



UKIAH VALLEY BASIN GROUNDWATER SUSTAINABILITY AGENCY
501 Low Gap Rd., Rm. 1010 ♦ Ukiah ♦ California 95482 ♦ (707)463-4441 ♦ fax (707)463-7237

NOTICE OF MEETING

NOTICE IS HEREBY GIVEN that the Ukiah Valley Basin Groundwater Sustainability Agency (“Agency”) Board of Directors (“Board”) will hold its regular Board Meeting at:

1:30 P.M. - Thursday, March 12, 2020
Mendocino County Board of Supervisors Chambers,
501 Low Gap Road, Room 1070, Ukiah, CA 95482

AGENDA

- 1. CALL TO ORDER AND ROLL CALL**
- 2. PLEDGE OF ALLEGIANCE**
- 3. STAFF UPDATES**
- 4. PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA**

The Board will receive public comments on items not appearing on the agenda and within the subject matter jurisdiction of the Agency. The Board will not enter into a detailed discussion or take any action on any items presented during public comments. Such items may only be referred to staff for administrative action or scheduled on a subsequent agenda for discussion. Persons wishing to speak on specific agenda items should do so at the time specified for those items. The presiding Chair shall limit public comments to three minutes.

5. ACTION ITEMS

a. Discussion and Possible Action Regarding Member Agency Dues for Fiscal Year 2020-2021

The Board will review the current financial status of the Agency and consider due for Fiscal Year 2020-2021 to fund the Agency administration as the Groundwater Sustainability Plan is developed.

b. Update and Discussion Regarding Proposition 68 Solicitation for Groundwater Sustainability Plan Development and Projects

The Board will receive an update on Proposition 68 grant solicitation.

c. Presentation, Discussion and Possible Action Regarding the Development of Sustainability Goals



UKIAH VALLEY BASIN GROUNDWATER SUSTAINABILITY AGENCY
501 Low Gap Rd., Rm. 1010 ♦ Ukiah ♦ California 95482 ♦ (707)463-4441 ♦ fax (707)463-7237

The Board will receive an introduction to the development of sustainability goals for the Ukiah Valley Basin Groundwater Sustainability Plan.

d. Update and Discussion Regarding the Technical Advisory Committee's Groundwater Interaction Working Group

The Board will receive an update on the Technical Advisory Committee's working group.

6. DIRECTOR REPORTS

7. ADJOURNMENT

The Ukiah Valley Basin Groundwater Sustainability Agency complies with ADA requirements and upon request, will attempt to reasonably accommodate individuals with disabilities by making meeting material available in appropriate alternative formats (pursuant to Government Code Section 54953.2). Anyone requiring reasonable accommodation to participate in the meeting should contact the Mendocino County Executive Office by calling (707) 463-4441 at least five days prior to the meeting.

Please reference the Mendocino County website to obtain additional information for the Ukiah Valley Basin Groundwater Sustainability Agency: <http://www.mendocinocounty.org/uvbgsa>



Ukiah Valley Basin Groundwater Sustainability Agency

Agenda Summary

| | |
|--|---|
| Item No.: | 6.a |
| Date: | 3/12/20 |
| To: | Board of Directors |
| Subject: | Discussion and Possible Action Regarding Member Agency Dues for Fiscal Year 2020-2021 |
| Consent Agenda <input type="checkbox"/> Regular Agenda <input checked="" type="checkbox"/> Noticed Public Hearing <input type="checkbox"/> | |

Summary:

The board will review the current financial status of the Agency and consider dues for Fiscal Year 2020-2021 to fund the Agency administration as the Groundwater Sustainability Plan is developed.

Recommended Action:

Approve the assessment for three thousand dollars (\$3,000) in dues for member agencies to fund the Agency for Fiscal Year 2020-2021 and 2021-2022.

Background:

In order to provide the needed capital to initially fund the Agency, there was a contribution from Members Agencies in the amount of five thousand dollars (\$5,000). The Joint Powers Agreement (JPA) section 15.2 allows the Agency to be funded through additional contributions by all members of the Agency.

The current amount in the trust account is \$7,678.64. Based on projections for the end of the fiscal year, staff believes there will be an account balance of \$3,700. Additional funding will be needed for next fiscal year. In March 2020, the Groundwater Sustainability Plan (GSP) Financial Evaluation process will start. The evaluation will provide recommendations on long-term funding options for plan implementation.

Staff recommends the member agencies provide contributions of \$3,000 to fund the GSA for the next two fiscal years. Allowing for the completion of both the GSP Financial Evaluation and adoption of the GSP. If approved, the member agencies will receive an invoice of \$3,000 at the start of next fiscal year (July 2020).



Ukiah Valley Basin Groundwater Sustainability Agency

Agenda Summary

Fiscal Summary: N/A

Action: _____

Motion: _____ **2nd:** _____

03/06/2020 12:22
clarkj

MENDOCINO COUNTY PRODUCTION v11.3
ACCOUNT DETAIL HISTORY FOR 2020 00 TO 2020 13

P 1
glacthst

| ORG YR/PR | ACCOUNT JNL EFF DATE | SRC REF1 | REF2 | REF3 | CHECK # | OB | AMOUNT | NET LEDGER BALANCE | NET BUDGET BALANCE |
|-----------------------------|---|----------|--------|----------|----------|--|----------|-----------------------|-----------------------|
| 2110 | 2110-00-000-0000-000-00-000000-000000-760256- | | | | UK | VLY BASIN GROUNDWATER SUS SOY BALANCE | | -8,984.91 | |
| 20/01 | 394 07/01/19 | GRV REV | ACCRUE | 2018/19 | | | -50.00 | -9,034.91 | |
| 20/05 | 503 11/14/19 | GEN Q1 | | | | | 1,356.27 | -7,678.64 | |
| LEDGER BALANCES --- DEBITS: | | | | 1,356.27 | CREDITS: | -9,034.91 | NET: | -7,678.64 | |
| GRAND TOTAL --- DEBITS: | | | | 1,356.27 | CREDITS: | -9,034.91 | NET: | -7,678.64 | |

3 Records printed

** END OF REPORT - Generated by Janet Clark **



Ukiah Valley Basin Groundwater Sustainability Agency

Agenda Summary

| | |
|--|--|
| Item No.: | 6.b |
| Date: | 3/12/20 |
| To: | Board of Directors |
| Subject: | Update and Discussion Regarding Proposition 68 Solicitation for Groundwater Sustainability Plan Development and Projects |
| Consent Agenda <input type="checkbox"/> Regular Agenda <input checked="" type="checkbox"/> Noticed Public Hearing <input type="checkbox"/> | |

Summary:

The Board will receive a presentation regarding Proposition 68 grant application to support the development of the Ukiah Valley Groundwater Sustainability Plan.

