Paso Basin Cooperative Committee
NOTICE OF SPECIAL MEETING
PUBLIC WORKSHOP

NOTICE IS HEREBY GIVEN that the Paso Basin Cooperative Committee will hold a ***Special Meeting – Public Workshop*** at **5:30 P.M.** on Monday, **April 23, 2018** at **Kermit King Elementary** (700 Schoolhouse Cir, Paso Robles, CA 93446).

NOTE: The Paso Basin Cooperative Committee reserves the right to limit each speaker to three (3) minutes per subject or topic. In compliance with the Americans with Disabilities Act, all possible accommodations will be made for individuals with disabilities so they may attend and participate in meetings.

John Hamon, Chairperson, City of Paso Robles
Reginald Cousineau, Member, Heritage Ranch CSD
Joe Parent, Member, San Miguel CSD
John Peschong, Vice Chairperson, County of SLO
Willy Cunha, Secretary, Shandon-San Juan WD

Steve Martin, Alternate, City of Paso Robles
Scott Duffield, Alternate, Heritage Ranch CSD
Kelly Dodds, Alternate, San Miguel CSD
Debbie Arnold, Alternate, County of SLO
Matt Turrentine, Alternate, Shandon-San Juan WD

Agenda
April 23, 2018

1.	**Call to Order**	**5:30 PM**
2.	**Roll Call**	
3.	**Pledge of Allegiance**	
4.	**Public Comment**	
5.	**Orientation Presentations and Questions - Overview**	**5:40 PM**
	SGMA Background, Schedule, GSP Outline	**6:00 PM**
	Sustainable Management Criteria, Terms and Definitions	**6:40 PM**
	Plan for Developing Sustainable Management Criteria	**7:35 PM**
6.	**Upcoming Meetings**	**8:15 PM**
7.	**Adjourn**	**8:30 PM**

The Paso Basin Cooperative Committee invites basin users and interested community members to attend a series of Special Meeting - Public workshops on the development of a Groundwater Sustainability Plan (GSP) for the Paso Robles Groundwater Basin in accordance with the requirements of the Sustainable Groundwater Management Act (SGMA).

The workshops will provide an opportunity to learn more about the following topics and provide initial input on:

- **Groundwater Sustainability Plan (GSP) development** for the Paso Basin
- **Sustainable Groundwater Management Act (SGMA)** and the Paso Basin
- **Projects and Programs** for Groundwater Management
- **Further information** on the state of the Paso Basin

Please note that the Paso Basin Cooperative Committee will also hold its ***Regular Meeting*** at **4:00PM** on Wednesday, **April 25, 2018** at the **City of Paso Robles Council Chambers** (1000 Spring Street, Paso Robles, CA 93446).

SGMA Background
Sustainable Management Criteria

Paso Robles Groundwater Basin
Cooperative Committee Informational Meeting #1
April 23, 2018

1

Informational Meetings - Objective

- Engage interested parties in the SGMA process
- Understand the decisions that must be made in the next 1.5 years
- Develop common expectations of what a successful GSP includes
- Encourage everybody to submit plan suggestions
- Agree to a common language

2

Informational Meetings

- April 23 – Introduction and Sustainable Management Criteria
- April 30 – Groundwater law and state of the basin
- May 14 – Projects and programs
- May 21 – Follow up

3

Informational Meeting #1

4

Informational Meeting #1 Presentations

- Background on the Sustainable Groundwater Management Act
- Definitions of Sustainability and Sustainable Management Criteria
- How to Develop Sustainable Management Criteria

5

SGMA Background

6

Presentation Topics

- SGMA Basics
- Groundwater Sustainability Plans

7

Groundwater Management History

- State Water Resources Control Board
  - Managed surface water use since 1914
  - Very limited authority to manage groundwater use
  - Results in two separate water management systems
- Groundwater in California historically managed by:
  - Groundwater Management Plans (AB3030/SB1938)
  - Adjudications (Seaside Basin)
  - Special districts
  - Potential County police authority

