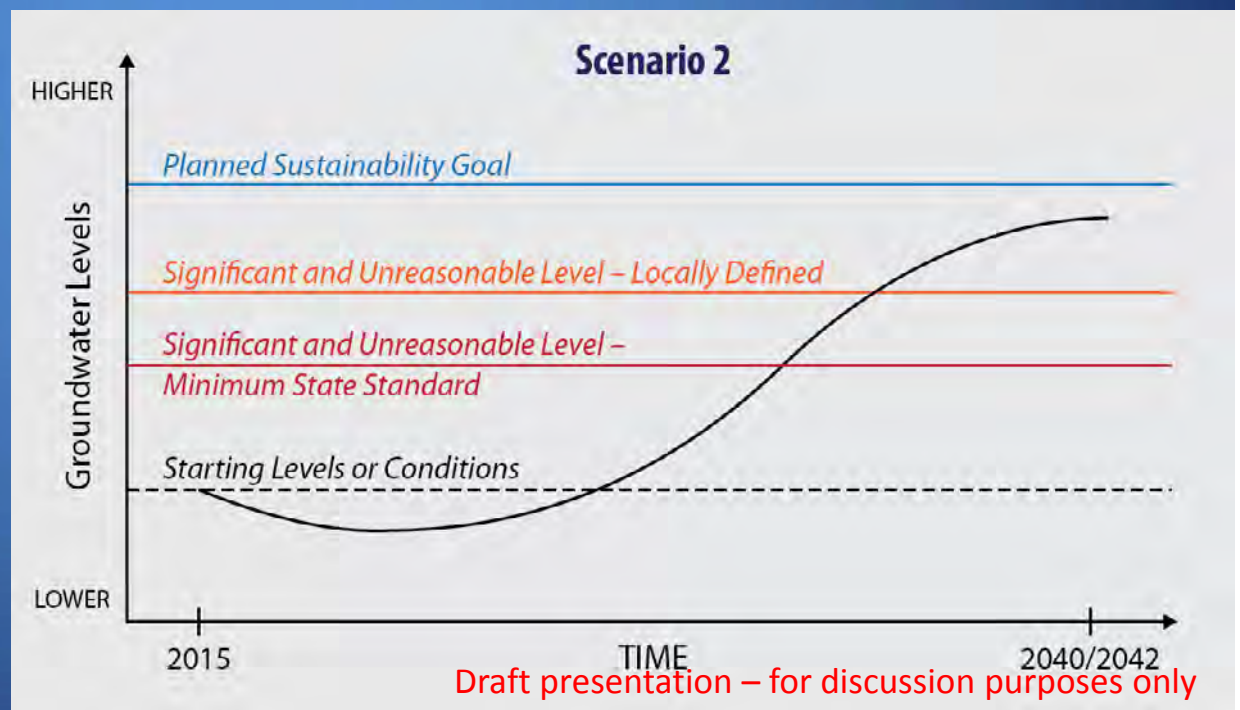
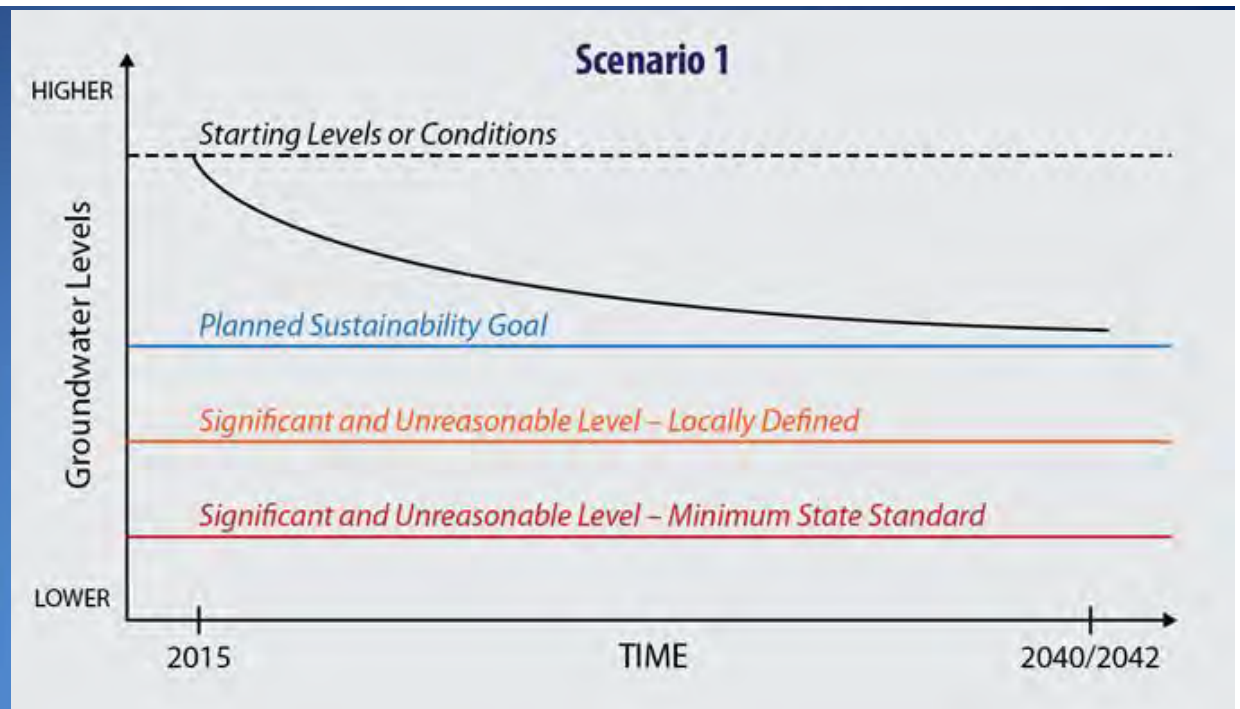