Recommended Action:

Receive update regarding the Proposition 68 solicitation for Groundwater Sustainability Plan development and projects.

Background:

On May 3, 2019, DWR released the Draft SGM Grant Program Proposition 68 2019 Guidelines and Planning Grant - Round 3 Proposal Solicitation Package (PSP) to conduct the third SGM Planning Grant solicitation in mid-May to make approximately \$47 million available for competitive grants.

The Proposition 68 SGM Implementation Grant solicitation is anticipated to open in early 2020. At least \$88 million will be available for competitive grants for projects that address drought and groundwater investments.

The Proposition 68 solicitation was released on September 9, 2019 and was slated to close on November 1, 2019. Due to the fires in Northern California and the widespread Public Safety Power Shutoff the Governor declared a statewide emergency resulting in DWR extend the submission date to November 15 at 1pm.

The Mendocino County Water submitted an application for funding. The Ukiah Valley Basin GSP Development Support application is recommended for full funding in the amount of \$1,23,800.



Ukiah Valley Basin Groundwater Sustainability Agency

Agenda Summary

Fiscal Summary: N/A

Action: _____

Motion: _____ **2nd:** _____



Ukiah Valley Basin Groundwater Sustainability Agency

Agenda Summary

| | |
|--|--|
| Item No.: | 6.c |
| Date: | 3/12/20 |
| To: | Board of Directors |
| Subject: | Presentation, Discussion and Possible Action Regarding the Development of Sustainability Goals |
| Consent Agenda <input type="checkbox"/> Regular Agenda <input checked="" type="checkbox"/> Noticed Public Hearing <input type="checkbox"/> | |

Summary:

The Board will receive an introduction to the development of sustainability goals for the Ukiah Valley Basin Groundwater Sustainability Plan.

Recommended Action:

Receive presentation regarding sustainability goals and provide direction to staff.

Background:

On June 14, 2018, the Ukiah Valley Basin Groundwater Sustainability Agency (UVBGSA) recommended approval of a contract with Larry Walker and Associates for the development of the Ukiah Valley Groundwater Sustainability Plan (GSP). On July 10, 2018, the Mendocino County Water Agency Board of Directors approved the contract with Larry Walker and Associates.

Larry Walker and Associates presents to the Board on a regular basis to review components of the GSP for feedback and approval. LWA will provide a GSP update and review the sustainability goals development process.

Fiscal Summary: N/A

Action: _____

Motion: _____ **2nd:** _____



Ukiah Valley Basin Groundwater Sustainability Agency

Agenda Summary

| | |
|--|--|
| Item No.: | 6.d |
| Date: | 3/12/20 |
| To: | Board of Directors |
| Subject: | Update and Discussion Regarding the Technical Advisory Committee's Groundwater Interaction Working Group |
| Consent Agenda <input type="checkbox"/> Regular Agenda <input checked="" type="checkbox"/> Noticed Public Hearing <input type="checkbox"/> | |

Summary:

The Board will receive an update on the Technical Advisory Committee's working group.

Recommended Action:

Receive presentation regarding the Technical Advisory Committee's Groundwater Interaction Working Group and provide direction to staff.

Background:

At the January 9, 2020 Technical Advisory Committee (TAC) meeting, the TAC created a working group on the groundwater/surface water interaction. The working group includes the following TAC members: Laurel Marcus, Marcus Trotta, Sean White, and Mike Webster.

The first meeting of the working group was on February 24, 2020. Larry Walker and Associates will provide an update on the working group progress.

Fiscal Summary: N/A

Action: _____

Motion: _____ **2nd:** _____

DRAFT

Ukiah Valley Basin Groundwater Sustainability Agency Board Meeting

Discussion Regarding the Development of Sustainability Goals for Ukiah Valley Groundwater Basin

March 12, 2020

Agenda

- GSP Development: technical work update
- Review of Sustainable Management Criteria (SMC)
 - What will our process look like?
- Sustainability Goal → Group discussion

Integrated model updates

■ MODFLOW updates

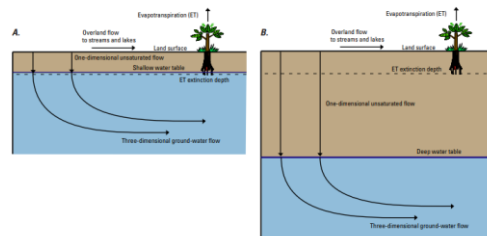
- Newton Solver (NWT) → needed for GSFLOW coupling.
- Unsaturated zone flow (UZF) → needed for GSFLOW coupling.
- Initial calibration → refined hydraulic properties and water budgets prior to coupling with GSFLOW.
- Review CLSI continuous well data → Inform temporal water-level trends



A Product of the Ground-Water Resources Program

Documentation of the Unsaturated-Zone Flow (UZF1) Package for Modeling Unsaturated Flow Between the Land Surface and the Water Table with MODFLOW-2005

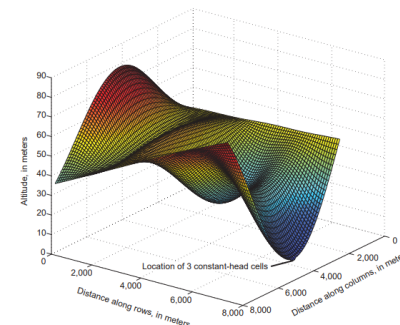
Chapter 19 of
Section A, Ground Water, of
Book 6, Modeling Techniques