8

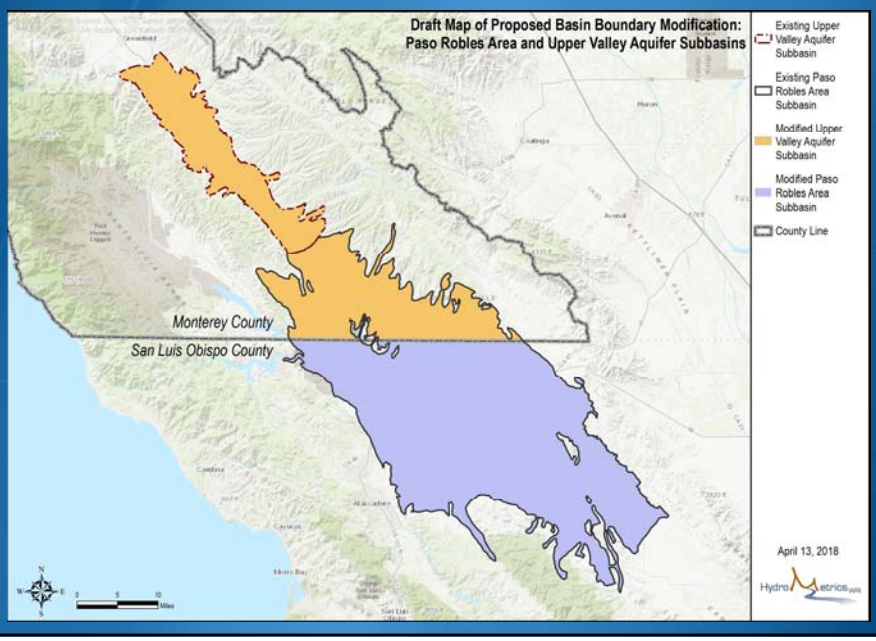
The Sustainable Groundwater Management Act (SGMA) Passed in September 2014

A compromise between one faction wanting State regulation of groundwater rights, and one faction insisting on local management

- Locally driven
  - Groundwater is best managed locally, but this comes with responsibilities
  - Local definition of what constitutes sustainability
  - Locally agreed to plans for achieving sustainability
- State backstop
  - State can temporarily take over groundwater management if a basin fails to meet certain requirement or milestones in SGMA

9

Paso Robles Basin



10

SGMA Implemented by GSAs With New Authorities

- Raise funds
  - Regulatory fees
  - Taxes on land, pumping, etc.
- Register wells
- Require pumping be measured and reported
- Control well spacing
- Regulate pumping amounts
- Buy, trade, or sell water
- Do whatever "necessary and proper" to carry out SGMA's purposes

GSAs do not have to use ANY of these authorities

11

SGMA Timeline

12

Groundwater Sustainability Plans

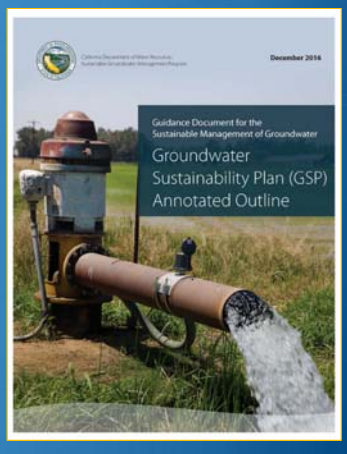
- Focus of the next 1.5 years
- Primarily policy documents
  - Policies informed by good science
- Must be developed with public input
- Must focus on two questions
  - What do locals want the Paso Robles basin to look like in 20 years? (define sustainability)
  - How do locals want to achieve sustainability?

13

GSP Simplified Outline

- Part 1: Describe who you are
- Part 2: Describe the basin's geology and hydrogeology (with sustainable yield)
- Part 3: Define how you will measure sustainability
- Part 4: Identify programs and projects that get you to sustainability
- Part 5: Implementation information

