

San Pasqual Valley Groundwater Basin Sustainable Groundwater Management Act Advisory Committee Meeting

Groundwater Model Update
Sustainability Criteria
Projects and Management Actions



October 8, 2020



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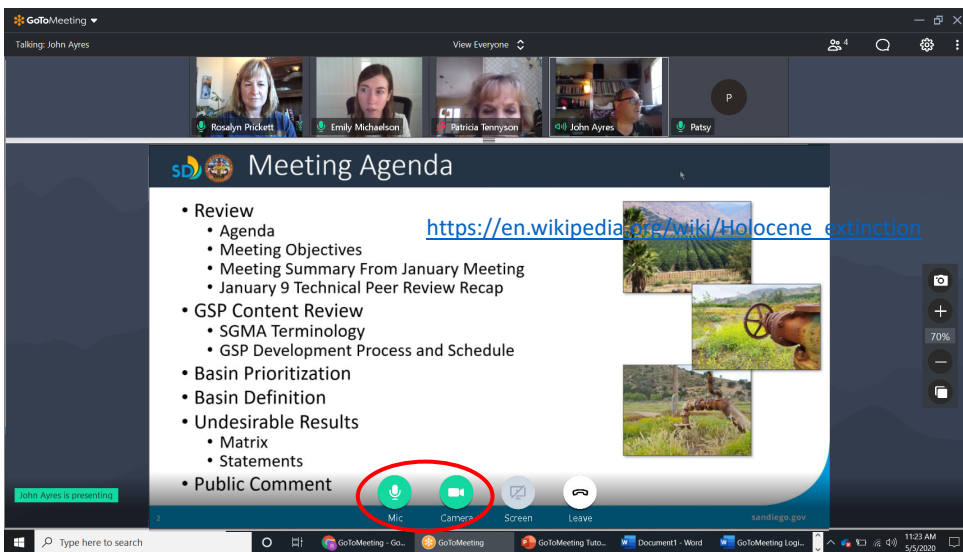
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GoToMeeting – Quick How To

• Your screen should look like this:



- Turn on/off your Mic (mute) and Camera (video) using the controls along the bottom
- During the meeting, you may need to wiggle your mouse to make the controls appear

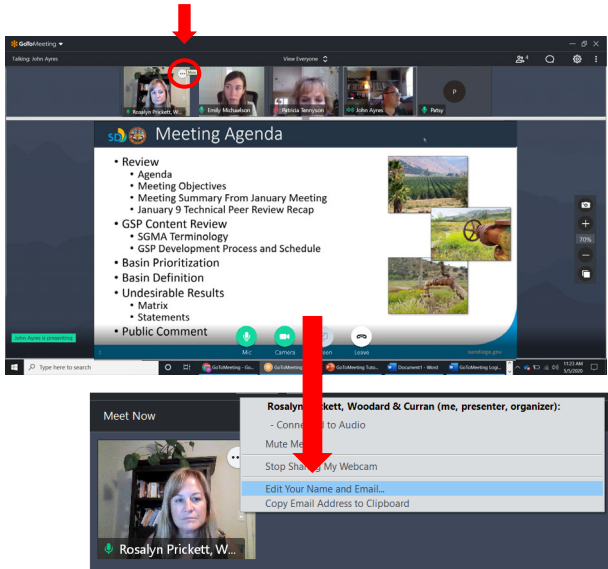
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GoToMeeting – Please Enter Your Name



- Please identify yourself with your full name and organization
- Hover over your photo and click on the 3 dots, then *Edit Your Name and Email*
 - AC members – please include “AC – Name, Entity”
 - All other participants – please include “Name, Entity”

