

Cuyama Basin Groundwater Sustainability Agency

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# SGMA Educational Item: What is Sustainability?

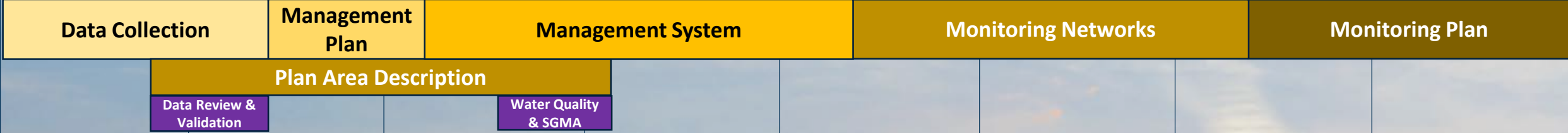
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May 31, 2018

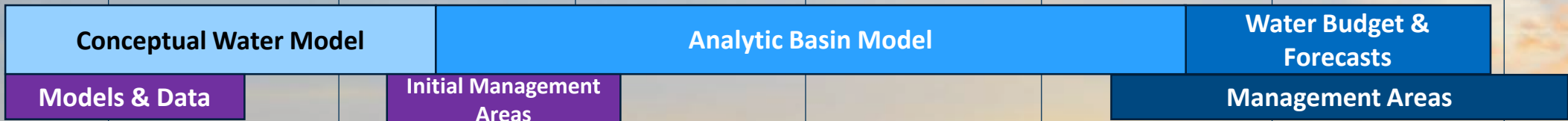


# Cuyama Basin Groundwater Sustainability Plan – Discussion Topics

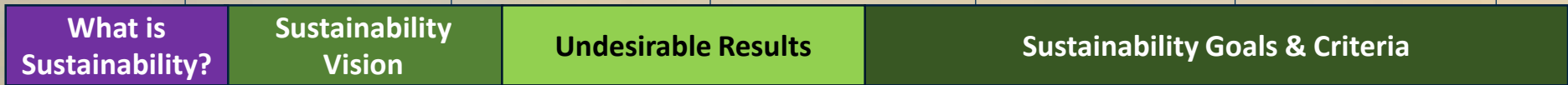
## Data & Information



## Basin Model



## Sustainability Goals



Education Topics






2018 Mar Apr May Jun Jul Aug Sep Oct



# Cuyama GSP Sustainability Goals Timeline

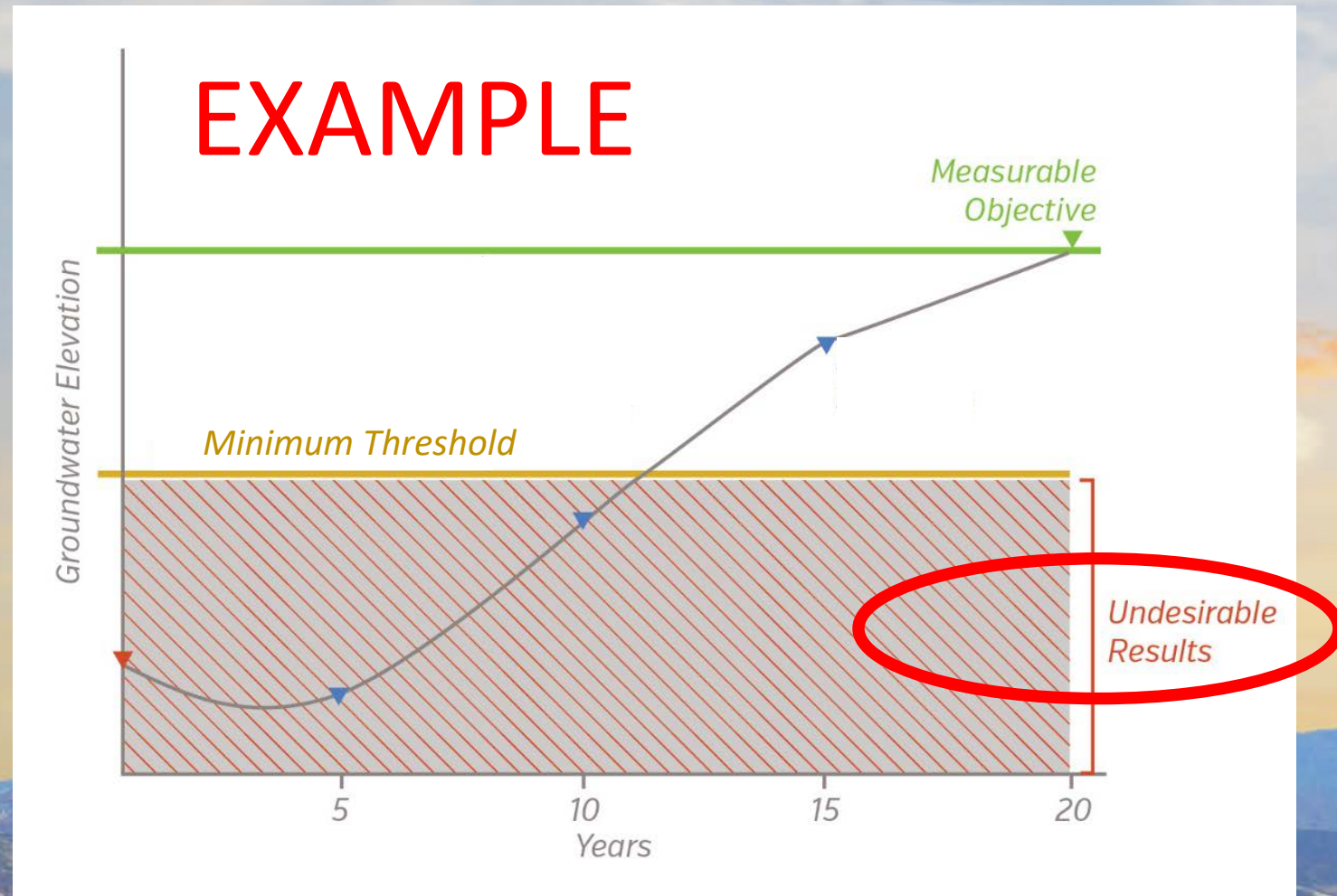
- May and June SAC and Board Meetings and Workshop:
  - Solicit initial input on sustainability vision and goals
- July/August:
  - Review undesirable result narratives
  - Discuss ideas for thresholds and objectives
- September/October:
  - Develop quantitative thresholds and objectives for each indicator

# Sustainability Indicators in the Cuyama Basin

Sustainability Indicators	Lowering GW Levels	Reduction of Storage	Land Subsidence	Surface Water Depletion	Degraded Water Quality
					
Metrics Defined by SGMA	Groundwater elevation	Total volume	Rate and extent of subsidence	Volume or rate of depletion	Migration of plumes; constituent concentrations
Example Problems	Dry Wells Low Pumping Production	Dry Wells Low Pumping Production	Unleveling of Fields Damage to Structures	Dry out Cuyama River earlier / more often	Higher salinity Nitrates in drinking water