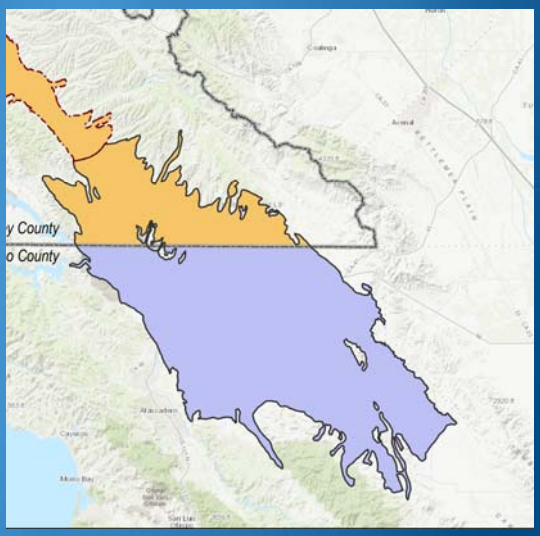
DWR's Example GSP Outline



14

Part 1: Describe Who You Are

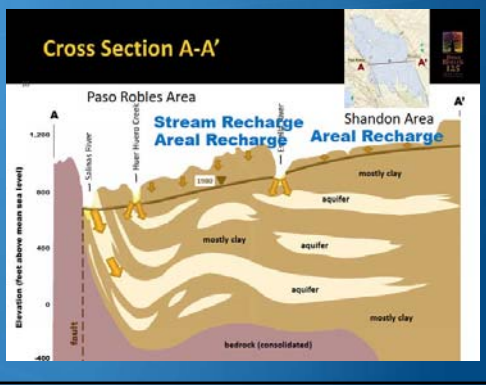
- Largely organizational information and the least controversial section
  - Maps of cities and towns
  - Land use
  - Well density
  - Existing groundwater management activities
  - Existing general plans



15

Part 2: Describe the Basin

- Largely technical section with relatively low controversy
- Geology
  - At least 2 geologic cross-sections per basin
- Historical and current groundwater budgets
  - Groundwater recharge
  - Groundwater pumping
  - Change in storage
  - Estimate of Sustainable Yield
- Future groundwater budget
  - Include effects of climate change
- Existing monitoring programs



16

Part 3: Define Sustainability and How it is Measured

- A policy focused section
- Opportunity for public input and review

Six Sustainability Indicators

★ This is one of the most important sections of the GSP
- Uncertainty in your Sustainable Yield is OK
- Lack of clarity in how you define sustainability is NOT OK

17

Part 4: Projects and Programs to Achieve Sustainability

- Both technical and policy aspects to this section
- Opportunity for public input and review
- Demonstrate your projects will achieve sustainability in 20 years
- Demonstrate you will maintain sustainability for 30 years thereafter
- Agree on who pays for these programs, and who benefits (negotiations)
- You may need backup or supplemental plans if your preferred projects and programs are not adequate

18

Part 5: Implementation

- Implementation schedule
- Implementation costs
- Understand permitting requirements

19

GSP Ultimate Goal

According to the California Constitution, the waters of the State shall be , "… put to beneficial use to the fullest extent of which they are capable… in the interest of people and for the public welfare".

In other words

- Manage sustainably
- Avoid waste
- Promote the economy, society, and the environment

20

Plan Schedule

21

Questions

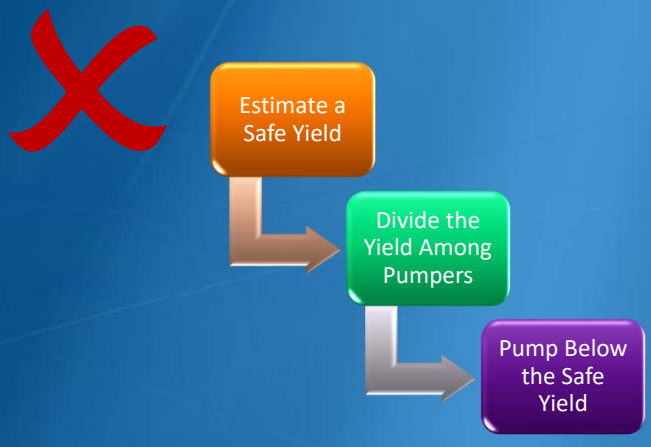
22

Sustainable Management Criteria: How We Define Sustainability

These thoughts are my own, and do not represent the opinions or policies of the State of California

23

To Successfully Define Sustainability Stop Thinking About Adjudications and Safe Yield



Sustainability defined by pumping within Safe Yield

24

Defining Sustainability Under SGMA

Sustainability based on aquifer condition

Controlling pumping is one of many tools to achieve sustainability

25

Key Question: What is an Undesirable Result?