MO and IM General Questions

- **Local Flexibility and State Evaluation** - How should locally-defined MO and IM be developed to balance local flexibility and allow the State to complete evaluation and assessments of GSPs?
- **Site Specific developed at Local Level** - Should a measurable objective be developed for each of the significant and unreasonable undesirable results and be based on broad consideration of whether implementation of the measurable objectives will avoid or minimize permanent or irreversible impacts at a local level?
- **Justification for Site Specific** - Will it be important to document the variability of basin conditions if site-specific definitions of significant and unreasonable undesirable results are developed locally, to support DWR's evaluation of future thresholds for management of those undesirable results?

Measurable Objectives Based on Undesirable Results

Setting Planned Goals and Significant and Unreasonable Thresholds



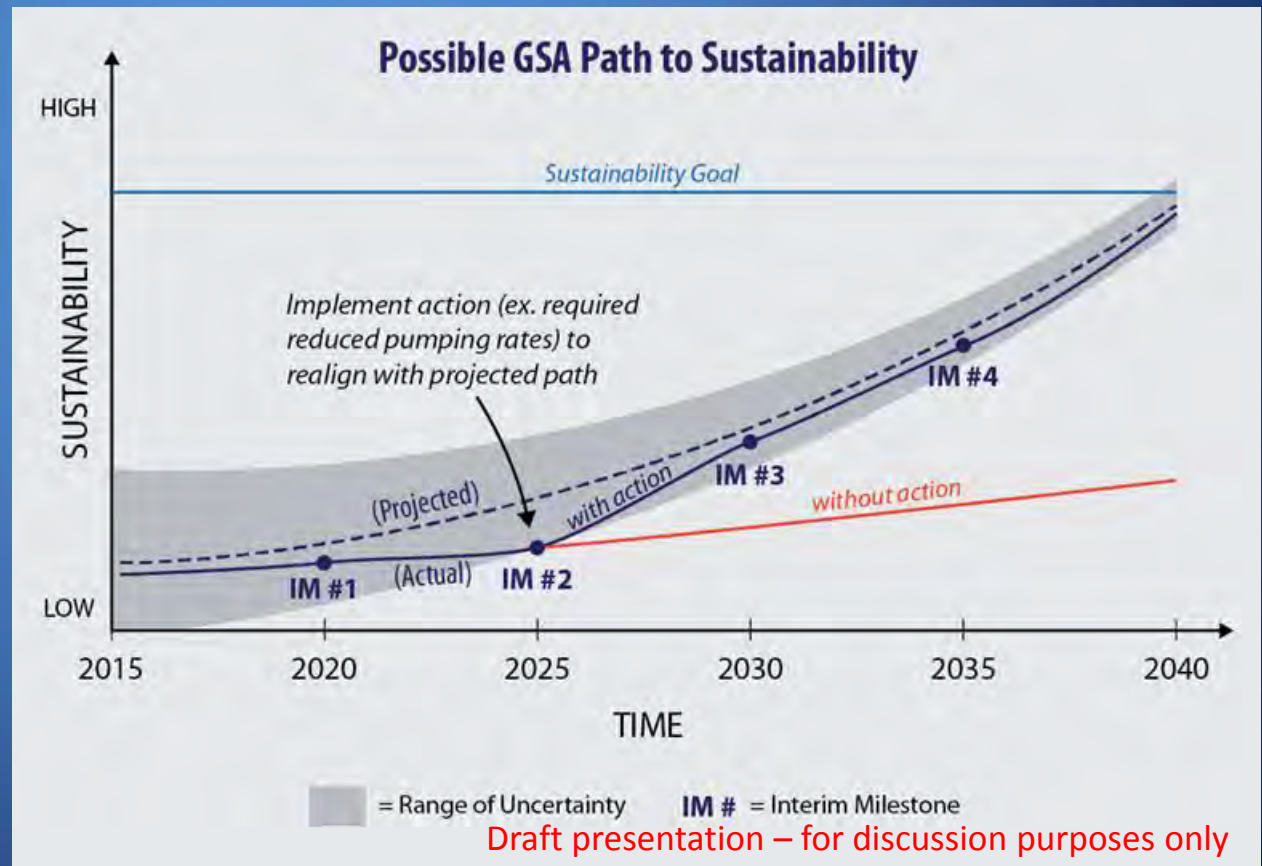
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Specific MO and Quantitative Thresholds

- **Specific and Quantitative** - Should all measurable objectives be specific and include numerically-based quantitative thresholds to measure progress?
 - Should this be done so that DWR will be able to say unambiguously whether the GSP is on track to meet the sustainability goal(s)?
- **Matching MO and Undesirable Results** - Should at least one measurable objective with a quantitative threshold be included in GSPs for each of the applicable “undesirable results”?
- **Narrative Thresholds** - If goal statement type measurable objectives with narrative thresholds were allowed, how would DWR and the GSAs implementing GSP(s) in a basin agree on the level of progress toward the sustainability goal at interim milestones?
 - Are there additional characteristics that need to be considered, other than numeric- or narrative-based measurable objectives and thresholds?