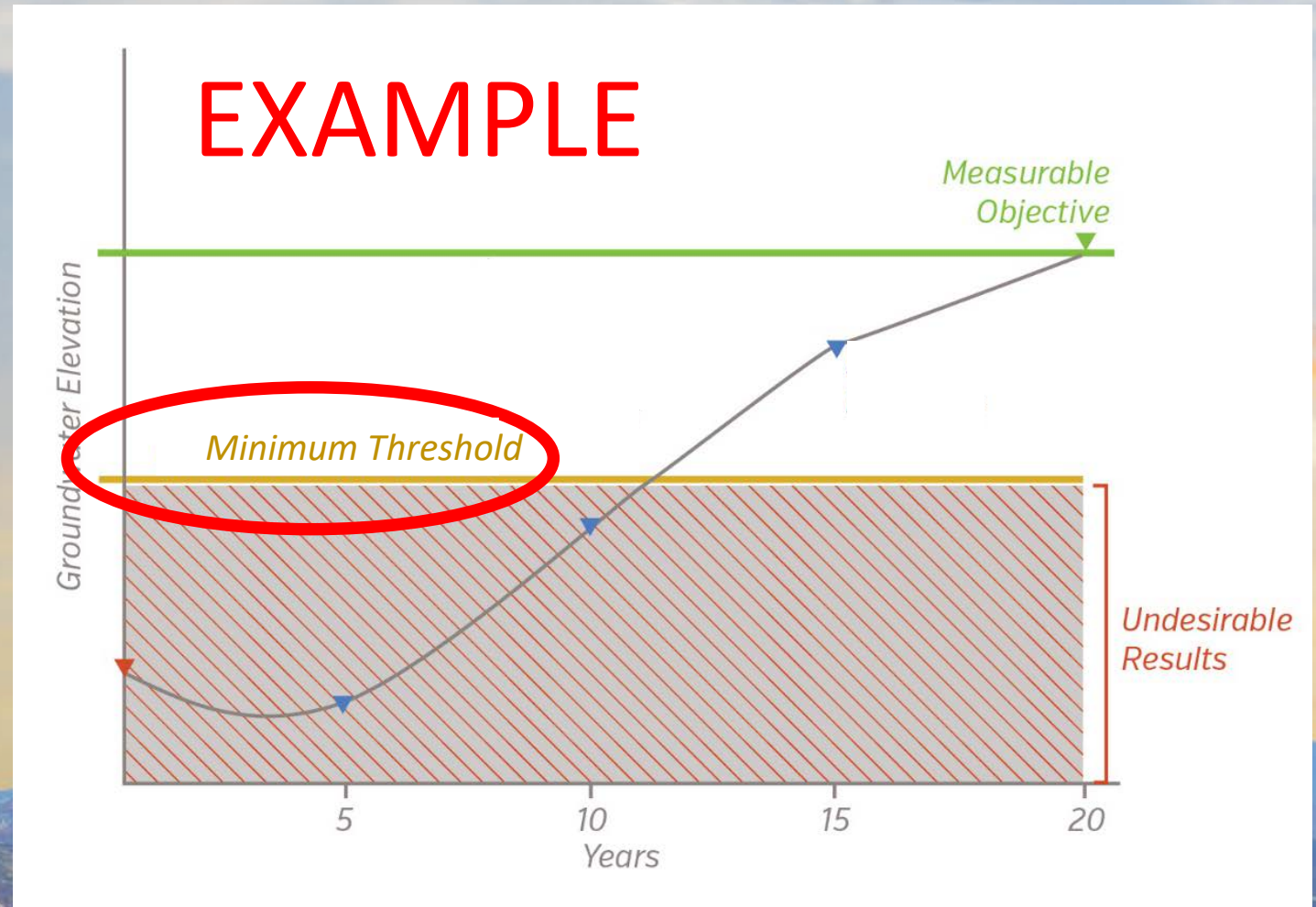
# Undesirable Results, Minimum Thresholds & Measurable Objectives

- Undesirable Results:
  - Must be “Significant and Unreasonable”
  - Statement that describes conditions that we do not want to have happen
  - Defined for each sustainability indicator