- Avoiding undesirable results directly leads to sustainability
- Undesirable Result is part of the Sustainable Management Criteria (SMC)
- Therefore, defining our SMCs and our Undesirable Results is an important early activity

26

Terms and Definition

Stick with me

These will eventually make sense

27

Sustainability is Outcome Based

- Sustainability is defined for each of six sustainability indicators

28

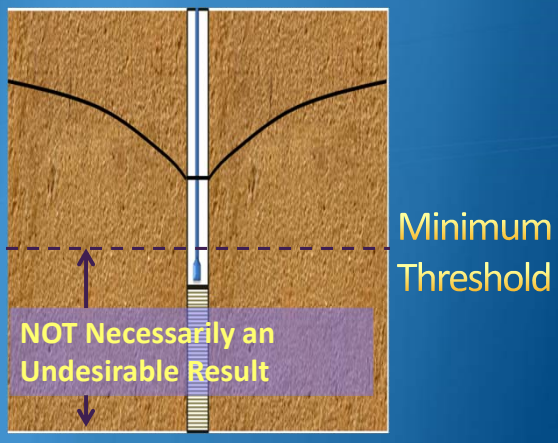
Each of the Six Sustainability Indicators have Three Sustainability Management Criteria Terms

- Minimum Thresholds
- Measurable Objectives
- Undesirable Results

29

Minimum Threshold

- Quantitative value that is used to define an undesirable result
- Set at each representative monitoring point (well)
- Set for each of the six sustainability indicators



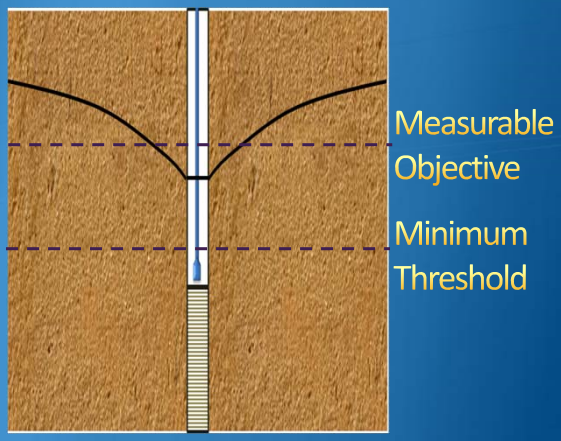
Minimum Thresholds based on what is *Significant and Unreasonable*

30

Measurable Objective

Think of Measurable Objectives as safety factors

- Quantitative target or goal that allows operational flexibility above the Minimum Threshold
- Set at each Representative Monitoring Point (well)
- Set for each sustainability indicator
- Must be set in the plan, but are NOT enforceable during implementation

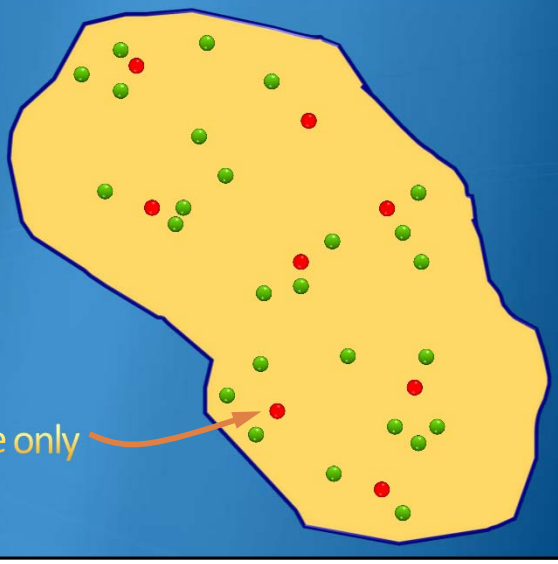


31

Representative Monitoring Points

- Representative Monitoring Point (RMP)
- Other Monitoring Point (MP)