Triggers & Actions Related to IM

- Would trigger actions, as explained above, aid GSAs in obtaining statewide sustainability?
- What type of “Contingency Plan” trigger(s) should be considered if planned activities are not progressing toward, or resulting in, the sustainability goal?
- Are there other concepts that GSAs could use to clearly document when actions are needed to maintain progress toward their sustainability goals?



Measurable Objective (i.e. for each undesirable result or other planning objectives)

Threshold	Triggers	Actions
<p>Groundwater levels in monitoring wells at the coastline must average at least X feet above sea level to avoid sea water intrusion.</p>	<p>Initial Trigger – Might correspond to the identified threshold value. If so, this trigger value might indicate that the actual conditions are consistent or paralleling planned conditions. (Ex. Groundwater levels fluctuate on annual average at X feet above sea level)</p>	<p>Actions at this trigger value may be used to further evaluate data if uncertainty exists, or advance other planned activities to provide a measure of safety to ensure continued success toward planned conditions.</p>
	<p>Mid-Level Trigger(s) – (Ex. Groundwater levels fluctuate 10 feet below threshold value resulting in inland advancement of saline water)</p>	<p>Action(s) at this trigger(s) may need to be designed to address conditions that are possibly threatening the sustainability goal, where actual conditions are deviating negatively from planned conditions. Example actions could include increased monitoring, importing water, conservation measures, mandatory demand reduction measures, etc. The severity of the action(s) may depend on the final trigger value.</p>
	<p>Final Trigger – (Ex. Groundwater levels fluctuate 30 feet below threshold value resulting in inland advancement of saline water)</p>	<p>Action(s) at this trigger might be designed to address conditions where it's clear based on the trigger value the sustainability goal is being threatened (actual conditions are clearly deviating negatively from planned conditions) and there is an immediate need to address conditions to avoid significant and unreasonable undesirable results. A "Contingency Plan" focused on demand reduction activities to balance supply and demand may be necessary.</p>

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Uncertainty

- What steps can GSAs and basin managers be taking now to reduce uncertainty so that achievable sustainability goals can be set in their GSPs, which are supported by realistic measurable objectives?
- What role should DWR play in assisting GSAs in basins where relatively high levels of uncertainty exists due to poor or no past record keeping of basic GW Info (i.e. water levels, pumping quantities, quality)?



ATTACHMENT C.3.

Water Available for Groundwater Replenishment (WC 10729 (c)) – SGMA Discussion Paper

Department of Water Resources - Sustainable Groundwater Management Program

July 21, 2015

1.0 Purpose

The purpose of this paper is to identify issues related to developing a report on water available for groundwater replenishment required under WC 10729 (c). Relevant sections from the SGMA legislation are provided, followed by a summary of recent outreach, potential options and questions to consider.

2.0 Background

In 2014, new legislation passed that provides a statewide framework for sustainable groundwater management in California (SB1168, AB1739, and AB1319). This legislation, referred to as the Sustainable Groundwater Management Act (or SGMA), is consistent with California's preferred bottom-up approach by leaving groundwater management to the locals (through groundwater sustainability agencies, or GSAs). As part of the SGMA legislation, WC 10729 (c) states: *The department shall prepare and publish a report by December 31, 2016, on its Internet Web site that presents the department's best estimate, based on available information, of **water available for replenishment of groundwater** in the state.*

The SGMA legislation does not provide additional details about the meaning and intent for this report. There are many possible policy-dependent options to consider and several alternative technical methods that could be applied to address this requirement. Policy considerations include defining water available for replenishment based on existing water management infrastructure and operations criteria, or based on potentially new future water management strategies including new conjunctive management projects, new surface storage, increased water conservation, a Delta WaterFix and EcoRestore, etc. Technically there are many options to consider ranging from a water rights analysis of available surplus water under recent hydrological conditions to a vulnerability assessment and tradeoff analysis of water available for groundwater recharge. Such options could consider future population growth, land use changes and alternative climate scenarios. These options must be weighed against the relative short time frame with which to complete this requirement.

3.0 Initial Outreach and Discussion

DWR has begun outreach with several policy and technical experts to consider the various options to address the requirement of WC 10729 (c), as well as the purposes and value of the report. Below is a highlight of some of the advice provided.