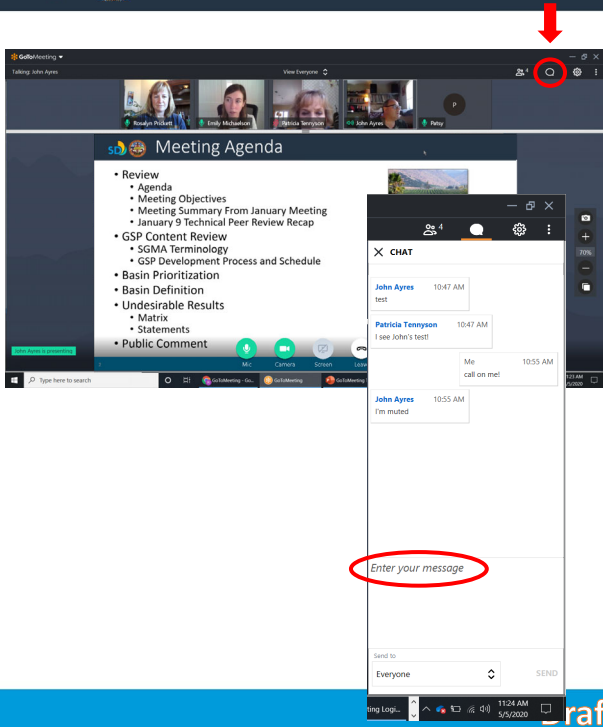
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GoToMeeting – How to Comment



- Our facilitator will mute everyone at the beginning of the meeting
- Let us know you have a comment or question by clicking the **Chat** icon in the top right
 - Click on *Enter your message*, type your name and organization and hit SEND
- Wait until our facilitator calls on you:
 - Our facilitator will unmute you to relay your question or comment
 - Please also check your phone/computer to make sure you’re not muted there too

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San Pasqual Valley GSP Advisory Committee Meeting

REVIEW

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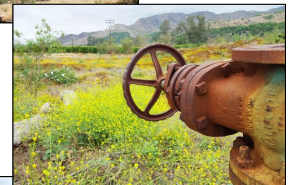


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Meeting Agenda

1. Roll Call & Introductions
2. Review
 - Agenda
 - Meeting Objectives
 - Previous Meeting Summary
 - Summary of Comments Received
 - TPR Meeting Recap
 - Review of Ground Rules
 - Public Comment Format
3. GSP Content Review
 - GSP Development Process
 - Project Schedule
4. Groundwater Model Update
 - Well-parcel and Land Use Maps
 - Water Budget Primer
5. Projects and Management Actions
 - Categories
 - Adaptive Management
 - Seeking AC/Public Input
 - Management Areas
6. Field Program Update
7. Public Comments
8. Next Steps & Closing Remarks



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Meeting Objectives, Summary, and Comments Received

- Meeting Objectives
 - Provide Groundwater Model update
 - Discuss Projects and Management Actions
- Previous Meeting Summary
 - See Handout 1
- Summary of Comments Received
 - See Handout 2

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Technical Peer Review (TPR) Recap

- July 9 TPR Meeting:
 - Groundwater Model Update
 - Monitoring Networks
 - Sustainability Criteria
 - Refined Cross Sections
 - Field Program Update
- October 8 TPR Meeting:
 - Groundwater Model Update
 - Model layering
 - Stream inflow estimates
 - Parameter assumptions
 - Calibration targets
 - Projects and Management Actions

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Review of Ground Rules-Focus on the Future

- AC is a resource for the Core Team; not a decision-making body
- Members represent their stakeholder group, not their personal interest
- All perspectives are valued, and all will be recorded
- The goal is not to resolve all differences in perspective, but to acknowledge and understand them
- Comments should be respectful, and focus on substance of the discussion, not denigrate other perspectives or make assumptions about motives
- Everyone will be given opportunities to speak, one at a time, when called upon by the facilitator
- No side conversations
- Questions of clarification should be put into the **Chat** during presentations; they will be addressed after the presentation is complete

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Updated Public Comment Format