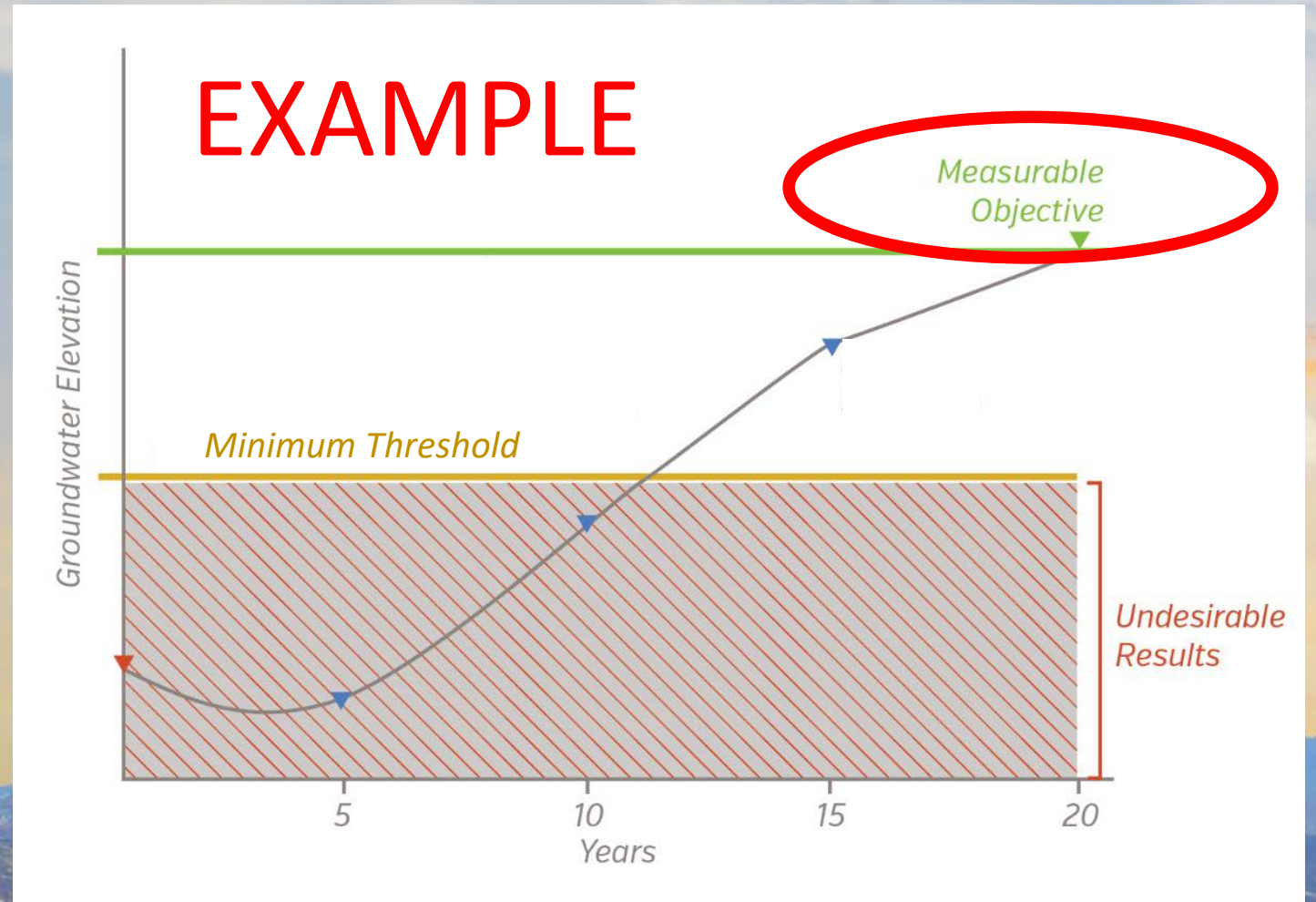
# Undesirable Results, Minimum Thresholds & Measurable Objectives

- **Minimum Thresholds:**
  - Anything worse is considered an “undesirable result”
  - The lowest the basin can go without something significant and unreasonable happening to groundwater