- Address both opportunities for additional water supplies as well as obstacles
 - The obstacles should include those threats to the reliability of existing water supplies including regulatory, climate change, legal issues
 - Opportunities include potential reoperation of the SWP and CVP, new conveyance, new surface storage, conservation, stormwater capture at the local level, watershed treatment, and recycled water. Opportunities could be identified both at the larger water project level (e.g. State Water Project and Central Valley Project) as well as the local watershed level (e.g. water resources planning efforts completed or underway by local agencies)
- Include uncertainty in potential outcomes and provide range of estimates
- Recognize the value of surface storage
- Need something beyond a SWP/CVP delivery reliability report
- Quantitative information in the report may be less valuable than qualitative information
- Value in organizing the report by general groundwater areas in California that would benefit from various water sources
- Consider regional variation in capability to capture water for replenishment
- Develop economic/feasibility guidance
- Link to the full range of issues addressed in the Governor's Water Action Plan

4.0 Options for Addressing WC 10729(c)

The figure summarizes alternative ways of estimating water available for replenishment. These options are distinguished from each other by the geographic applicability from local agency to statewide, consideration of hydrologic and other uncertainties, and the flexibility in considering alternative water management strategies. There are a few technical options for performing the required analysis, but each option has pros and cons described in the table.

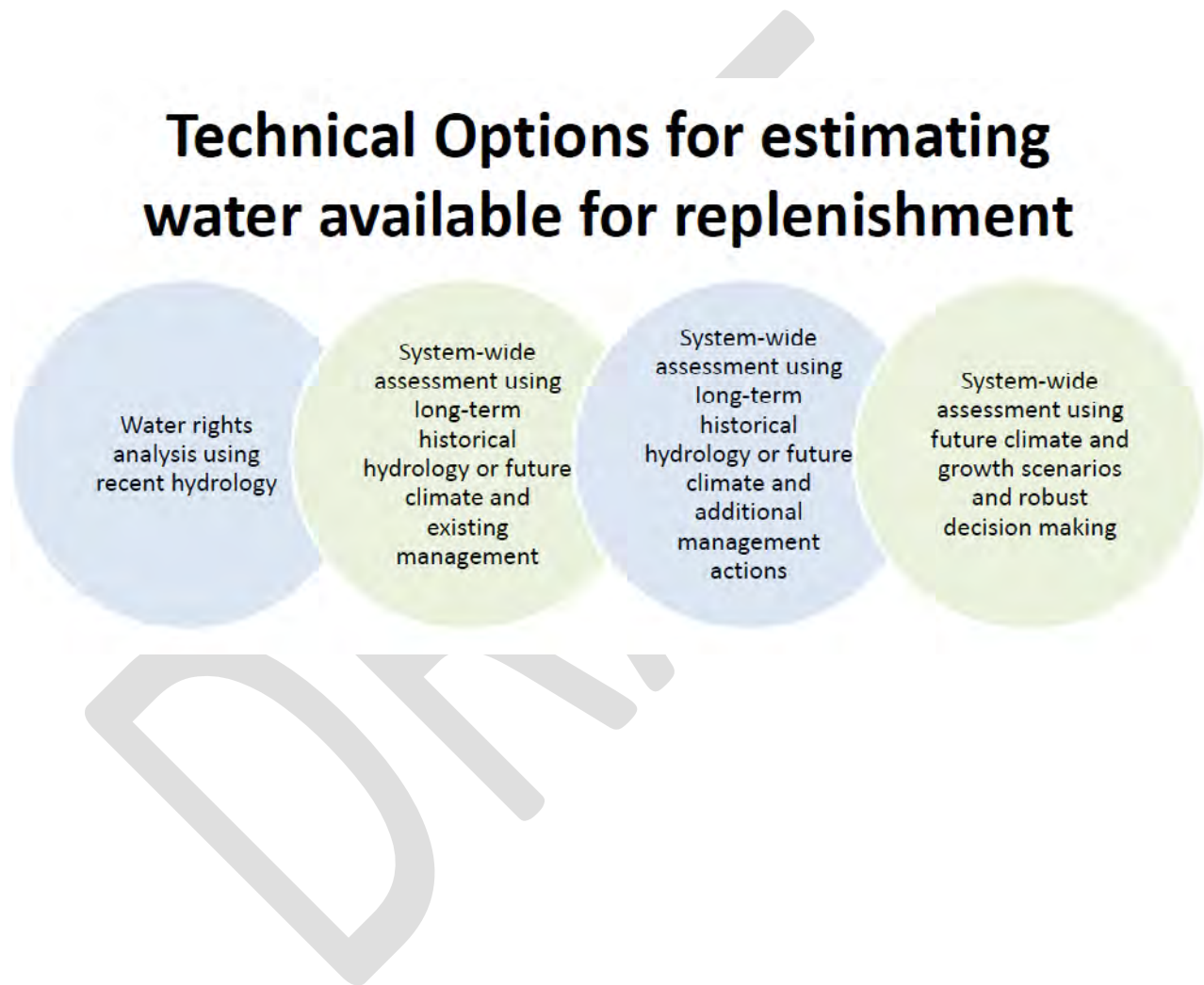


Table – Pros and Cons of Technical Options

Option	Examples	Pros	Cons
Water rights analysis using recent hydrology	Watershed based method for surplus water analysis (Water Board)	<ul style="list-style-type: none"> • Applicable across any watershed • Method is straightforward where historical data exists 	<ul style="list-style-type: none"> • Generally limited to using recent hydrology unless detailed model exists • Limited ability to evaluate new management strategies or stressors like climate change
System-wide assessment using long-term historical hydrology or future climate and existing management	<ul style="list-style-type: none"> • CALSIM/C2VSIM studies • SWP Delivery Reliability Report 	<ul style="list-style-type: none"> • Captures supply reliability for SWP/CVP service areas • Additional modeling with C2VSIM would allow assessment of surface water – groundwater interaction 	<ul style="list-style-type: none"> • Does not easily include local water management options • Does not includes areas outside SWP/CVP service areas
System-wide assessment using long-term historical hydrology or future climate and additional management actions	<ul style="list-style-type: none"> • Surface Storage Investigations 	<ul style="list-style-type: none"> • Captures supply variability for SWP/CVP service areas • Captures new statewide storage options and Delta Conveyance • Additional modeling with C2VSIM would allow assessment of surface water – groundwater interaction 	<ul style="list-style-type: none"> • Does not easily include local water management options • Does not includes areas outside SWP/CVP service areas
System-wide assessment using future climate and growth scenarios and robust decision making	<ul style="list-style-type: none"> • BDCP EIR/EIS 	<ul style="list-style-type: none"> • Captures supply variability for SWP/CVP service areas • Captures new statewide storage options and Delta Conveyance • Includes robust description of future climate variability 	<ul style="list-style-type: none"> • Does not easily include local water management options • Does not includes areas outside SWP/CVP service areas