Minimum Thresholds and Measurable Objectives are only defined at RMPs



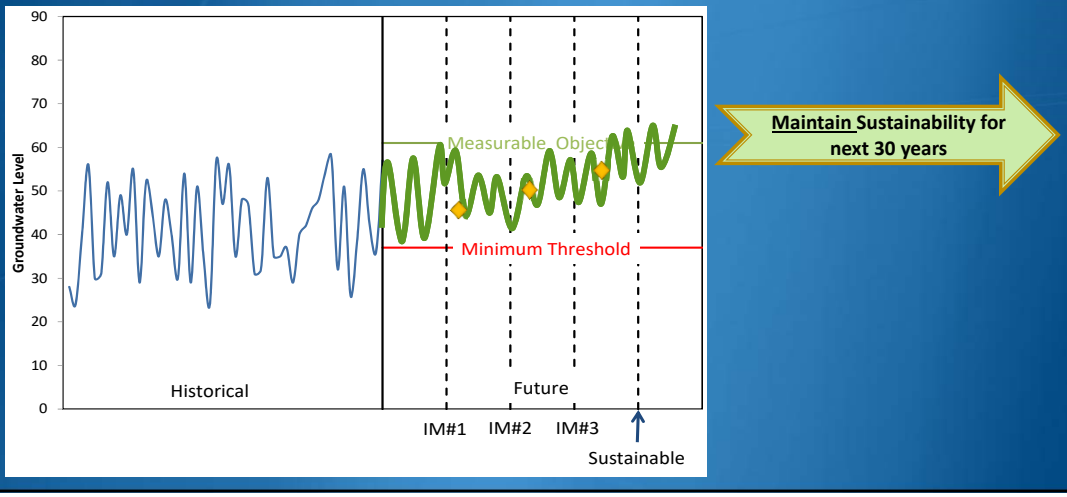
32

Thresholds and Interim Milestones

- Minimum Thresholds set at every RMP
- Measurable Objectives are set with safety factor on Minimum Thresholds
- Interim milestones are (loose) targets, set at five year intervals, that show how you plan to be headed towards your Measurable Objectives
  - Interim milestones likely set from modeling results of how projects change future groundwater conditions

33

Combining Minimum Thresholds, Interim Milestones, and Measurable Objectives at a Single Well



34

Undesirable Results

"The description of undesirable results … shall be based on a quantitative description of the ***combination of minimum threshold exceedances*** *that cause significant and unreasonable effects in the basin."*

Reminder: Avoiding Undesirable Results is how you prove sustainability

35

Undesirable Results are a Combination of Minimum Thresholds

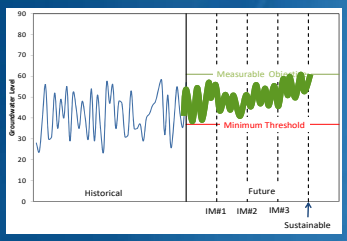
Example 1: An undesirable result occurs when 10% of your groundwater elevations, measured at Representative Monitoring Points, drop below the associated Minimum Thresholds

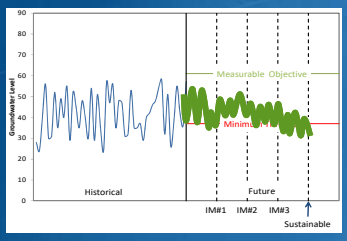
This might be an example definition of Undesirable Results for groundwater levels

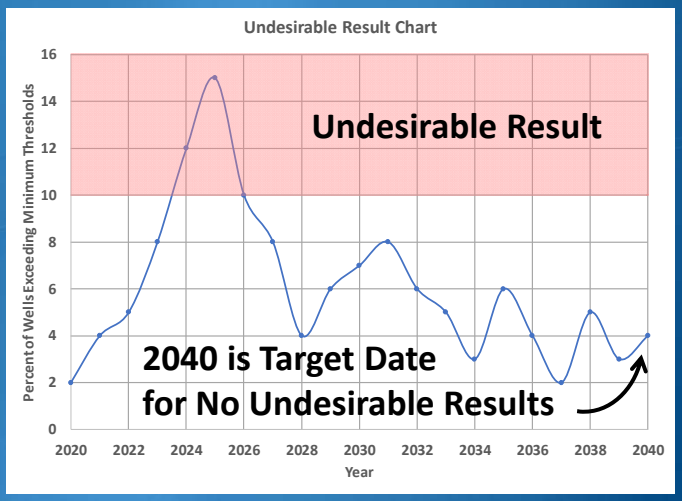
How you define Undesirable Results is how you can accommodate flexibility