Groundwater Resources Program

MODFLOW-NWT, A Newton Formulation for MODFLOW-2005

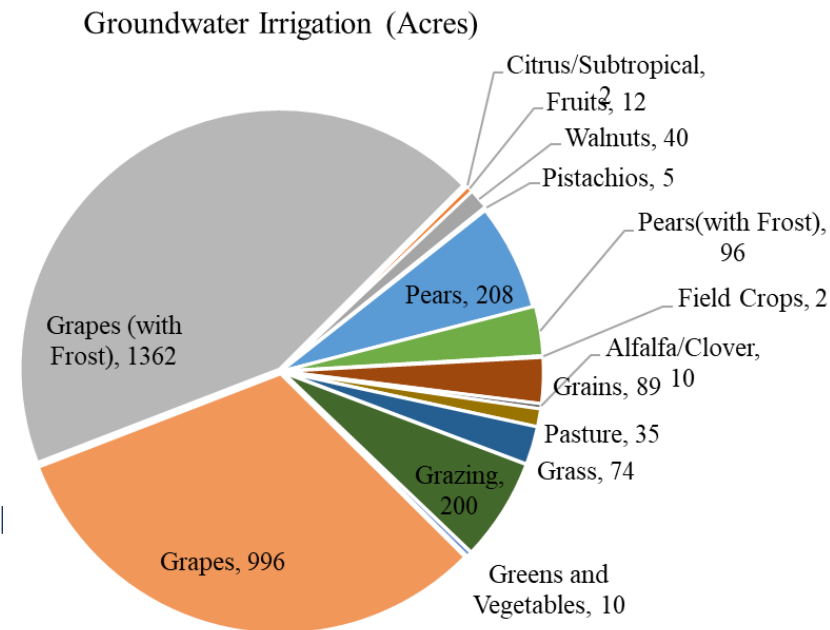
Chapter 37 of
Section A, Groundwater
Book 6, Modeling Techniques



Integrated model updates

■ PRMS updates

- Inclusion of ponds → improved representation of SW diversion timing.
- Review CLSI tributary stream gage data → Informs wet/dry behavior of tributaries.
- Updated irrigation patterns based on previous meeting was implemented and will be used for the Ag Package.



| | No Frost Protection | | With Frost Protection | | Total | |
|--------|---------------------|---------------|-----------------------|---------------|-------------|---------------|
| | Groundwater | Surface Water | Groundwater | Surface Water | Groundwater | Surface Water |
| Grapes | 996 | 3005 | 1362 | 3074 | 2357 | 6079 |
| | 11.8% | 35.6% | 16.1% | 36.4% | 27.9% | 72.1% |
| Pears | 208 | 395 | 96 | 455 | 304 | 850 |
| | 18.0% | 34.3% | 8.4% | 39.4% | 26.3% | 73.7% |

- Migrating MODFLOW and PRMS to GSFLOW executable
- Acquisition of GSFLOW Ag. Package from USGS → Currently reviewing workflow and capabilities. □

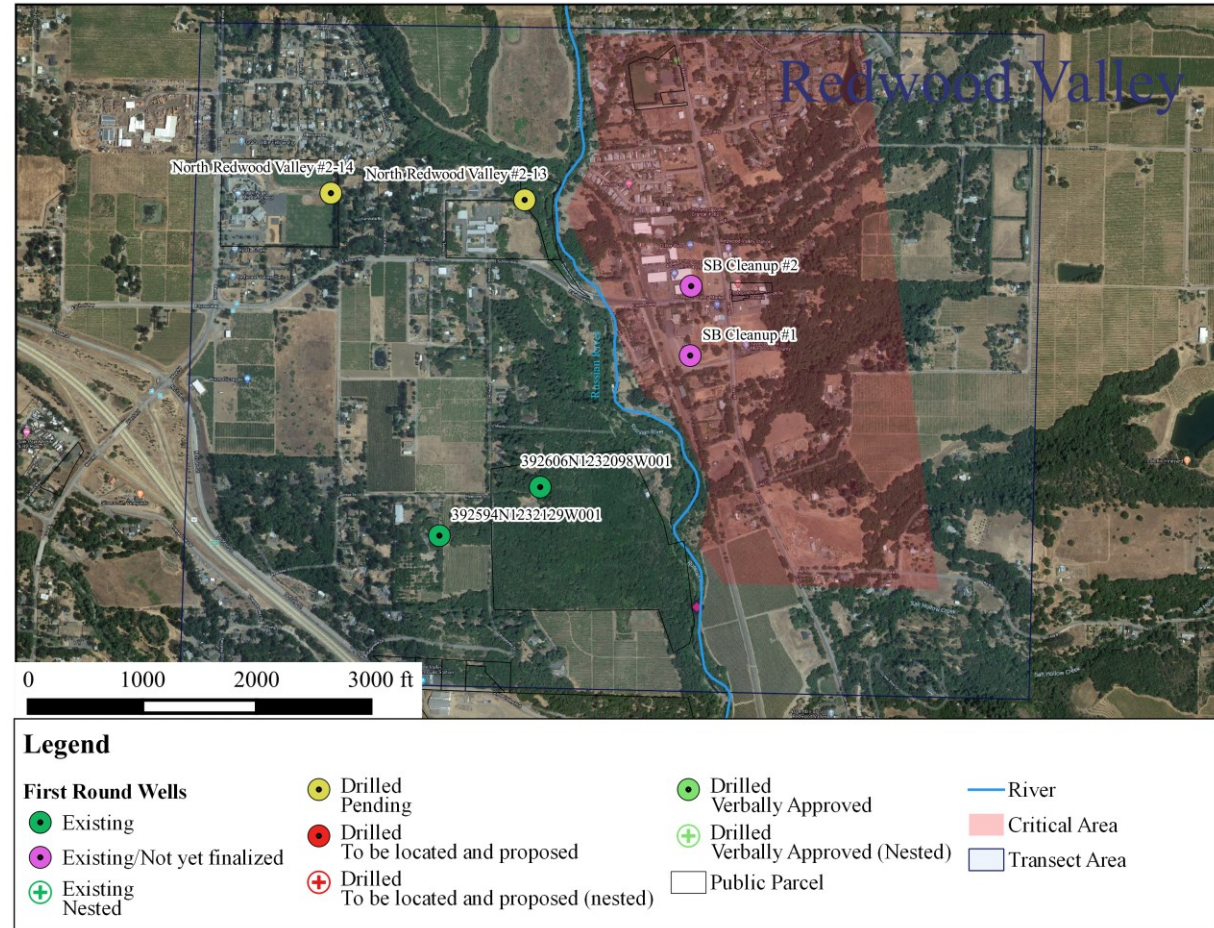


Surface Water Working Group update

- Leverage local expertise to inform development of “interconnected surface water” SMC
- 1st Meeting 2/24/2020
 - Definitions of a “healthy” and “unhealthy” surface water system
 - Identifying existing studies and data sets
 - Options for prioritizing monitoring locations and data collection
 - Develop a plan for future SW Working Group meetings