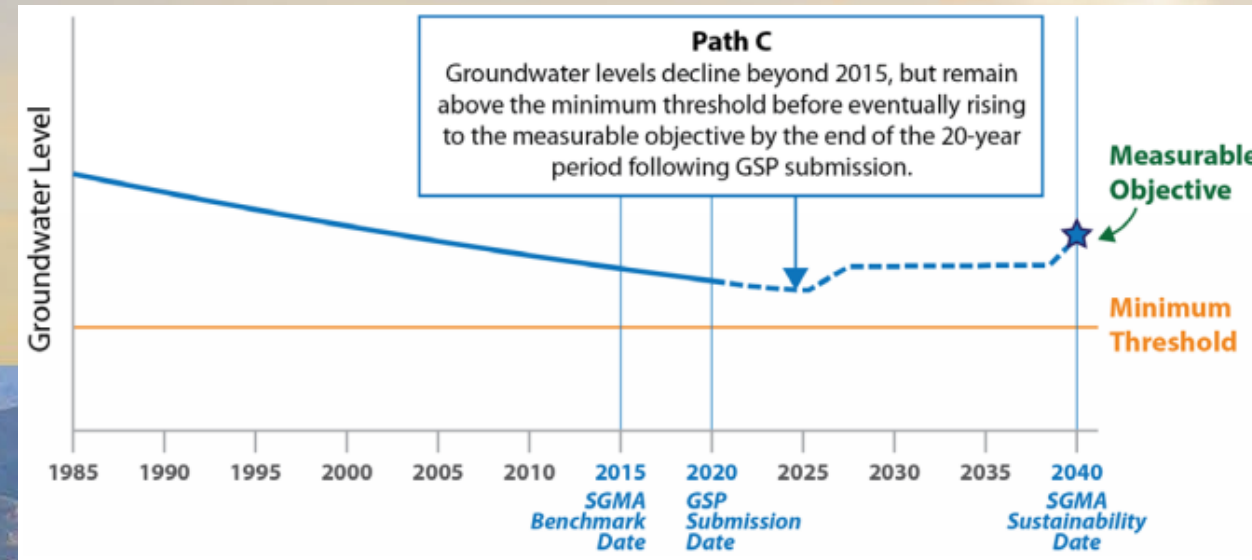
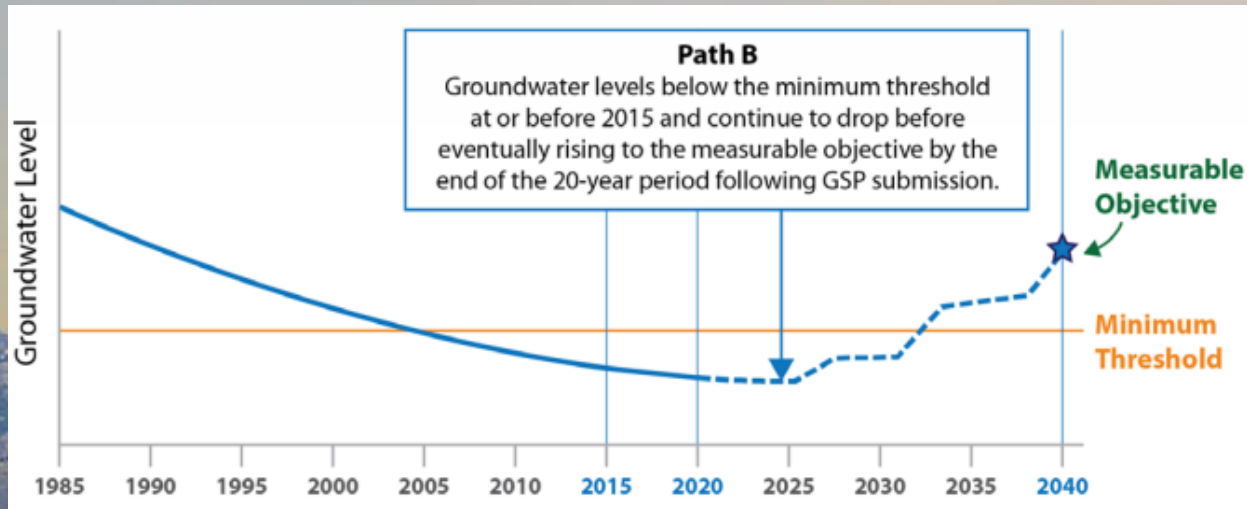
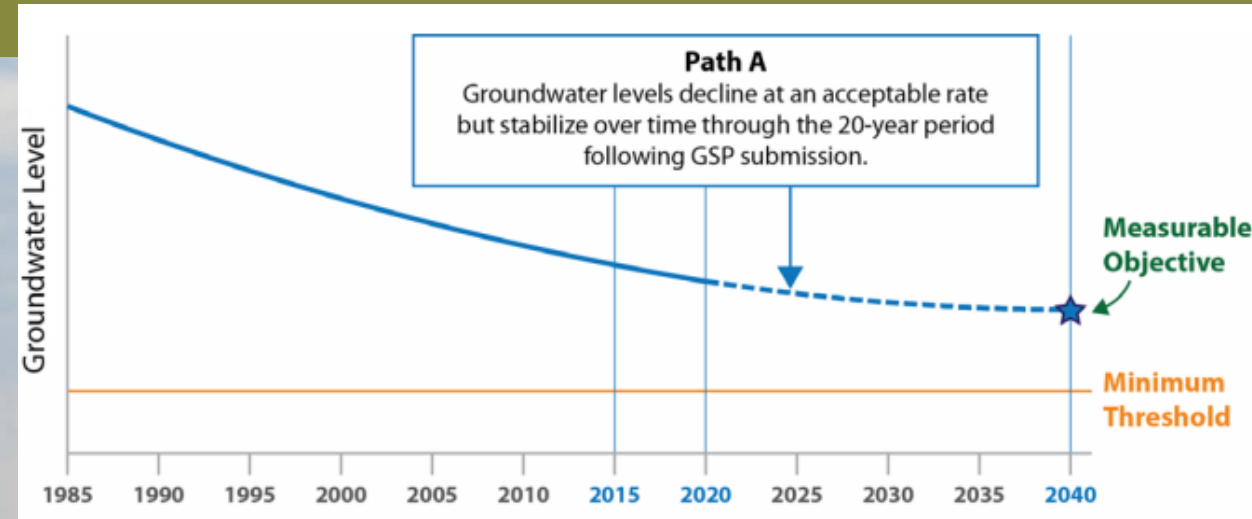
# Undesirable Results, Minimum Thresholds & Measurable Objectives

