

Stakeholder workshop No. 2: Sustainable Goal Setting

Arlington Basin Groundwater Sustainability Plan (GSP)
August 27, 2020 • 3 p.m. – 5 p.m.

Who's here?



ENVIRONMENTAL /
CONSERVATION GROUPS



Santa Ana Watershed
Project Authority



URBAN / AGRICULTURE
WATER USERS



WESTERN
MUNICIPAL
WATER
DISTRICT



INTEGRATED WATER
MANAGEMENT



— BUREAU OF —
RECLAMATION



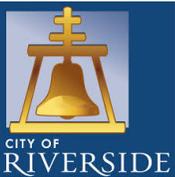
Elsinore Valley Municipal Water District



PRIVATE WATER
USERS



La Sierra
UNIVERSITY



CITY OF
RIVERSIDE



CLAYSON, BAINER
& SAUNDERS
PROFESSIONAL LAW CORPORATION



CORONA
"THE CIRCLE CITY"
Established
May 4, 1886
To Cleanse Our Past - To Plan Our Future



Workshop goals

- Describe SGMA requirements for goal setting
- Document stakeholder input on **implications of goals to feasibility and cost of projects and management actions**
- (If time) Document stakeholder input on draft **monitoring network and goals**

This input will be used to **inform** the GSP's sustainability goals



Workshop agenda

- 5 min Project Grounding
- 10 min 4 Guiding Principles Co-Created with Stakeholders
- 30 min **PRESENTATION:** SGMA Sustainability Requirements and Key Terms
- 30 min **DISCUSSION:** Basin Sustainability Goals
- 5 min What's Next and Audience Q&A



Presenters



Tiffany Meyer

Stakeholder Engagement Lead
Water Systems Consulting (WSC)



Brian Villalobos

Principal Hydrogeologist
Geoscience



Ryan Shaw

Groundwater Sustainability Agency
(GSA) Representative
Western Municipal Water District



Quick project overview

Ryan Shaw

Western Municipal Water District,
Arlington Basin GSP Groundwater Sustainability Agency

Securing sustainable groundwater in the Arlington Basin



Arlington Basin governance



Sustainable Groundwater Management Act (SGMA) deadlines



Opportunities for stakeholders to inform the GSP



Step 1.
Establish
Governance
Structure

Jan '19 – Apr '19

Apr. 2019
PUBLIC MEETING
and GSA Formation



Step 2.
Document
Basin Setting

Apr '19 – Jul '20

 July 30, 2020
STAKEHOLDER
WORKSHOP:
*Building a Shared
Vision of a Sustainable
Arlington Basin*



Step 3.
Set Sustainability
Goals

Jul '20 – Sep '20

 Aug. 27, 2020
STAKEHOLDER
WORKSHOP
Sustainable Goal Setting


WE ARE HERE



Step 4.
Develop
Plan to
Sustainability

Sep '20 – Nov '20

 Sep. 30, 2020
STAKEHOLDER
WORKSHOP
*Projects and
Management Actions*



Step 5.
Adopt
the Plan

Nov '20 – Feb '21

 Apr. 2021
PUBLIC COMMENT
PERIOD
Full Draft of GSP

Questions?