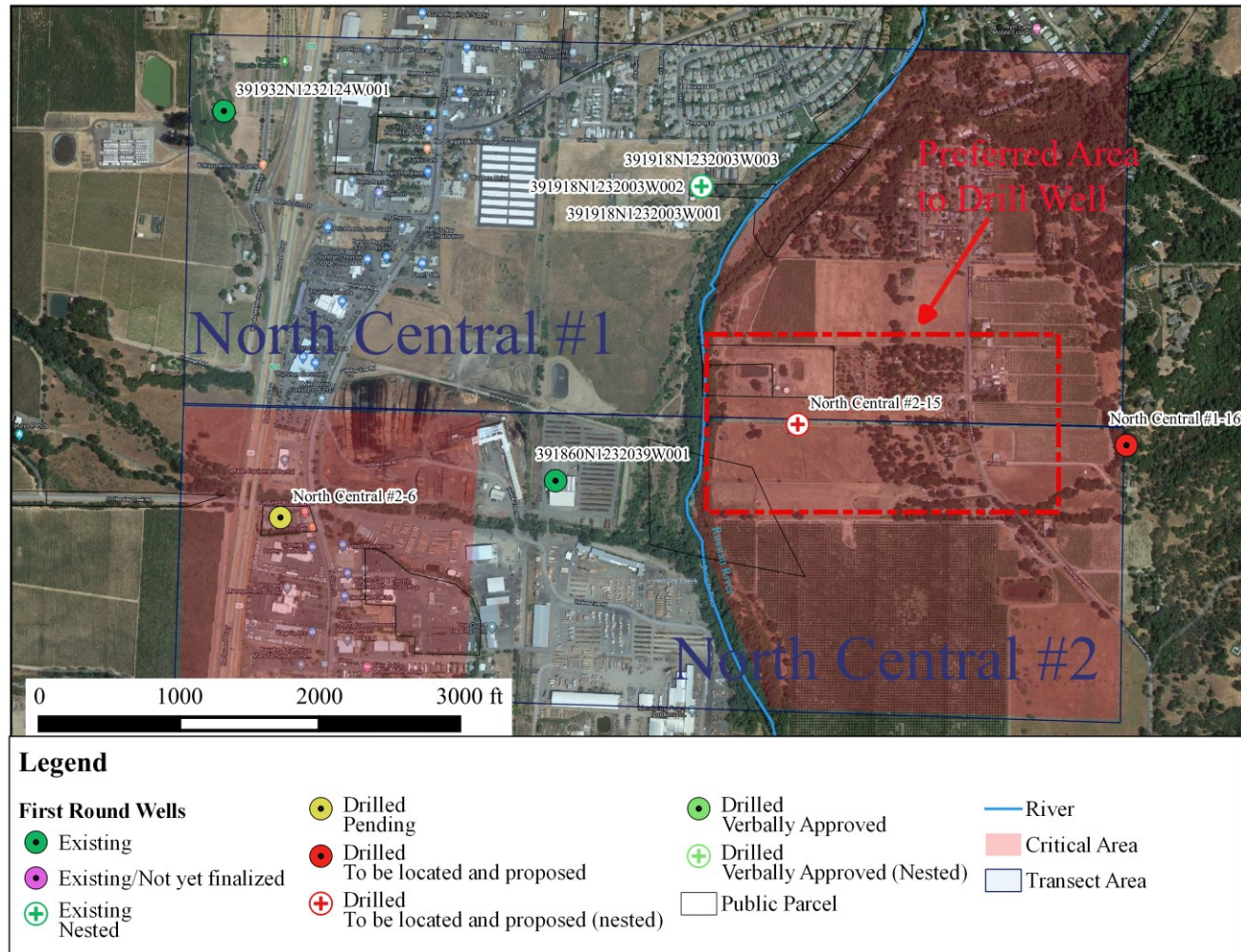
TSS and continuous measurements

- First round of wells are identified.
- Agreements are being pursued.
- First visit to be made late March and instrumentation begin in April.