36

Example







37

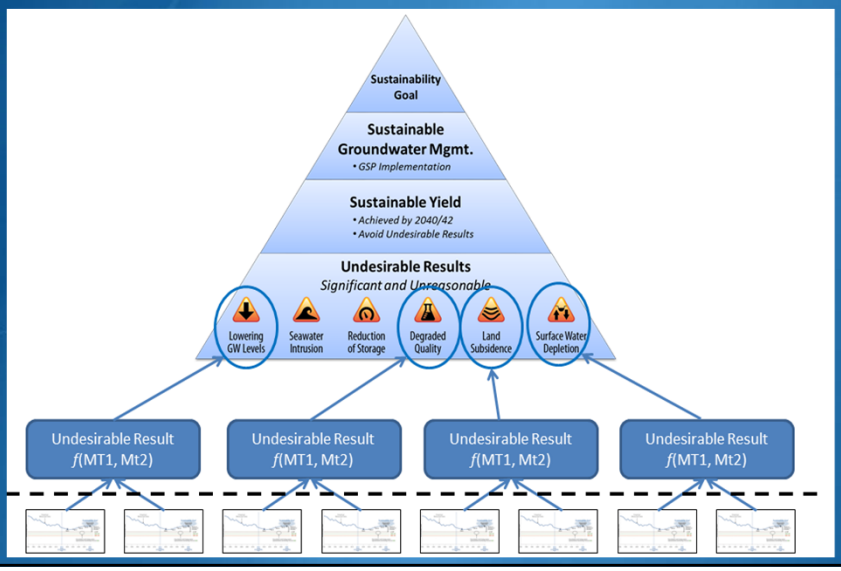
Undesirable Results are a Combination of Minimum Thresholds

Example 2: An undesirable result occurs when groundwater elevations at any single Representative Monitoring Points drop below the associated Minimum Thresholds

This might be an example definition of Undesirable Results for seawater intrusion

38

Demonstrating Sustainability: Brining it All Together



39

Sustainability Recap

- The fundamental principle is that groundwater sustainability is achieved by avoiding undesirable results for all six indicators
- Sustainability is proven with future measurements of groundwater conditions, not model results
- Notice that you do not have to necessarily meet your measurable objectives to be managing sustainably
  - Undesirable Results are the sustainability metric
  - Undesirable Results are a quantitative collection of Minimum Thresholds
  - Your GSP does have to demonstrate that you plan to meet Measurable Objectives

40

Questions on Sustainability Definitions?

41

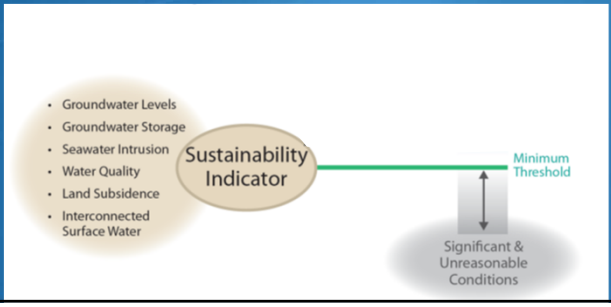
So How Do We Implement This?

Note – there is no one way to do this

42

How Is This Implemented?

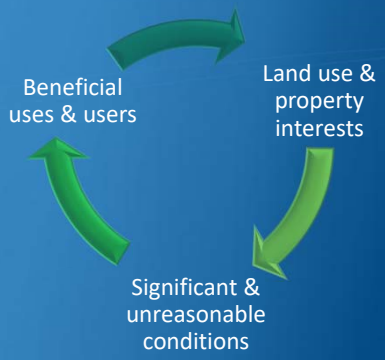
- Assess which of the six sustainability indicators are applicable
- Develop draft descriptions of what is significant and unreasonable
- Set minimum thresholds at each representative monitoring point to reflect what locally is significant and unreasonable



43

How Is This Implemented?