Workshop No. 1 Summary — Groundwater management vision

Tiffany Meyer

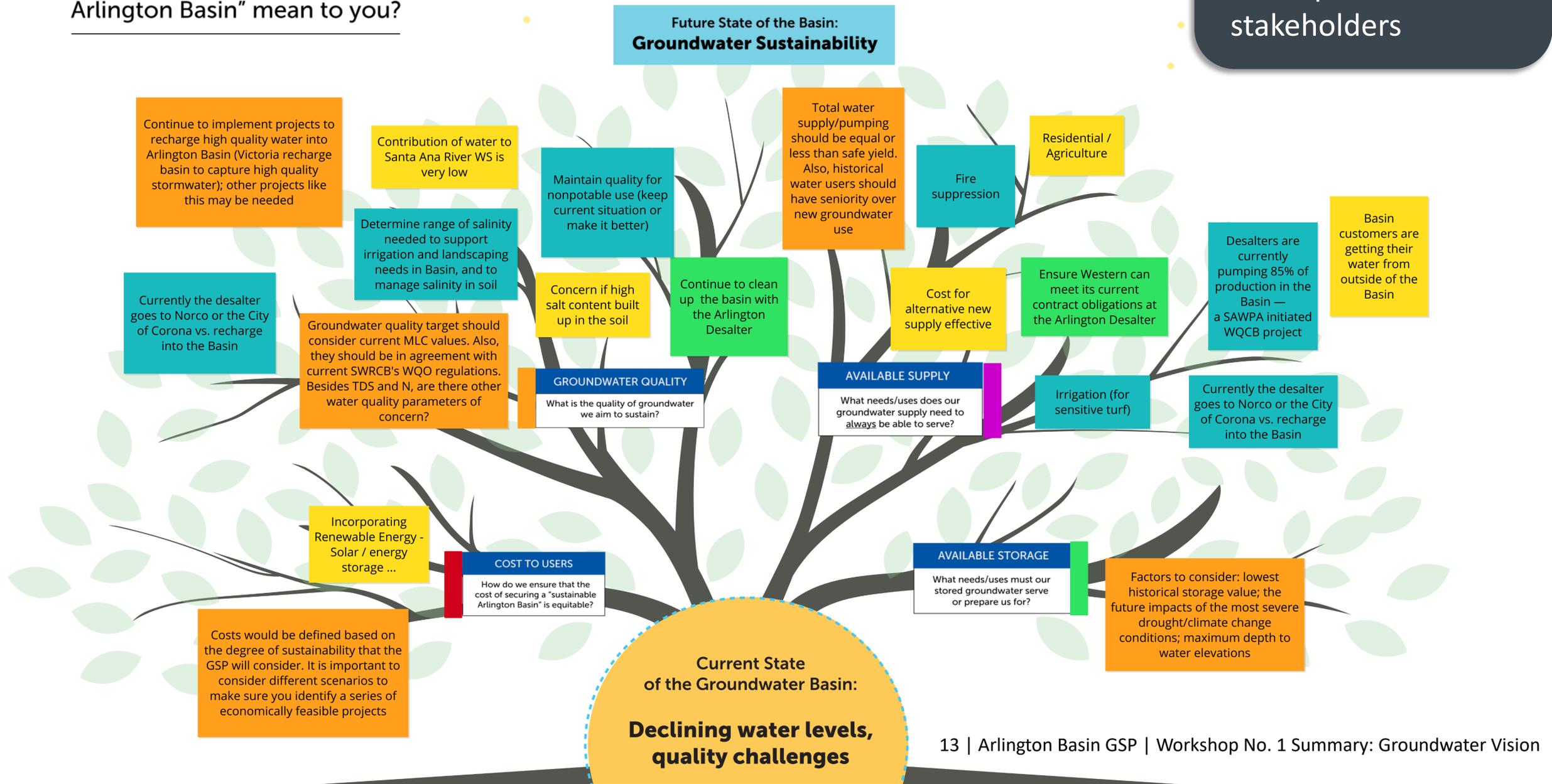
Water Systems Consulting (WSC)



Stakeholder Visioning Exercise

What does a "Sustainable Arlington Basin" mean to you?

Activity participation and input from stakeholders



4 Guiding Principles informing the Arlington Basin GSP

1

Available groundwater supply **reliably supports diverse needs** in and outside of the Basin.

2

Stored groundwater cost-effectively supports **water supply resilience**.

3

Groundwater quality is maintained at a **safe and compliant standard** to meet diverse Basin needs.

4

Cost of maintaining sustainable groundwater levels is **fair, feasible and fiscally-responsible**.