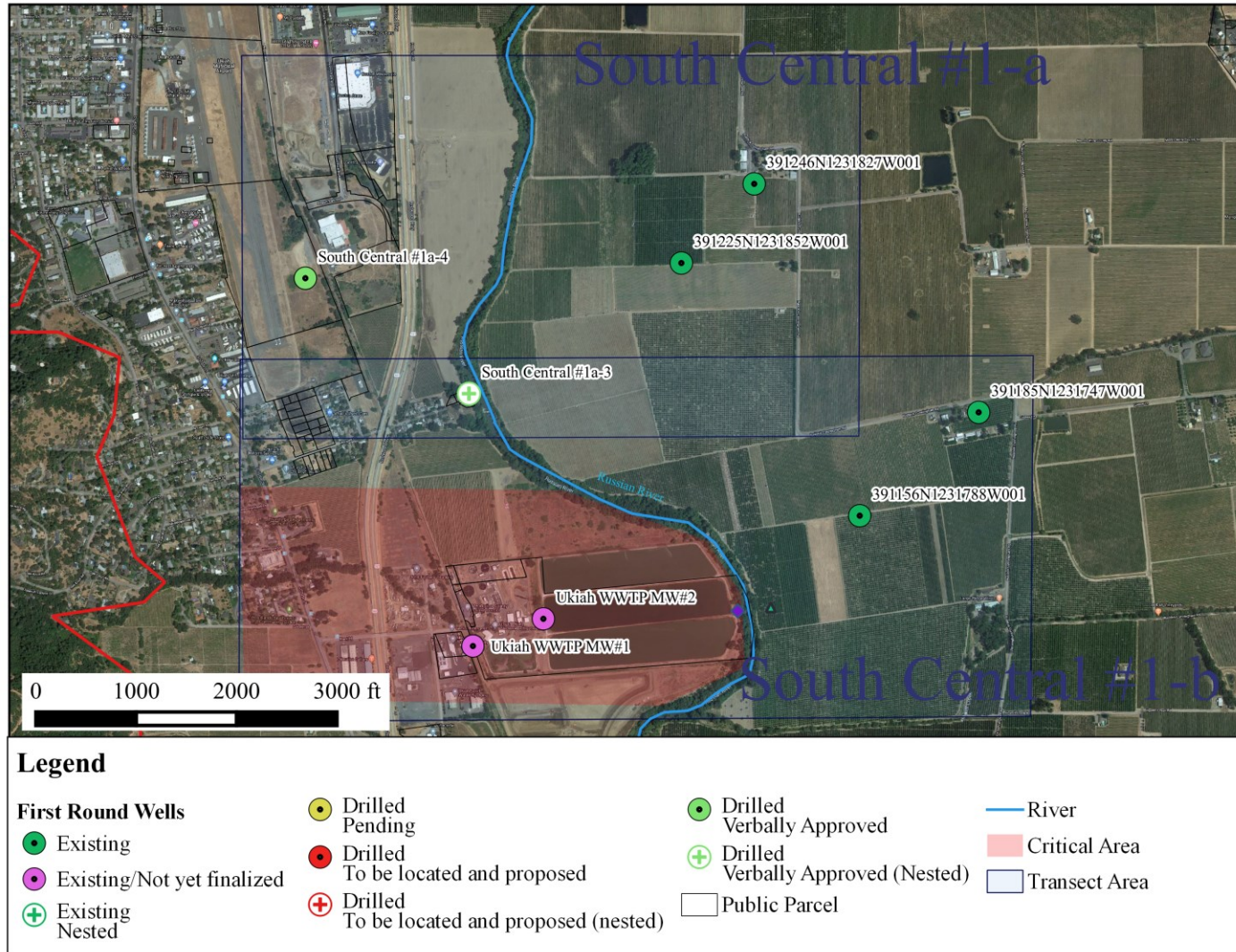
DRAFT

TSS and continuous measurements








DRAFT

TSS and continuous measurements

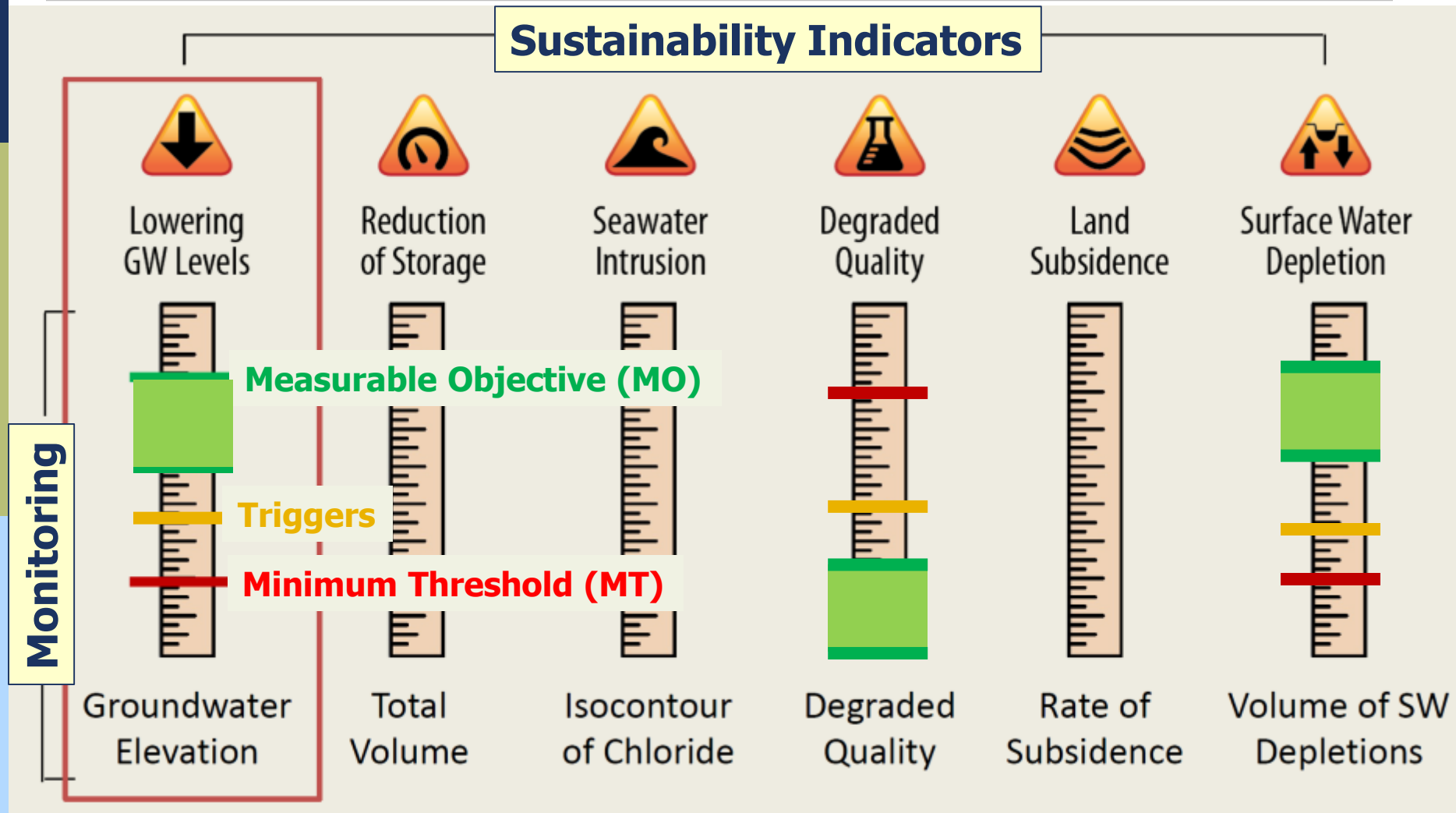


Overview of GSP Structure

A GSP has five chapters:

1. Introduction 
2. Plan Area and Basin Setting 
3. Sustainable Management Criteria 
4. Projects and Management Actions 
5. Plan Implementation 