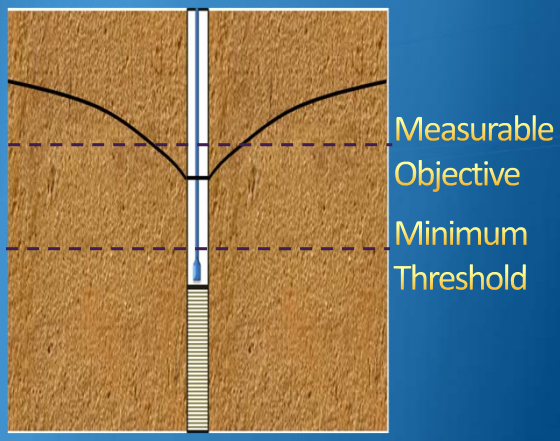
- Decide how to combine six sets of Minimum Thresholds into six Undesirable Results
- Likely an iterative process:
  - How does this undesirable result affect beneficial uses and users of groundwater
  - How does this undesirable result affect land uses and property interests
  - Does the undesirable result adequately characterizes conditions that are significant and unreasonable



44

How Is This Implemented?

- Set Measurable Objectives, based on the agreed to Minimum Thresholds
  - Quantify a margin of operational flexibility to each RMP
  - Goal is to ensure that meeting the Measurable Objective safely avoids Minimum Thresholds



45

How Is This Implemented?

- Identify projects and management actions to avoid Undesirable Results
  - Water Supply
  - Extraction Management

46

Iterate

- What combination of projects and management actions avoid all undesirable results simultaneously?
  - Keep flexibility in projects/actions to address adaptive management
- Can some undesirable results not be avoided?
  - Add/adjust project or management actions
  - Set new minimum thresholds
  - Redefine the formula used to define undesirable results
    - Make sure undesirable results still represent what is significant and unreasonable

47

Crucial Message

- Plan on substantial, iterative discussions
  - Discussions among GSA members, the public, stakeholders, and other groundwater users
  - Discussions of what constitutes significant and unreasonable
  - Discussions of whether the minimum thresholds are adequate, or too restrictive
  - Discussions of whether measurable objectives are reasonable
  - Discussions of how to combine minimum thresholds into undesirable results
  - Discussions of what projects are necessary (and who pays)