- All public comment will be summarized in the meeting summary
- Those wishing to comment should place their name and organization in the **Chat**; participants will be called on in the order received
- Public comment will take place at the conclusion of all AC discussion; and the AC is not obligated to respond to those making public comment
- Comments should be respectful, and focus on substance of the discussion, not denigrate other perspectives or make assumptions about motives
- If AC members have responses to public comment, they should be e-mailed to Sandra Carlson
- Any comments or concerns made between meetings must be directed to Sandra Carlson; please do not reply-all AC group

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**San Pasqual Valley GSP
Advisory Committee Meeting**

Advisory Committee Comments

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**San Pasqual Valley GSP
Advisory Committee Meeting**

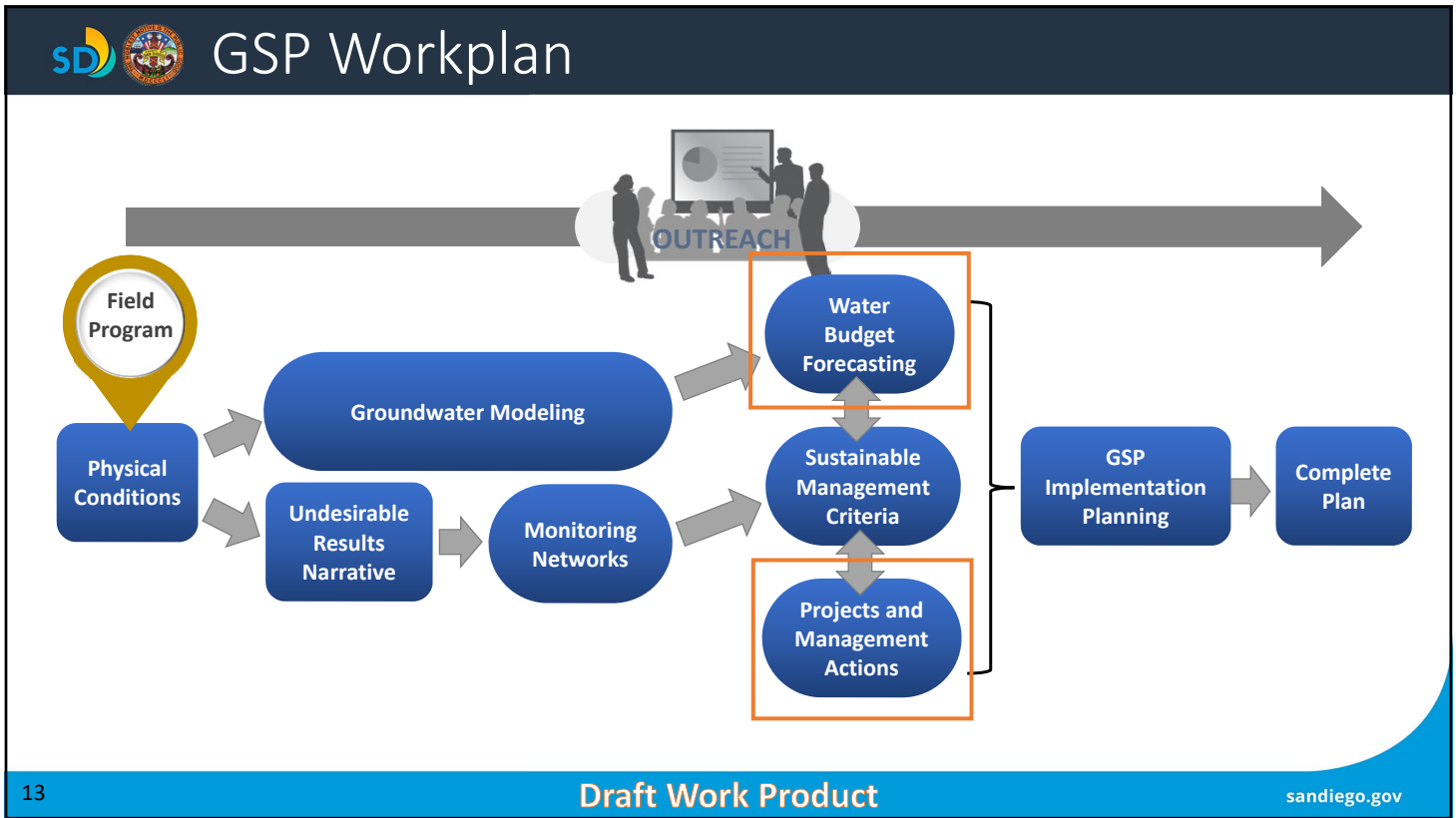
GSP CONTENT REVIEW

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GSP Schedule

Year	Quarter	Advisory Committee Topics	Technical Peer Review Topics	Outreach	Plan Area, HCM, GW Conditions	Model Development and Water Budgets	Monitoring and DMS	Undesirable Results and Sustainable Management Criteria	Projects and Management Actions and Implementation	Field Program
2020	Q2	Undesirable Results Groundwater Model Overview Sustainable Management Criteria Review Field Program Update	Section 6: Undesirable results, Groundwater model approach - Model code - Model data Groundwater model check in - calibration - Fate and transport Section 7: Monitoring Networks Section 8: Sustainable Management Criteria Groundwater model check in - calibration - Fate and transport							
2020	Q3	Groundwater Model Update Sustainable Management Criteria Projects and Management Actions	Section 5: Water Budgets Section 6: Undesirable results Section 7: Monitoring Networks Section 8: Sustainable Management Criteria Groundwater model check in - calibration							
2020	Q4	Water Budgets Sustainable Management Criteria Projects and Management Actions	Groundwater model check in Section 5: Water Budget - Baselines - Forecasts Section 8: Sustainable Management Criteria Section 9: Projects and Management Actions							
2021	Q1	Projects and Management Actions Plan Implementation	Section 5: Water Budget - Baselines - Forecasts Section 9: Projects and Management Actions Section 10: Plan Implementation							
2021	Q2	Share Draft GSP to AC and TPR for review	No Meeting							