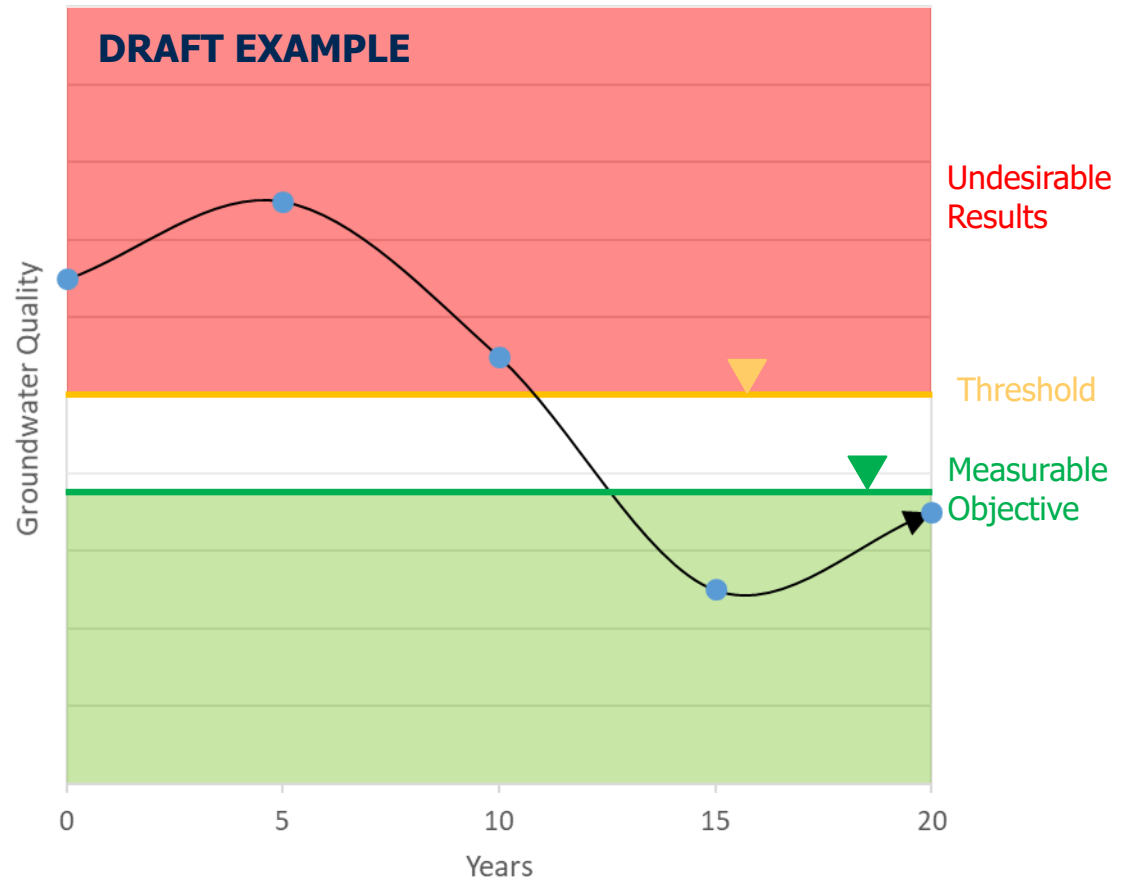
GSP: Monitoring and Managing Sustainability



DRAFT

Review of Sustainable Management Criteria Components

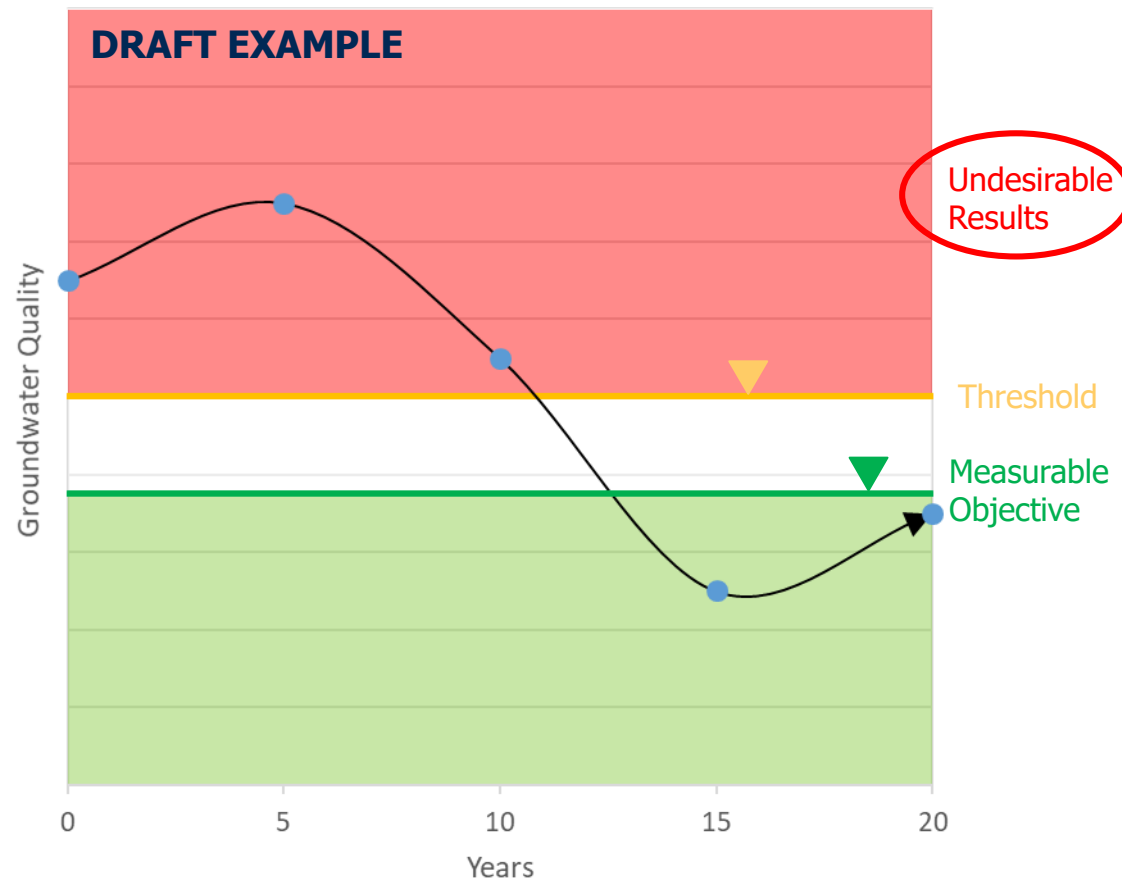
- Undesirable Results
- Minimum Thresholds
- Measurable Objectives
- Sustainability Goal



