



South Platte Forum

## **SWSI, IPPs, an the M&I Gap**

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# SWSI 2010 Areas of Analysis

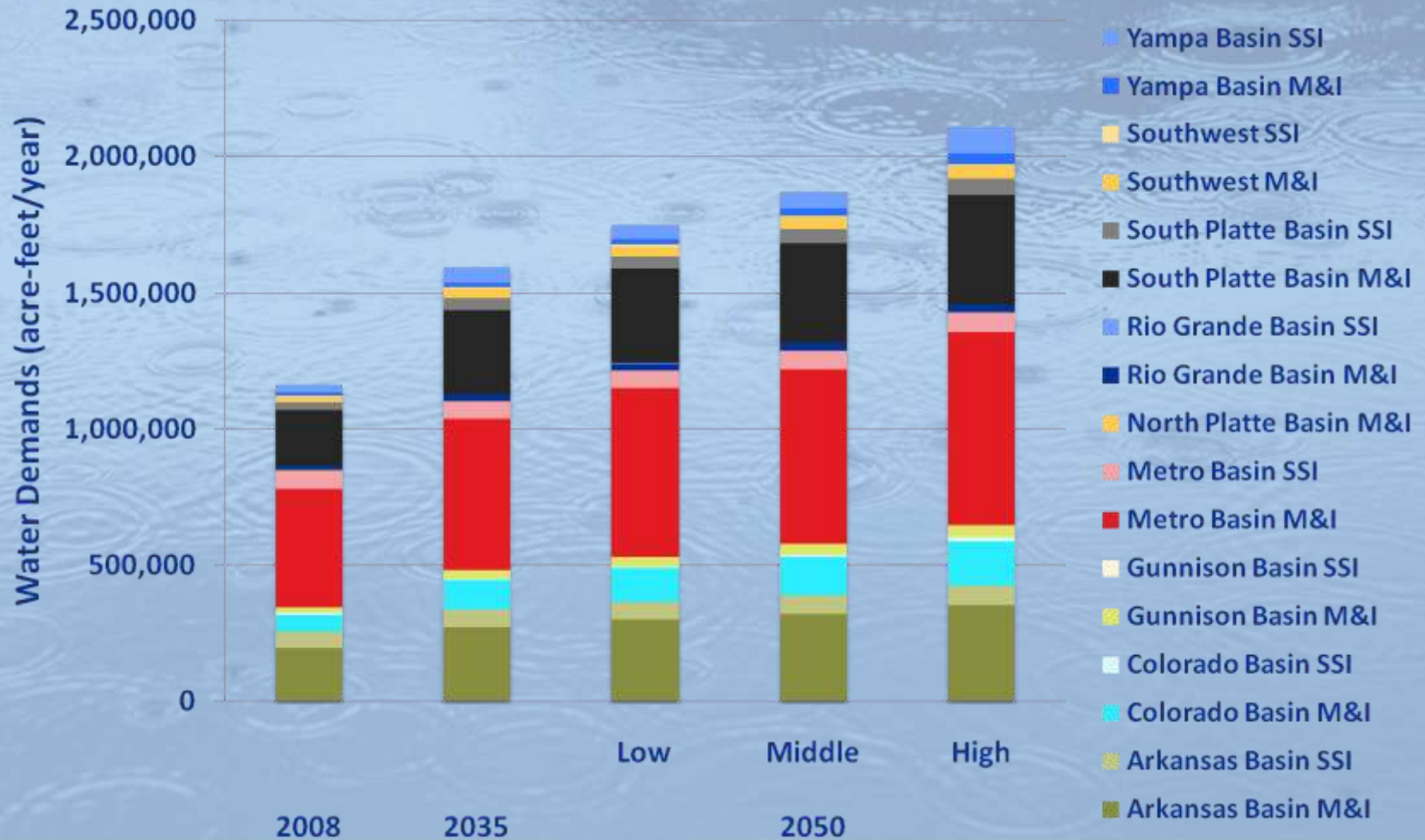
- Nonconsumptive Needs
- Agricultural Needs
- Water Supply Availability
- M&I Needs
- Identified Project and Processes (IPPs)
- M&I Gap
- Portfolios and Strategies to Address the M&I Gap