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Advisory Committee Comments

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GROUNDWATER MODEL UPDATE

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Numerical Model Update

- See Handout 3

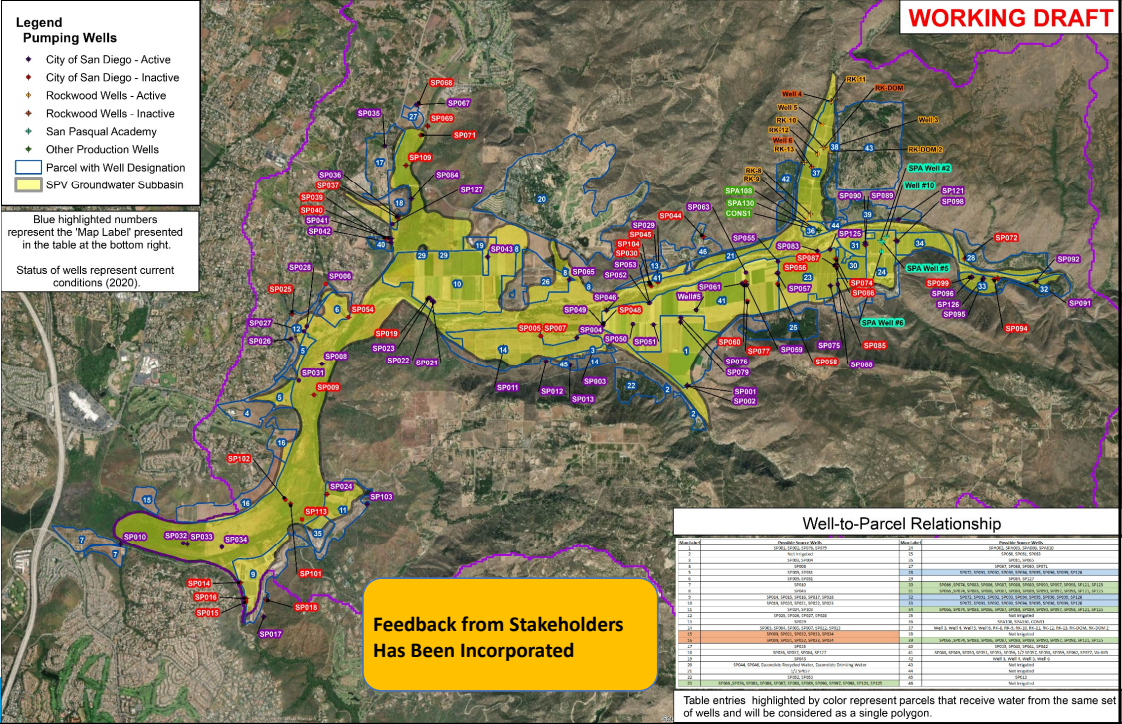
WORKING DRAFT

Legend Pumping Wells

- ◆ City of San Diego - Active
- ◆ City of San Diego - Inactive
- ◆ Rockwood Wells - Active
- ◆ Rockwood Wells - Inactive
- ◆ San Pasqual Academy
- ◆ Other Production Wells


▭ Parcel with Well Designation
▭ SPV Groundwater Subbasin

Blue highlighted numbers represent the 'Map Label' presented in the table at the bottom right.