Basin-wide sustainability goals

Brian Villalobos

Hydrogeologist, Geoscience





**The goal of SGMA is
groundwater sustainability**



Sustainability has specific meanings in SGMA

SUSTAINABILITY INDICATOR	 CHRONIC LOWERING OF GROUNDWATER LEVELS	 REDUCTION OF GROUNDWATER STORAGE	 INTER-CONNECTED SURFACE WATER DEPLETIONS	 WATER QUALITY DEGRADATION	 LAND SUBSIDENCE	 SEAWATER INTRUSION
METRIC(S) USED	Groundwater Elevation	Total Volume	Volume or rate of surface water depletion	<ul style="list-style-type: none"> - Migration Plumes - # of Supply Wells - Volume - Location of Isocontour 	Rate and extent of land subsidence	Chloride Concentration Isocontour



“Sustainability” is defined locally

4 Guiding Principles informing the Arlington Basin GSP

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SMGA uses specific terminology

Sustainable Management Criteria must:

- Include a **Sustainability Goal**, which is a succinct big-picture statement of the GSA's objectives and desired conditions and how they will be reached;
- Define **Significant and Unreasonable Effects**
- Identify **representative monitoring sites**
- Develop **measurable objectives**
- Define **minimum thresholds**
- Determine **undesirable results**
- Develop **Interim Milestones**, which are five-year check-ins to measure progress



Getting to Sustainability

Basinwide Sustainability Goal

Set minimum thresholds
and measurable objectives
for all Sustainable
Management Criteria



SUSTAINABLE MANAGEMENT CRITERIA

Measure and Monitor
at each representative
monitoring well



REPRESENTATIVE MONITORING WELLS

Achieve goals using
projects and
management actions



PROJECTS & MANAGEMENT ACTIONS

Basinwide Sustainability Goal

SMGA requirements

SGMA requires that Significant and Unreasonable Effects be described for each Sustainability Indicator

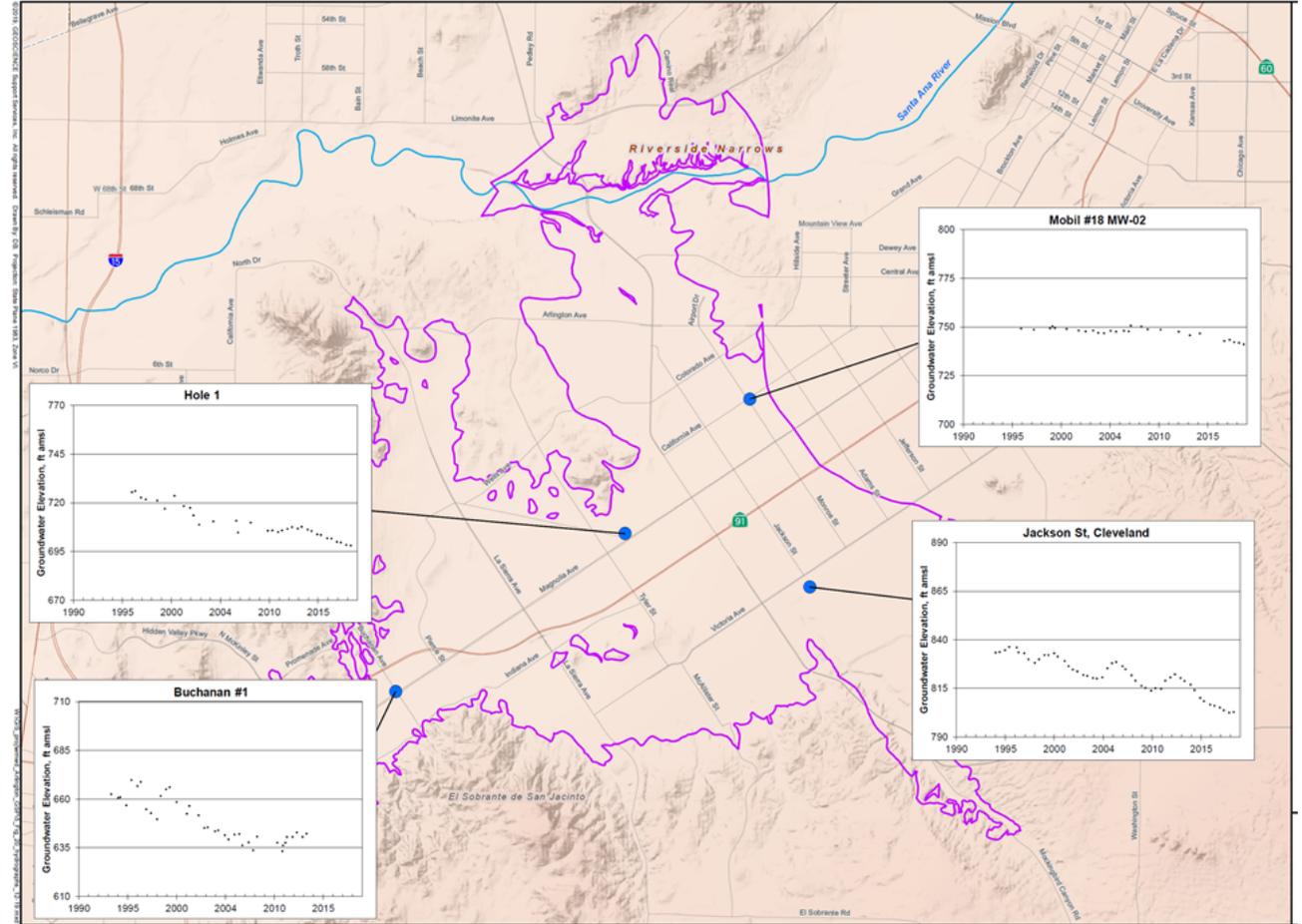
What we don't want to happen . . .