Review of Sustainable Management Criteria Components

■ Undesirable Results

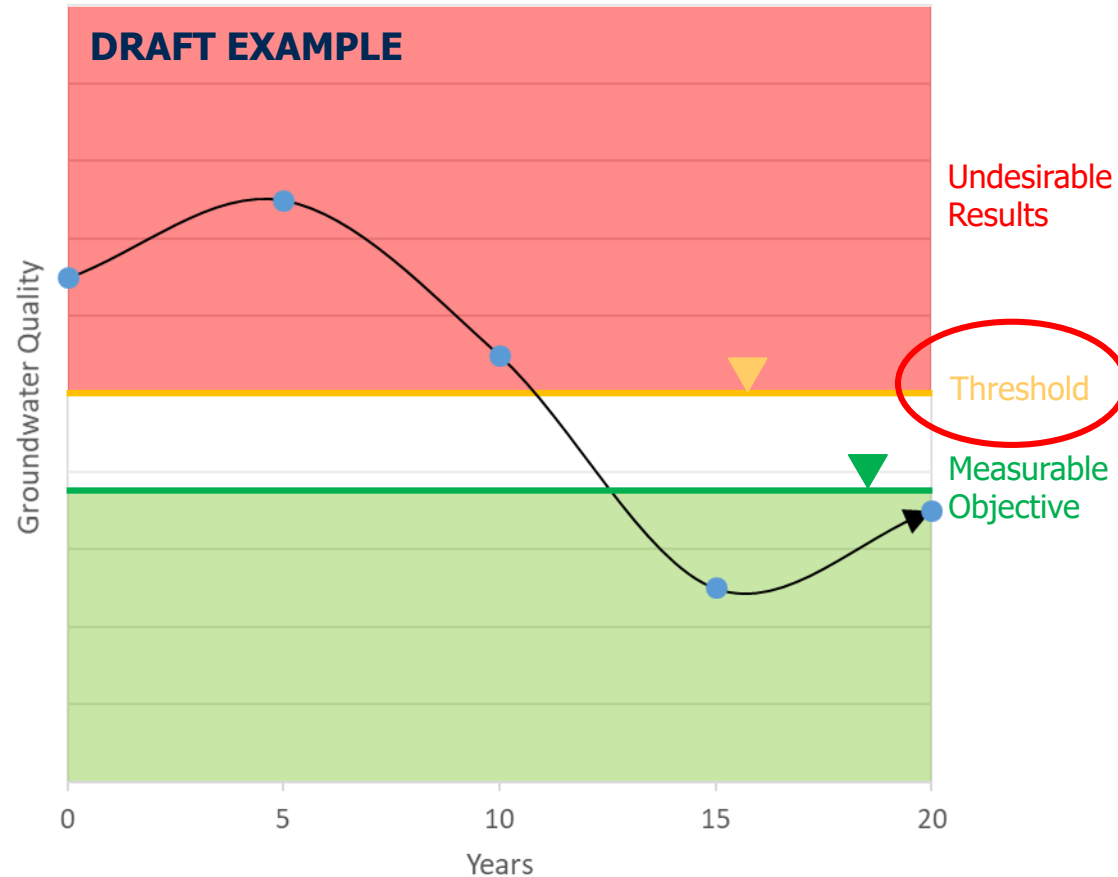
- Must be “Significant and Unreasonable”
- Statement that describes conditions that we do not want to happen
- Defined for each sustainability indicator
 - (e.g. groundwater levels, groundwater quality, etc.)



Review of Sustainable Management Criteria Components

■ Minimum Thresholds

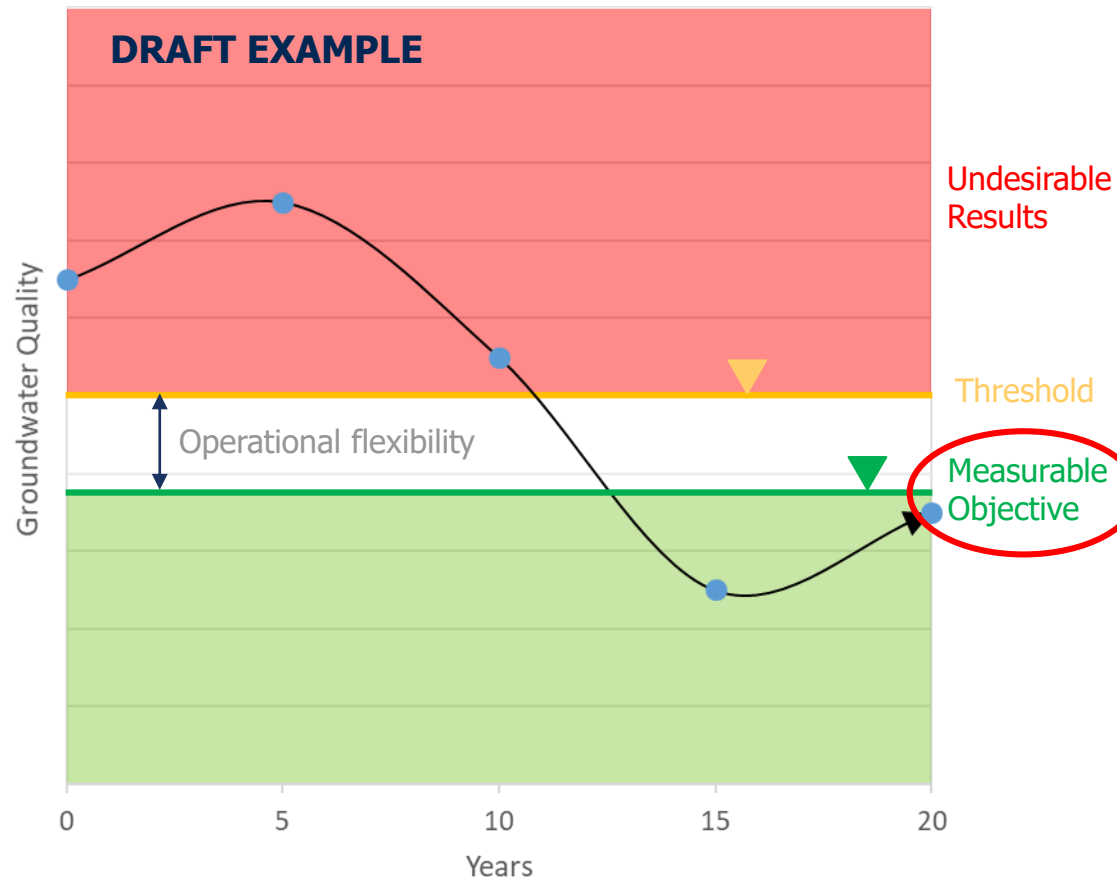
- Anything worse is considered an “undesirable result”
- The lowest a basin can go without something significant and unreasonable happening to groundwater