Status of wells represent current conditions (2020).



**Feedback from Stakeholders
Has Been Incorporated**

Well-to-Parcel Relationship	
Well Label	Parcel ID
SP001	1
SP002	2
SP003	3
SP004	4
SP005	5
SP006	6
SP007	7
SP008	8
SP009	9
SP010	10
SP011	11
SP012	12
SP013	13
SP014	14
SP015	15
SP016	16
SP017	17
SP018	18
SP019	19
SP020	20
SP021	21
SP022	22
SP023	23
SP024	24
SP025	25
SP026	26
SP027	27
SP028	28
SP029	29
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SP031	31
SP032	32
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SP100	100



Numerical Model Update

- See Handout 3

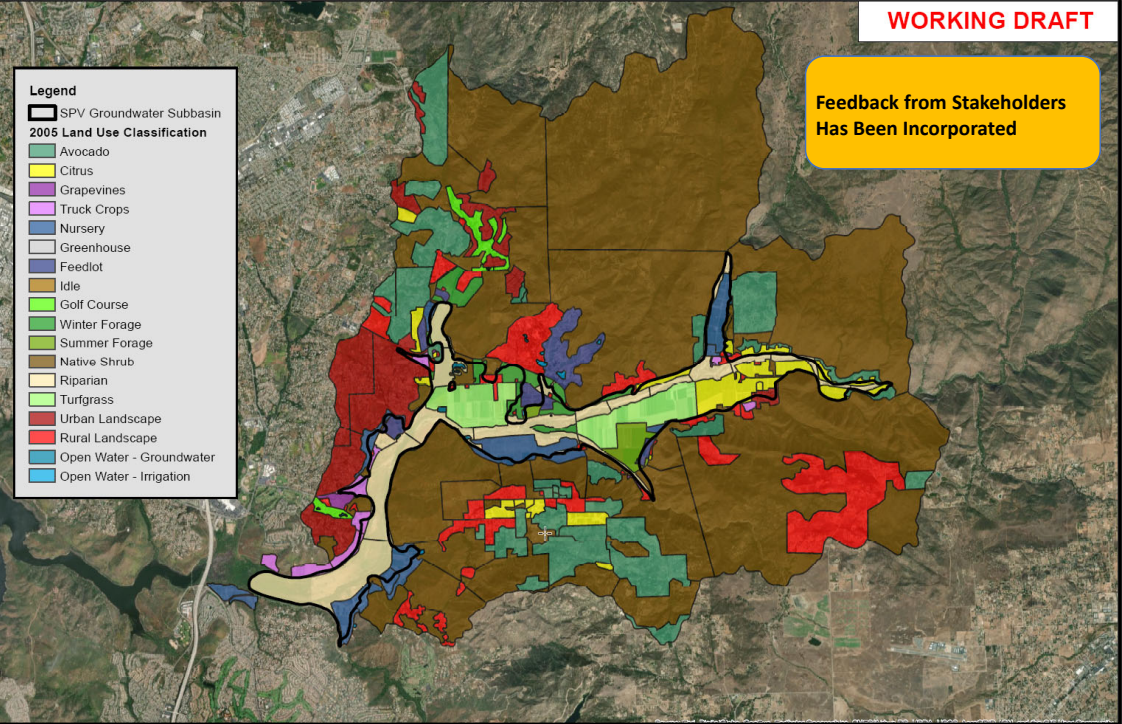
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Legend