- Measurable Objectives:
  - A management target that provides a usable buffer for use during droughts, etc
  - Establishes the upper targeted boundary for basin management



# Examples of Pathways to Sustainability

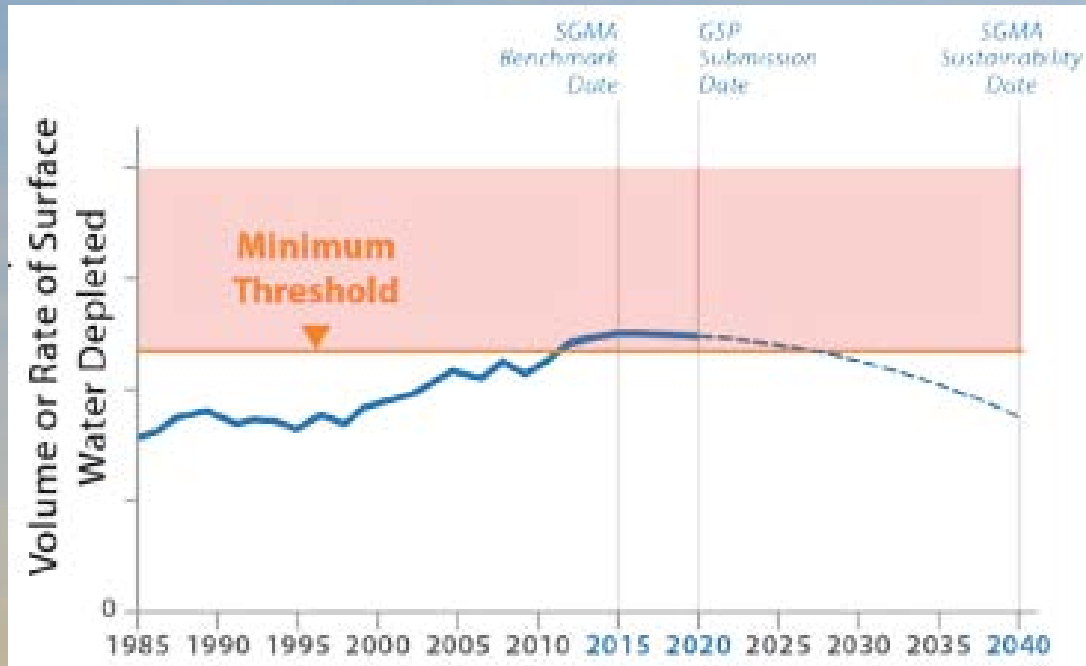
- Plan for future progress can vary based on local groundwater conditions and locally-defined values