	<ul style="list-style-type: none"> • Water Plan Update 2013 • USBR Sacramento San Joaquin Basin Study 	<ul style="list-style-type: none"> • More easily captures local management options • Includes robust description of future climate variability and future growth • Allows screening level surface water – groundwater interaction 	<ul style="list-style-type: none"> • Does not includes areas outside the Central Valley • Less detail for SWP/CVP operations
Other Options	IRWMP Inventory	<ul style="list-style-type: none"> • Allows narrative discussion of management strategies 	<ul style="list-style-type: none"> • Generally does not allow quantification of water available for groundwater replenishment

5.0 Considerations

There are several issues to consider when determining the appropriate approach to estimate water available for groundwater replenishment.

- Geographic scale: How localized does assessment of water available for groundwater replenishment need to be (water district vs. sub basin)? Should the focus be on SGMA High and Medium priority basins?
- Outreach: Given the short lead time to complete this requirement there is limited ability to interact with local water managers.
- No Single Approach: A hybrid of the approaches described in Section 4.0 will be needed to estimate water available for groundwater replenishment for watersheds statewide.
- Management Strategies: How important is consideration of new/future water management strategies in assessment of water available for groundwater replenishment (e.g. WaterFix/EcoRestore, new statewide storage, local conservation, local recycling etc.)?
- Capturing uncertainties: How important is consideration of future climate change, population growth, and regulatory changes (high / medium / low)? What other important uncertainties should be captured?
- Project operations: How important is quantification of SWP and CVP operations with respect to water available for replenishment (high / medium / low)?

ATTACHMENT C.4.



Sustainable Groundwater Management Act (SGMA)
DRAFT BASIN BOUNDARY EMERGENCY REGULATIONS - Factsheet
California Department of Water Resources (DWR)
http://water.ca.gov/groundwater/sgm/basin_boundaries.cfm

DRAFT BASIN BOUNDARY EMERGENCY REGULATIONS

It is the policy of the State that groundwater resources be managed sustainably for long-term reliability and multiple economic, social, and environmental benefits for current and future beneficial uses. The Department of Water Resources' (DWR) Sustainable Groundwater Management Program will implement the new and expanded responsibilities identified in the 2014 Sustainable Groundwater Management Act (SGMA). Sustainable groundwater management is best achieved locally through the development, implementation, and updating of plans and programs based on the best available science (Water Code § 113). The SGMA established a process for local agencies to request that DWR revise the boundaries of a groundwater basin or subbasin, including the establishment of new subbasins. California's groundwater basins and subbasins are defined in the DWR's [Bulletin 118-Update 2003](#) – and described below:

- A **groundwater basin** is defined as a three-dimensional alluvial aquifer, or a stacked series of alluvial aquifers, with reasonably well-defined boundaries in a lateral direction and a definable bottom.
- A **groundwater subbasin** is created by dividing a groundwater basin into smaller units using geologic and hydrologic barriers, or institutional boundaries.

By January 1, 2016, DWR is required to adopt emergency regulations that specify the information required to comply with Water Code §10722.2, which outlines the process that local agencies shall follow when requesting modifications to existing boundaries of groundwater basins and subbasins. The basin boundary regulations will also identify the methodology and criteria that will be applied by DWR when evaluating modification requests. In general, local agencies will be required to address all of the following:

- How to assess the likelihood that the proposed basin can be sustainably managed.
- How to assess whether the proposed basin would limit the sustainable management of adjacent basins.
- How to assess whether there is a history of sustainable management of groundwater levels in the proposed basin.