SMGA requirements

SGMA requires that the GSA identify Representative Monitoring Points

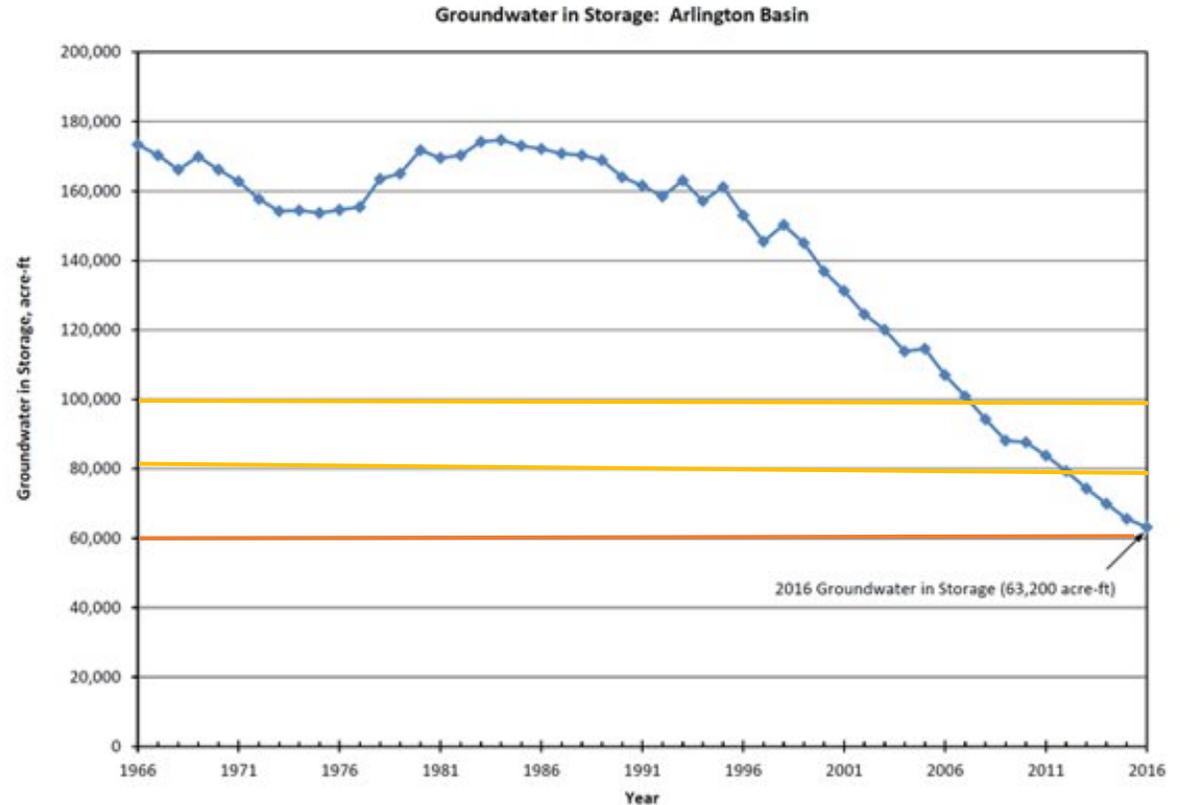
Monitoring Points Should Be Selected Based on SGs



SMGA requirements

SGMA requires that the GSA develop Measurable Objectives

Objectives are **specific, quantifiable goals** to maintain or improve groundwater conditions



SMGA requirements

SGMA requires that
GSAs develop
Minimum Thresholds

Thresholds are the **quantitative,**
measurable lines in the sand that we
don't want to cross.