- ▭ SPV Groundwater Subbasin

2005 Land Use Classification

- ▭ Avocado
- ▭ Citrus
- ▭ Grapevines
- ▭ Truck Crops
- ▭ Nursery
- ▭ Greenhouse
- ▭ Feedlot
- ▭ Idle
- ▭ Golf Course
- ▭ Winter Forage
- ▭ Summer Forage
- ▭ Native Shrub
- ▭ Riparian
- ▭ Turfgrass
- ▭ Urban Landscape
- ▭ Rural Landscape
- ▭ Open Water - Groundwater
- ▭ Open Water - Irrigation



**Feedback from Stakeholders
Has Been Incorporated**

SD
Numerical Model Update

- See Handout 3

WORKING DRAFT

Legend

SPV Groundwater Subbasin

2018 Land Use Classification

- Avocado
- Citrus
- Grapevines
- Truck Crops
- Nursery
- Greenhouse
- Feedlot
- Idle
- Golf Course
- Winter Forage
- Summer Forage
- Native Shrub
- Riparian
- Turfgrass
- Urban Landscape
- Rural Landscape
- Open Water - Groundwater
- Open Water - Irrigation

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Numerical Model Update

- Model Uses:
 - Estimate historical, current, and projected water budgets
 - Estimate change in groundwater storage
 - Estimate surface water and groundwater interaction

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WATER BUDGET PRIMER

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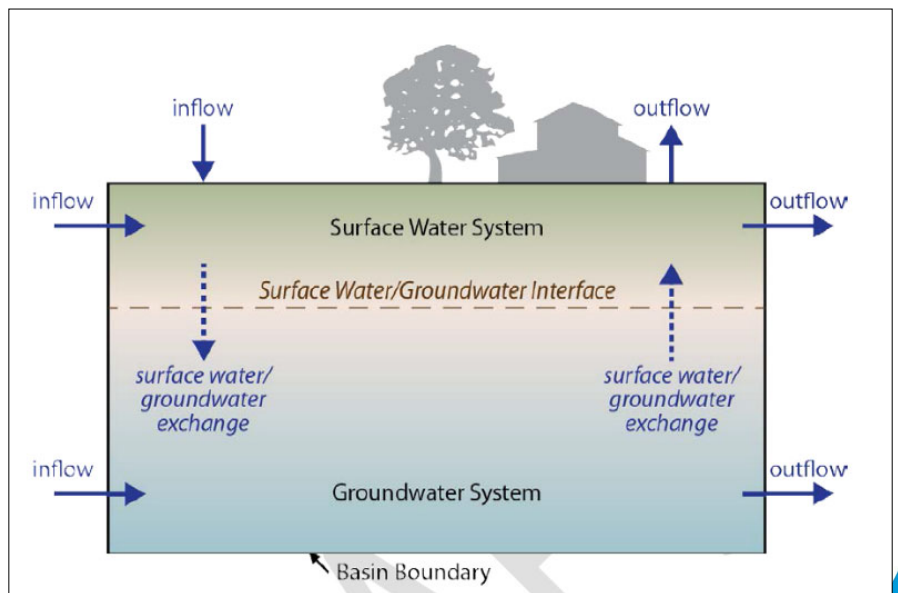


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Water Budget Primer

- Water Budget: an accounting of the total groundwater and surface water entering and leaving a groundwater basin.