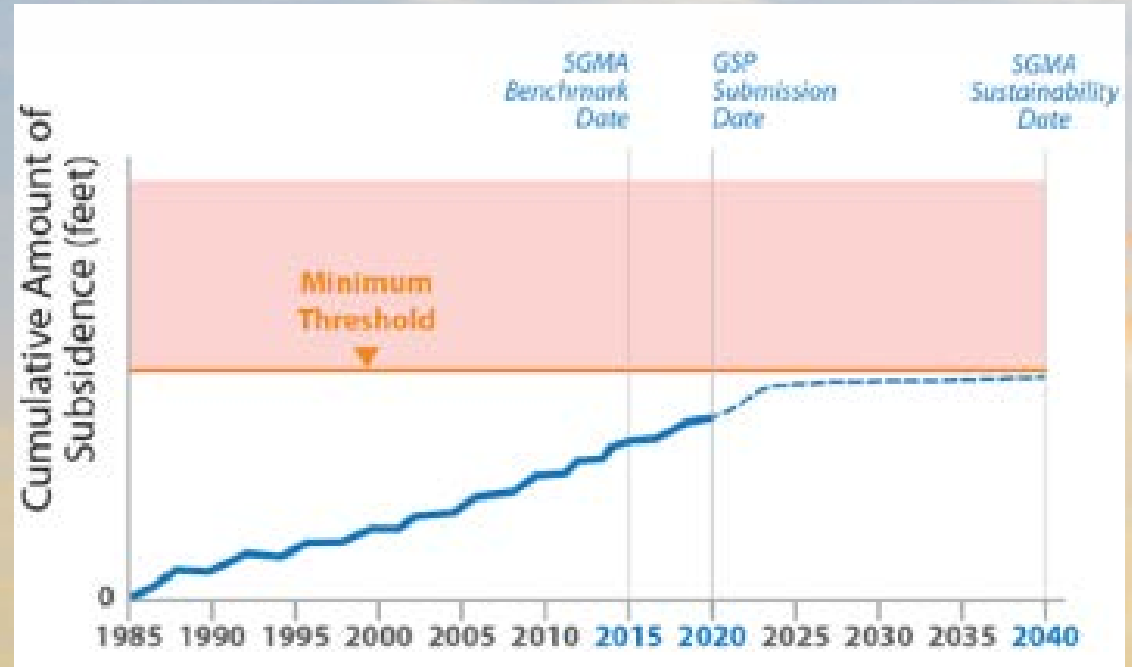


# Examples of Other Sustainability Indicators

- Surface Water Depletions



- Land Subsidence



# Workshop Discussion Questions

## Sustaining the future of the Cuyama Valley

- What does sustainability of the Cuyama Valley mean for you?
- Is your picture of the future different from the Cuyama Valley you know today, if it is, how is it different?

## The role of water in the future of the Cuyama Valley

- What do you see as important challenges or undesirable effects for the future of water in the Valley for the following?
  - Water and Jobs
  - Water and Community/Households
  - Water and Small Farms
  - Water and Large Farms
  - Water and Natural Resources