SMGA requirements

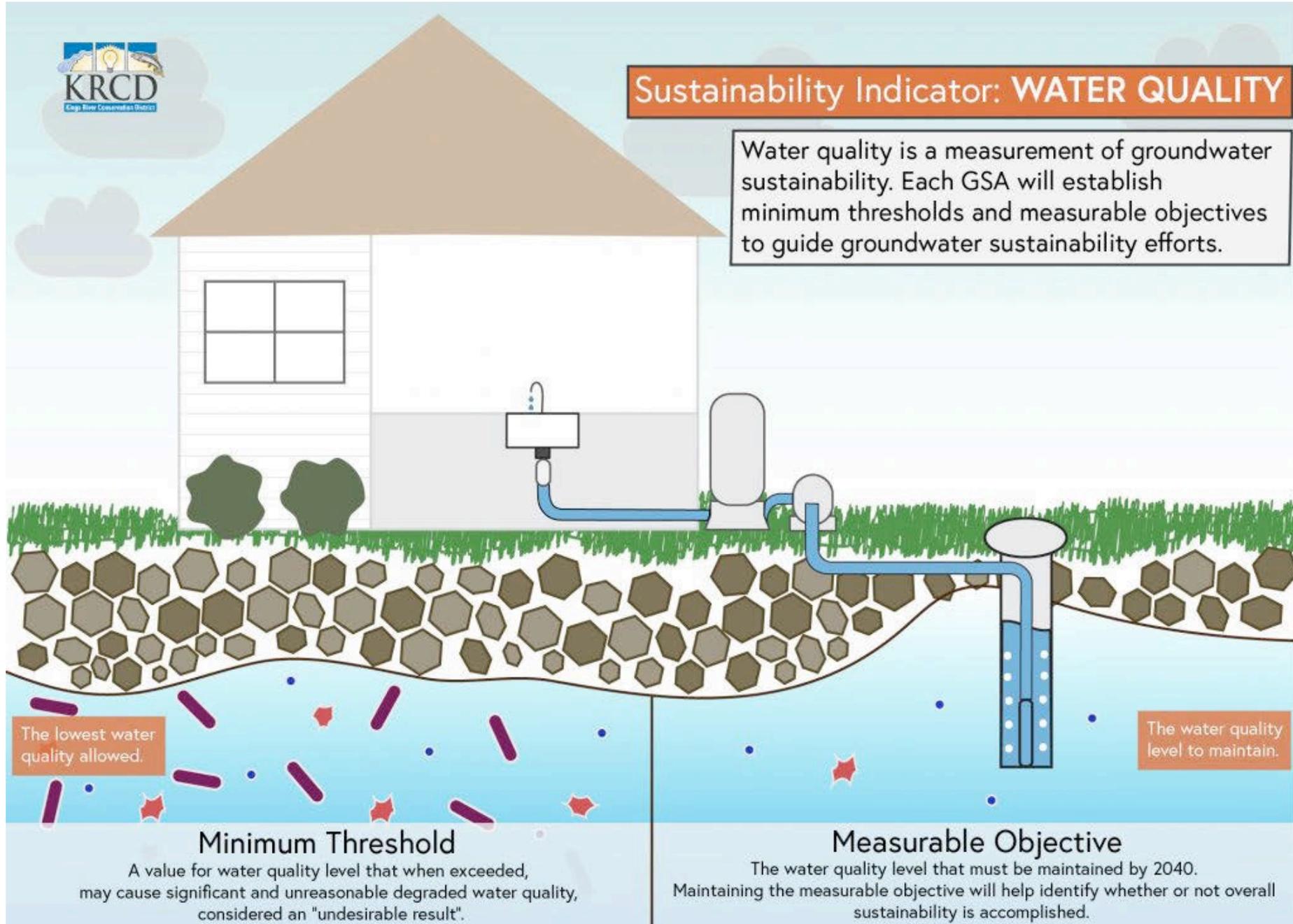
Undesirable Results
are the worst-case
scenario





Sustainability Indicator: WATER QUALITY

Water quality is a measurement of groundwater sustainability. Each GSA will establish minimum thresholds and measurable objectives to guide groundwater sustainability efforts.