Existing groundwater basin and subbasin boundaries have been defined and revised based the best available information during each past update of Bulletin 118. The proposed draft emergency regulations create a process that builds off this historical knowledge and provides a mechanism to modify basin and subbasin boundaries or create new subbasins based on new scientific information and local groundwater management knowledge to improve coordination and promote sustainable groundwater management statewide.

The draft emergency regulations have been organized in a manner to encompass the variety of modifications that may be requested by local agencies. Each basin boundary modification includes requirements that vary according to the type of modification requested. It is required that basin boundary modifications be coordinated and consolidated and proposed by a single local agency, identified as the Requesting Agency. The Requesting Agency will prepare the basin boundary modification request information in accordance with the requirements for the type of modification requested.

SUMMARY OF REGULATION ARTICLES

The basin boundary modification regulations will be part of the California Code of Regulations Title 23 - Waters, Division 2 - Department of Water Resources, Chapter 1.5 – Groundwater Management, Subchapter 1 – Groundwater Basin Boundaries, and are arranged into seven articles. The following is a brief summary of each article:

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.

MODIFICATION TYPES

There are two primary types of basin modifications, scientific and jurisdictional, each with specific requirements to justify the modification request. The following is a description and graphical representation of the types of basin or subbasin modifications:

Scientific	Hydrogeologic
Jurisdictional	Internal
	Consolidation
	Subdivision

Scientific Modifications: Scientific-based modifications are those that are directly attributed to the hydrogeologic definition of the groundwater basin. These modifications require geologic and/or hydrologic evidence to support a boundary modification that will increase the likelihood of sustainable management of the groundwater basin.

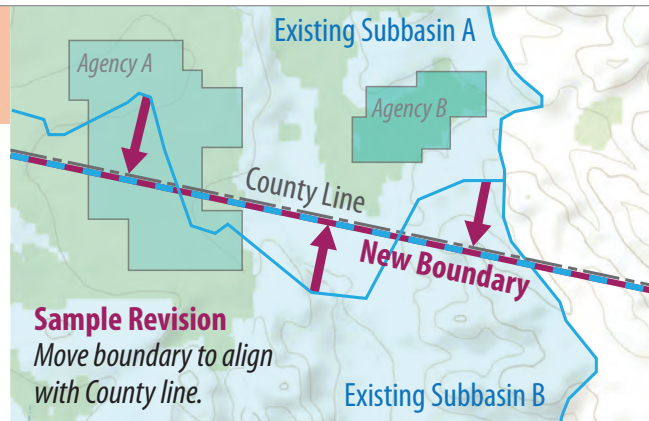
Jurisdictional Modifications: Jurisdictional modifications are those which increase the likelihood of sustainable groundwater management by modification of basin boundaries to promote the implementation of the SGMA without limiting the ability of the basins or affected basins to manage groundwater sustainably. Jurisdictional modifications have three sub categories: internal, consolidation, and subdivision.

Examples of Modification Types

SCIENTIFIC	
<p>A scientific revision to a basin boundary consists of the addition, deletion, or relocation of a boundary based on the geologic or hydrologic conditions that define that basin.</p>	<p>Sample Revision Addition or modification of boundary along barrier to groundwater flow.</p>

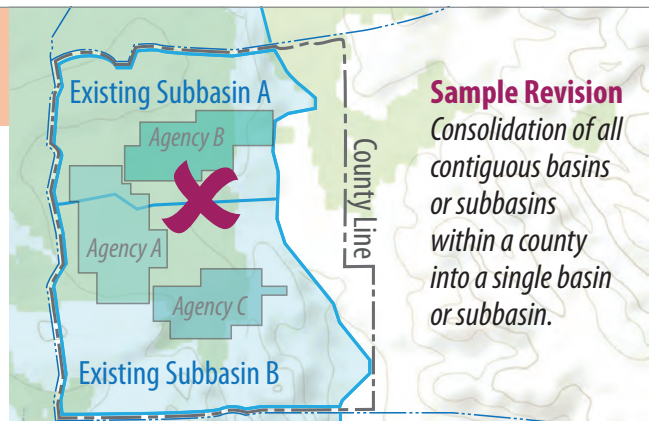
INTERNAL (Jurisdictional)

Internal Boundary Revision refers to any boundary modification that would adjust the location of a boundary between subbasins, within a basin, or the shared boundary between adjacent basins.



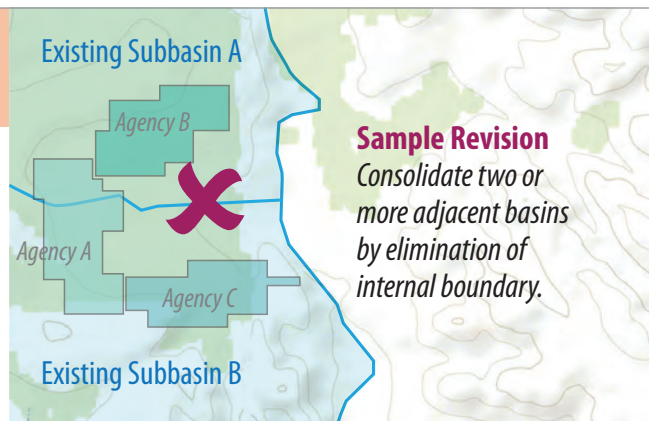
COUNTY BASIN CONSOLIDATION (Jurisdictional)

County Basin Consolidation means the consolidation of all contiguous basins or subbasins within a county into a single basin or subbasin whose boundaries do not extend beyond those of the county.