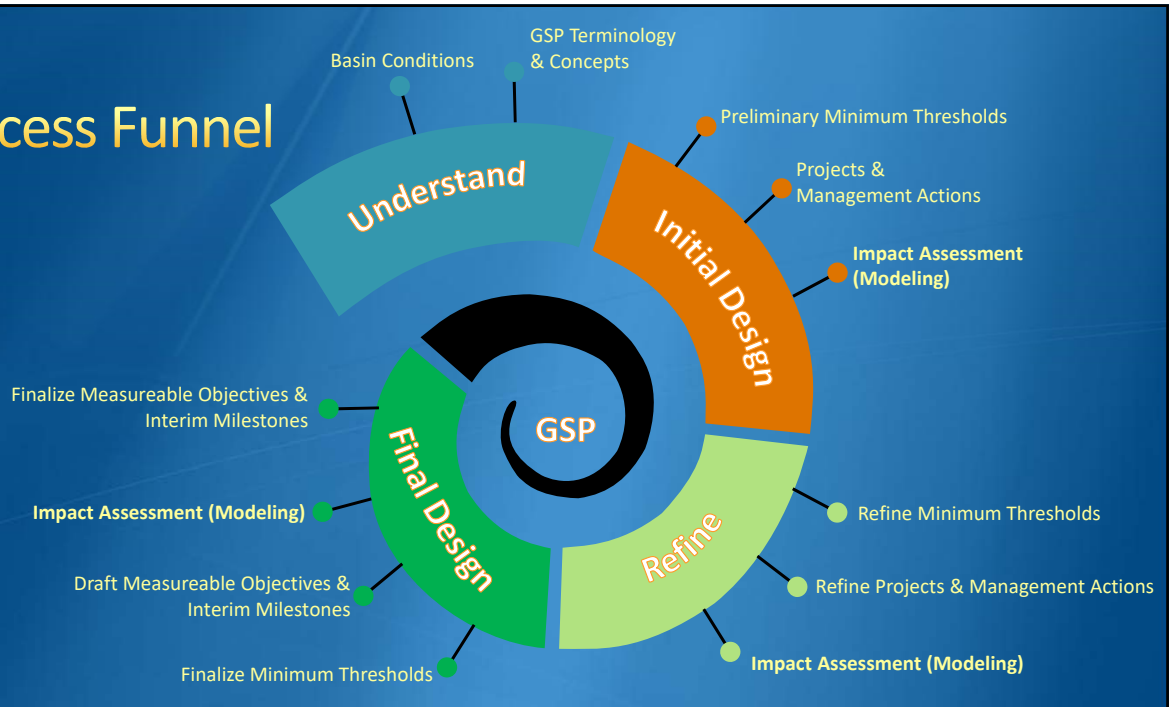
48

Next Steps

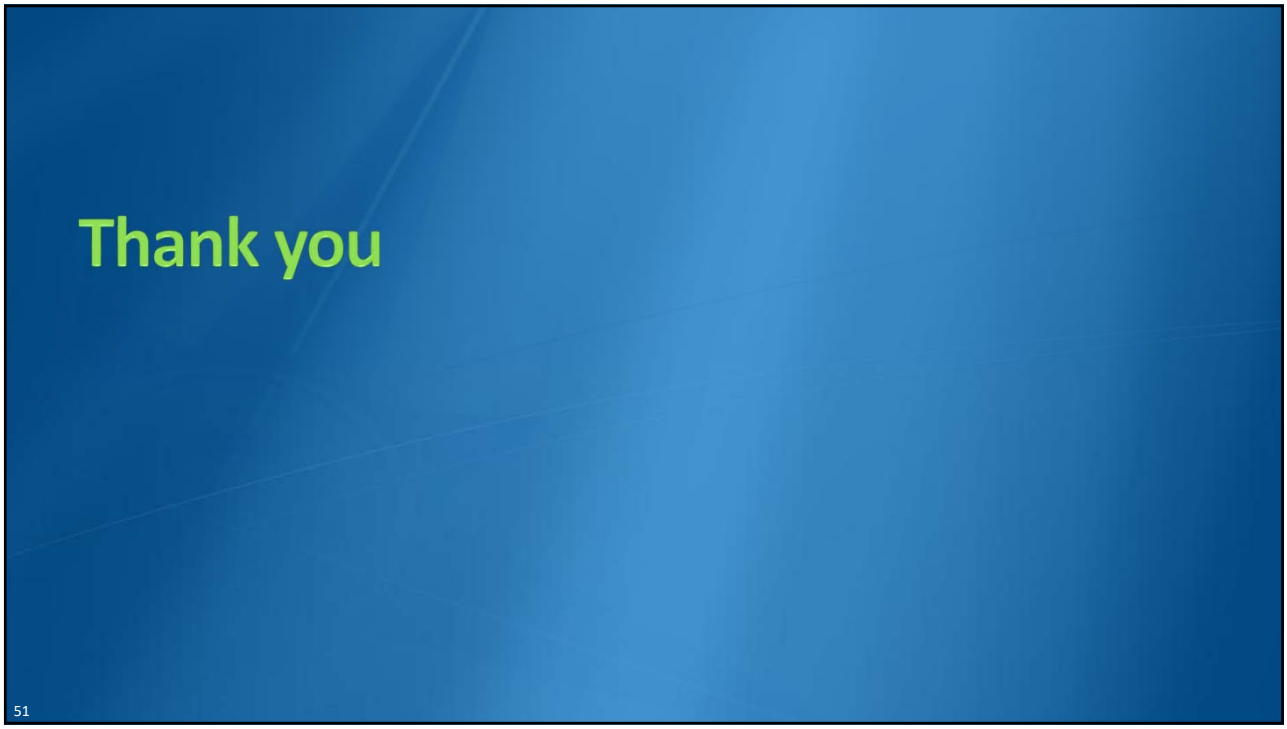
- Make sure everybody understands existing basin conditions
- Receive ideas on what is significant and unreasonable for each of the six sustainability indicators.
  - Significant and unreasonable concepts need not be perfect!
  - We DO need guidance from GSAs and members of the public

49

Process Funnel



50


Thank you
51