The lowest water quality allowed.

Minimum Threshold

A value for water quality level that when exceeded, may cause significant and unreasonable degraded water quality, considered an "undesirable result".

The water quality level to maintain.

Measurable Objective

The water quality level that must be maintained by 2040. Maintaining the measurable objective will help identify whether or not overall sustainability is accomplished.

SMGA requirements

Projects and Management Actions will be identified to address Undesirable Results

WHAT IS A GROUNDWATER SUSTAINABILITY PLAN?

A plan that will serve as a blueprint for the community's vision of a sustainably managed groundwater basin. The plan will include four main components.



* Undesirable results include significant and unreasonable lowering of groundwater levels, reduction of groundwater storage, seawater intrusion, degraded water quality, land subsidence and depletion of interconnected surface water.



Getting to Sustainability

Basinwide Sustainability Goal

Set minimum thresholds
and measurable objectives
for all Sustainable
Management Criteria



SUSTAINABLE MANAGEMENT CRITERIA

Measure and Monitor
at each representative
monitoring well



REPRESENTATIVE MONITORING WELLS

Achieve goals using
projects and
management actions



PROJECTS & MANAGEMENT ACTIONS

Basinwide Sustainability Goal

SGMA deadlines

Sustainability must be achieved by 2042 through specific projects and actions



SMGA requirements

The plan must include a budget and discussion of possible funding sources



What we want to determine today

Define **Significant and Unreasonable Effects**

Develop **measurable objectives**

Define **minimum thresholds**

Determine **undesirable results**

Identify **representative monitoring sites**

Develop **Interim Milestones**, which are five-year check-ins to measure progress



Questions?



Group discussion: Sustainable goal setting

Brian Villalobos

Hydrogeologist, Geoscience



1

Available groundwater supply **reliably supports diverse needs** in and outside of the Basin.

GROUP QUESTION:
Can we itemize specific groundwater needs by use, location and volume?

DISCUSSION NOTES:

X



2

Stored groundwater cost-effectively supports **water supply resilience**.

GROUP QUESTION:

What quantity of water is needed to support “resilience”? Water in available storage, severe drought, climate change, pumping capacity?
Minimum Threshold?

DISCUSSION NOTES:

X



3

Groundwater quality is maintained at a **safe and compliant standard** to meet diverse Basin needs.

GROUP QUESTION:

What are the specific groundwater quality requirements for existing and future use (itemized by use, location and volume)? Range of acceptable water quality?

WQOs: TDS-980 mg/l; NO3 as N-10 mg/L

DISCUSSION NOTES:

X



4

Cost of maintaining sustainable groundwater levels is **fair, feasible and fiscally-responsible.**

GROUP QUESTION:

What is required in terms of basin operation to manage the basin in consideration of the first three goals?

DISCUSSION NOTES:

X



GROUP QUESTION:

What are **significant and unreasonable effects**?

DISCUSSION NOTES:

X



GROUP QUESTION:

What are the **minimum thresholds**?

DISCUSSION NOTES:

X



GROUP QUESTION:

What should the measurable objectives be?

DISCUSSION NOTES:

X



GROUP QUESTION:

What should the **interim milestones** be, (5-year check-ins to measure progress).

DISCUSSION NOTES:

X



What's next?

Tiffany Meyer, WSC



*Review workshop no. 2
summary with draft
sustainability goals*

**WITHIN 2 WEEKS OF WORKSHOP,
2 WEEK REVIEW PERIOD**

This input will be used by the project team to
finalize the sustainability goals for the Arlington Basin



Attend workshop No. 3

Projects and Management Actions

September 30, 2020 • 3 p.m. – 5 p.m.

REGISTER AT

wmwd.com/ArlingtonBasinGSP
Click on “Stakeholder Workshops”



Questions?