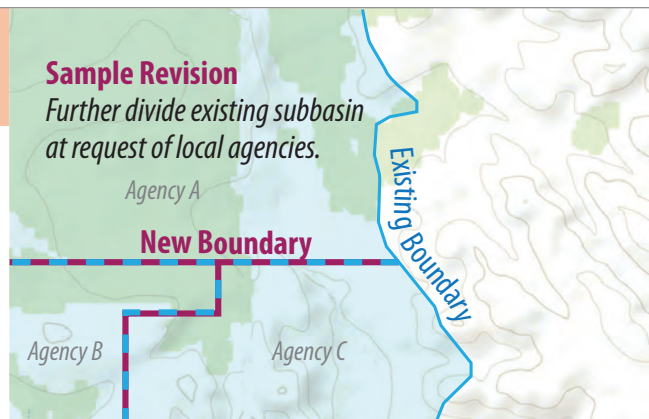
BASIN CONSOLIDATION (Jurisdictional)

Basin Consolidation refers to any boundary modification that would reduce the number of subbasins within a basin, or merge two or more adjacent basins, but would change only shared boundaries and would not change the external boundary of any basin or subbasin.



BASIN SUBDIVISION (Jurisdictional)

Basin Subdivision refers to any boundary modification that would increase the number of subbasins within a basin or subbasin.



REQUIRED COMPONENTS OF BOUNDARY MODIFICATION

The information submitted by a Requesting Agency to justify a basin boundary modification needs to align with the criteria described in the SGMA (Water Code § 10722.2(c)(1)-(3)). The criteria are general, as described below, but provide a context in which to present information to support the modification request.

1. How to assess the likelihood that the proposed basin can be sustainably managed.
2. How to assess whether the proposed basin would limit the sustainable management of adjacent basins.
3. How to assess whether there is a history of sustainable management of groundwater levels in the proposed basin.

All of the following three components are required for basin boundary modifications relate to Water Code §10722.2(a):

Component 1 – General Information

A Requesting Agency will be required to provide general information including: contact information; a narrative description and justification for the proposed boundary modification. This information is important as it provides the opportunity to explain what type of modification is being proposed and the rationale for why the modification will result in sustainable groundwater management. It also provides for the evaluation of eligibility as a local agency and provides contact information to assure that the modification request is coordinated properly. All Requesting Agencies must complete all of these requirements for all types of modification requests.

Component 2 – Notification, Consultation, and Local Support

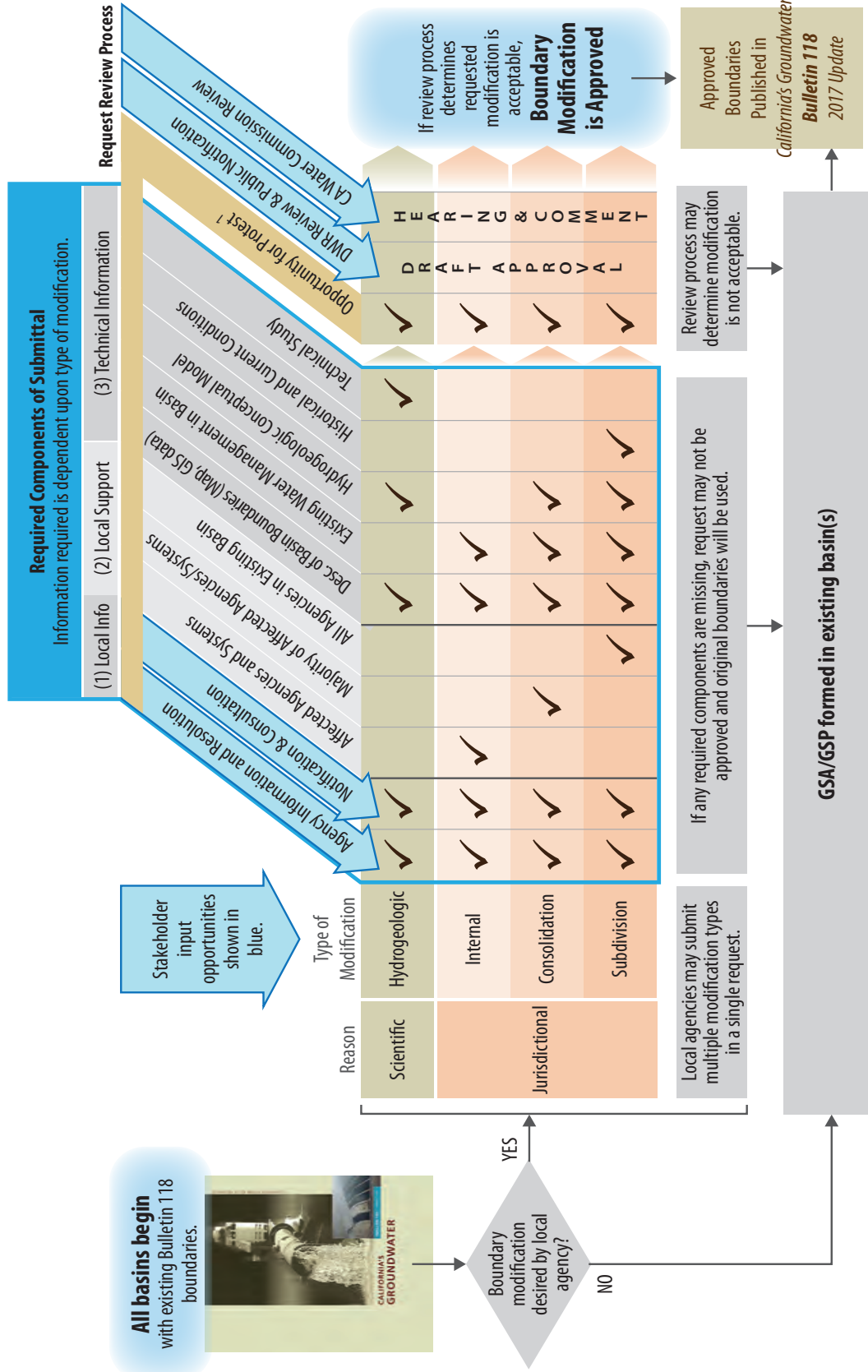
A Requesting Agency will need to demonstrate the required notification, consultation, and broad local support for each basin boundary modification request. The purpose of this component is to establish communication among the multiple local agencies and public water systems potentially affected by the modification and clearly demonstrate the intent and support at the local level. Broad local support demonstrates that the modification will result in the likelihood of sustainable groundwater management of the proposed basin, as well as the adjacent basins or subbasins. The notification, consultation, and broad local support are described below related to the type of basin modification:

- **All Requests** – Require Notification and Consultation (Article 5). For all basin boundary modifications, interested local agencies and public water systems must be consulted and a notice of the proposed modification shall be made public. A summary of public meetings where the proposed modification was discussed, including comments received, is required.
- **Jurisdictional Requests** - Local Support (Article 5).
 - **Internal Boundary** – Must demonstrate that each affected local agency and affected public water system support the modification request.
 - **Basin Consolidation and County Basin Consolidation** – Must demonstrate that a majority of affected local agencies and affected public water systems support the modification request.
 - **Basin Subdivision** – Must demonstrate that each affected local agency and each affected public water system support the modification request in the affected basin(s).

Component 3 – Technical Information

Technical information describing and supporting the three criteria identified in Water Code § 10722.2(c) is required for basin boundary modification. Requesting Agencies are required to provide evidence to justify the modification of a basin boundary and show compliance with the legislative intent of the SGMA. The technical supporting information required for each modification type is illustrated in the draft basin boundary modification process graphic below and described in detail in Article 5.

Basin Boundary Modification Process



¹ A protest submittal requires the same components as a boundary modification request, based on type of modification.

STAKEHOLDER INPUT OPPORTUNITIES

Local agencies, as defined in the SGMA, are eligible to request basin boundary modifications. The draft emergency regulations have been established to provide multiple opportunities for stakeholder input and notification of basin modification requests. The initial opportunity is direct communication with the Requesting Agency or an affected local agency through typical hearing processes at the local level. The notice, consultation, and local support component requires public meetings to occur prior to all boundary modification requests.

The draft emergency regulations include a protest provision (Article 4), which defines a process for stakeholders to protest a proposed modification, after a request is officially submitted to the DWR. A protest must rely on the same type of scientific and technical information, and will be evaluated by the same criteria, as the particular basin modification request to which it is addressed.

DWR will make the proposed recommendations for basin boundary modifications available on its website and will hold a public meeting to present and discuss the proposed recommendations.

Another opportunity to provide input on proposed basin boundary modifications is when DWR presents the list of proposed recommendations to the California Water Commission (CWC).

NEXT STEPS FOR ADOPTING REGULATIONS

The following is the anticipated schedule and next steps for adopting the emergency regulations:

- July 15, 2015** – Informational update on basin boundary emergency regulations presented to the CWC.
- July 17, 2015** – Draft basin boundary emergency regulations available on website.
- August 19, 2015** – Informational update on basin boundary emergency regulations presented to the CWC.
- August 31, 2015** – Public meeting and webinar presenting the draft basin boundary emergency regulations. Location: Byron Room, California EPA Building, Sacramento.
- September 2, 2015** – Public meeting presenting the draft basin boundary emergency regulations. Location: Bakersfield Community College, Bakersfield.
- September 3, 2015** – Public meeting presenting the draft basin boundary emergency regulations. Location: The Delhi Center, Santa Ana.
- September 4, 2015** – Deadline for comment on draft emergency regulations.
- September 16, 2015** – Informational update on basin boundary emergency regulations presented to the CWC.
- October – November, 2015** – Formal Notice of Proposed Rulemaking and supporting information.
- October – November, 2015** – Presentation of proposed emergency regulations to CWC for adoption.
- October – November, 2015** – Submission of adopted emergency regulations to Office of Administrative Law.
- January 1, 2016** – Basin boundary modification requests accepted by DWR within 90 day period.

*All dates are subject to change