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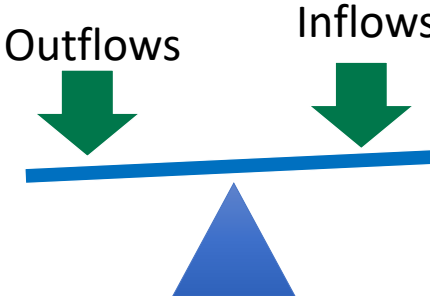
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Water Budget Primer

- Water Budgets are like bank accounts
- Inflows and outflows are tracked and compared over time to identify change in amount of water stored
- The amount of groundwater in storage is the bank account balance



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Water Budget Primer

Water Budgets Under SGMA

Historical Water Budget

Evaluates availability of past water use and aquifer response to water supply and demand trends relative to water year type, over at least 10 years

Current Conditions Baseline

Quantifies current inflows and outflows using the most recent data on hydrology, water supply, water demand, and land use

Projected Water Budget

Estimates future baseline conditions of supply, demand, and aquifer response to Plan implementation

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Water Budget Primer

Why are water budgets important?

- Provides values needed to manage groundwater
 - Status and trends of groundwater in storage
 - Primary components of inflows and outflows
- Assists in identifying the need for projects or actions to address groundwater levels

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Water Budget Primer

So we're managing to the water budget?

- It is not required to manage to the water budget under SGMA
- Sustainability can be accomplished by responding to monitoring
- Water budgets help identify if management actions are needed to maintain sustainability
- DWR's *Water Budget Best Practices (DWR, 2016)* states:

“SGMA requires local agencies to develop and implement GSPs that achieve sustainable groundwater management by implementing projects and management actions intended to ensure that the basin is operated within its sustainable yield by avoiding undesirable results”

- Undesirable results are detected by the GSP's monitoring network using sustainable management criteria (Discussed in detail next meeting)



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Advisory Committee Comments

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**PROJECTS AND MANAGEMENT
ACTIONS**

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Projects and Management Actions

- GSP Regulation 354.44 (a) “Each Plan shall include a description of the projects and management actions the Agency has determined will achieve the sustainability goal for the basin, including projects and management actions to respond to changing conditions in the basin.”
- “354.44 (b)(1) A list of projects and management actions proposed in the Plan with a description of the measurable objective that is expected to benefit from the project or management action. The list shall include projects and management actions that may be utilized to meet interim milestones, the exceedance of minimum thresholds, or where undesirable results have occurred or are imminent.”

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Projects and Management Actions

- Categories of projects and management actions
 - GSP Implementation – Activities that will be conducted regardless of basin conditions
 - Groundwater Quality – Coming next meeting
 - Adaptive Management – Activities that will be conducted only as needed
 - Projects
 - Management Actions

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Projects and Management Actions

- GSP Implementation:
 - Continue monitoring for levels and quality
 - Advisory Committee meetings
 - Core Team meetings
 - Annual Reports
 - 5 Year Updates
 - Numerical model updates
 - Pursue funding opportunities
 - Groundwater monitoring improvements

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Projects and Management Actions

- Adaptive Management:
 - ...is a structured, iterative process of decision making with an aim of reducing uncertainty over time via monitoring to meet resource management objectives.
- The San Pasqual Valley Basin is not experiencing undesirable results related to levels (significantly and unreasonably worse than 2015 conditions)
- Projects and Management Actions (PMAs) will be developed in this GSP to maintain conditions to avoid undesirable results in groundwater levels in the future by using adaptive management