Review of Sustainable Management Criteria Components

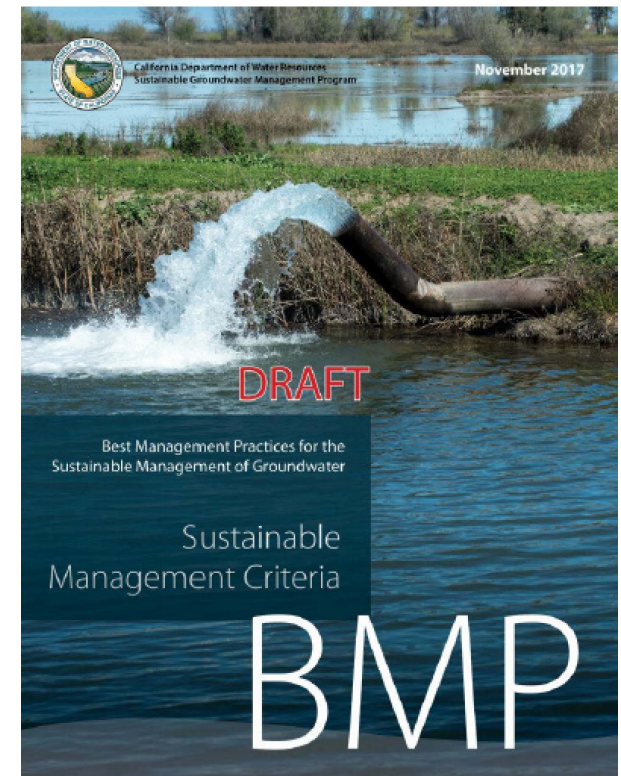
■ Measurable Objectives

- A management target that provides a usable buffer for use during droughts, etc.
- Establishes the upper targeted boundary for basin management
- Should provide a reasonable margin of operational flexibility



Related SGMA Activities that Inform Sustainable Management Criteria

- Understand the basin setting:
 - Hydrogeologic conceptual model
 - Current and historical conditions
 - Estimated water budget
 - Potential management areas
- Inventory existing monitoring programs and evaluate and build potential representative monitoring points
- Engage interested parties (i.e. beneficial uses and users of groundwater)



Proposed SMC Development Process

- Assess which of the ***six sustainability indicators*** are applicable for the Ukiah Valley Groundwater Basin
- Develop narrative (qualitative) descriptions of what constitutes ***significant and unreasonable conditions*** (i.e. locally unacceptable conditions)
- Translate narrative descriptions into quantitative values = ***undesirable results*** and ***minimum thresholds***
- Determine desirable conditions = ***measurable objectives***
- Set ***interim milestones*** in order to achieve ***measurable objectives***
- Define an overarching ***sustainability goal***

Proposed SMC Development Process

What thermometer
looks like?

Which undesirable
results are
controversial?

Technical team will
summarize existing data
and describe options

Advisory
Committee to
propose SMC for
each undesirable
result (UR)



```
graph TD; A[What thermometer looks like?] --> D((Advisory Committee to propose SMC for each undesirable result (UR))); B[Which undesirable results are controversial?] --> D; C[Technical team will summarize existing data and describe options] --> D;
```

The diagram illustrates the proposed SMC Development Process. It features a central red oval at the bottom representing the 'Advisory Committee to propose SMC for each undesirable result (UR)'. Three boxes point towards this central oval: a green box at the top asking 'What thermometer looks like?', a dark green box on the left asking 'Which undesirable results are controversial?', and a dark blue box on the right stating 'Technical team will summarize existing data and describe options'. Arrows connect each of these three boxes to the central red oval, indicating their input into the committee's process.

Culmination of Process and Next Steps

- **GOAL:** Ukiah Valley Sustainable Management Criteria developed
 - Issues around each topic (indicator) identified and explored
 - Interests of beneficial uses and users considered
 - Measurable objectives, triggers, thresholds, and interim milestones defined
 - Buy in to overarching sustainability goal
- Technical GSP pieces complete (e.g. hydrology)
- Groundwater management responses developed if triggers or thresholds are crossed (next phase of work)
- Stakeholder communication and engagement throughout entire process

Preliminary SMC Development Schedule

March 2020

- Sustainability goal
- Water Quality SMC: Build thermometer, what's healthy/what's unhealthy

May 2020

- Water quality SMC: Refine discussion as needed, focus on scenarios and actions, close on the thermometer
- Subsidence SMC: Build the thermometer, what's healthy and what's unhealthy → quick discussion
- SW depletion SMC: terrestrial GDEs → Build thermometer, what's healthy/what's unhealthy

July 2020

- SW depletion SMC: SW/GW interactions → Build thermometer, what's healthy/what's unhealthy

Questions and Comments

Initial Exploration of a Sustainability Goal

Key SGMA text (GSP Emergency Regulations 354.24)

“Each agency shall establish in its Plan a sustainability goal for the basin that culminates in the absence of undesirable results”

Initial Exploration of a Sustainability Goal

1. If groundwater is sustainably managed in Ukiah Valley, what has it achieved and what does it look like?
2. What does the worst-case scenario look like in Ukiah Valley if groundwater is not managed sustainably?
3. Give us your perspective but also think about how others view the issue?

Examples of Sustainability Goals from Other GSPs

■ Mid-County Santa Cruz GSP:

- Manage the groundwater Basin to ensure beneficial uses and users have access to a safe and reliable groundwater supply that meets current and future Basin demand without causing undesirable results to:
 - Ensure groundwater is available for beneficial uses and a diverse population of beneficial users;
Protect groundwater supply against seawater intrusion;
 - Prevent groundwater overdraft within the Basin and resolves problems resulting from prior overdraft;
 - Maintain or enhance groundwater levels where groundwater dependent ecosystems exist;
 - Maintain or enhance groundwater contributions to streamflow;
 - Support reliable groundwater supply and quality to promote public health and welfare;

Examples of Sustainability Goals from Other GSPs

■ Mid-County Santa Cruz GSP (cont.):

- Manage the groundwater Basin to ensure beneficial uses and users have access to a safe and reliable groundwater supply that meets current and future Basin demand without causing undesirable results to:
 - Ensure operational flexibility within the Basin by maintaining a drought reserve;
 - Account for changing groundwater conditions related to projected climate change and sea level rise in Basin planning and management;
 - Do no harm to neighboring groundwater basins in regional efforts to achieve groundwater sustainability.

■ Salinas GSP:

- The goal of this GSP is to manage the groundwater resources of the 180/400-Foot Aquifer Subbasin for long-term community, financial, and environmental benefits to the Subbasin's residents and businesses. This GSP will ensure long-term viable water supplies while maintaining the unique cultural, community, and business aspects of the Subbasin. It is the express goal of this GSP to balance the needs of all water users in the Subbasin.

Questions?

Thank you!