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Projects and Management Actions

- Adaptive Management
 - Framework for implementation of management actions and projects to address sustainability indicators as needed
 - Iterative and cyclical process
 - Triggered by sustainable management criteria
 - Allows GSA to select and refine the correct projects and/or management actions if they are needed to prevent reaching undesirable results
 - Prevents implementation of unneeded actions or projects
 - More details next meeting

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Projects and Management Actions

- Example Projects that may be Considered:
 - Stormwater Recharge in-channel
 - Recycled Water Recharge or Direct Delivery (Escondido) Membrane Filtration Reverse Osmosis (MFRO) water to Cloverdale Creek
 - Recycled Water Recharge (Escondido) MFRO water with pipeline to eastern portion of Basin
 - Recycled Water Recharge (San Diego) new Water Reclamation Facility water with pipeline to eastern portion of Basin
 - Water Recharge or Direct Delivery with from Ramona Municipal Water District to eastern portion of Basin

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Projects and Management Actions

- **Example Management Actions that May be Considered:**
 - Demand Softening – encourage changing of crop types to less water intensive uses
 - Irrigation Efficiency – GSA encourage improved efficiency
 - RWQCB Coordination – GSA may coordinate with RWQCB on water quality issues
 - Well Inventory – GSA may inventory wells in Basin
 - Basinwide Metering – GSA may require meters on extraction wells
 - Pumping Restrictions – GSA may limit pumping

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Projects and Management Actions

- **Advisory Committee Input:**
 - Potential projects?
 - Potential management actions?
 - Considerations about adaptive management?

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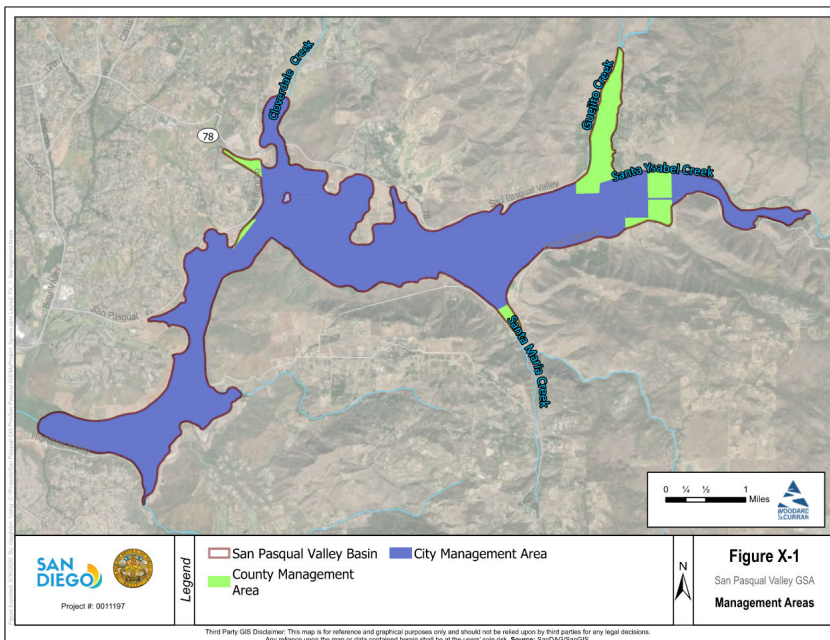
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Management Areas



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FIELD PROGRAM UPDATE

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Field Program Update

- Aquifer testing is still on hold



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FINAL THOUGHTS BY AC

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PUBLIC COMMENT

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NEXT STEPS & CLOSING REMARKS

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Next Meeting

- Next AC Meeting:
 - January 14, 2020, 2-4pm
- Public Notices are at:
 - Online:
<https://www.sandiegocounty.gov/content/sdc/pds/SGMA/san-pasqual-valley.html>

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- For additional information, please contact:
Sandra Carlson at (619) 533-4235
carlsons@sandiego.gov

Thank You!

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