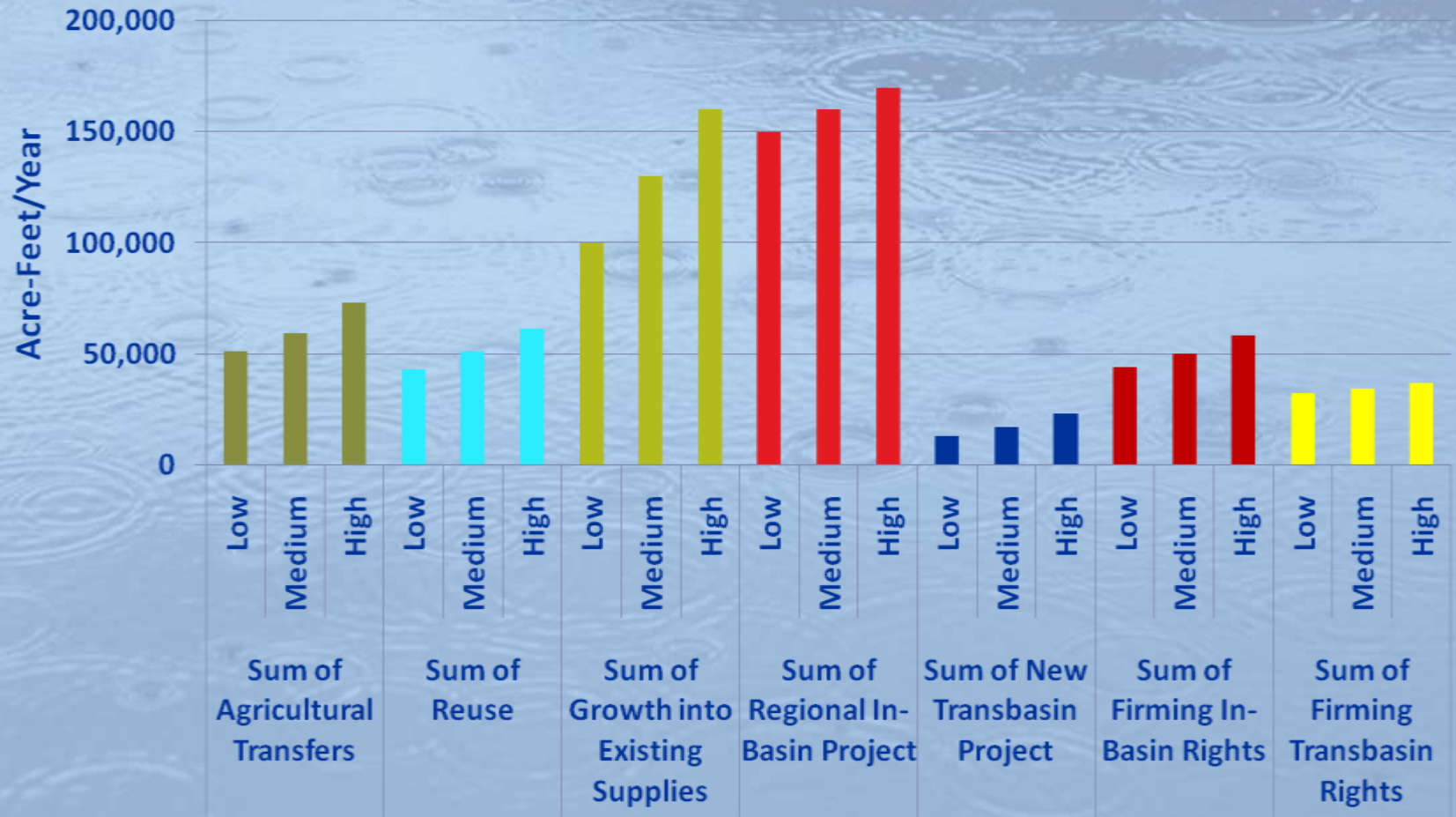
# Overview – M&I Water Demands to 2050

- Population
  - 2035 population projection from Colorado State Demographer's Office (SDO)
  - 2050 population project using SDO's methodology
- Demands
  - Update *current system-wide* gallon per capita per day (gpcd) values
  - Project base-line water demands at 2035 and 2050
  - Subtract passive conservation savings

# By 2050, Colorado will Need 600,000 to 1 Million AFY of Additional M&I Supply



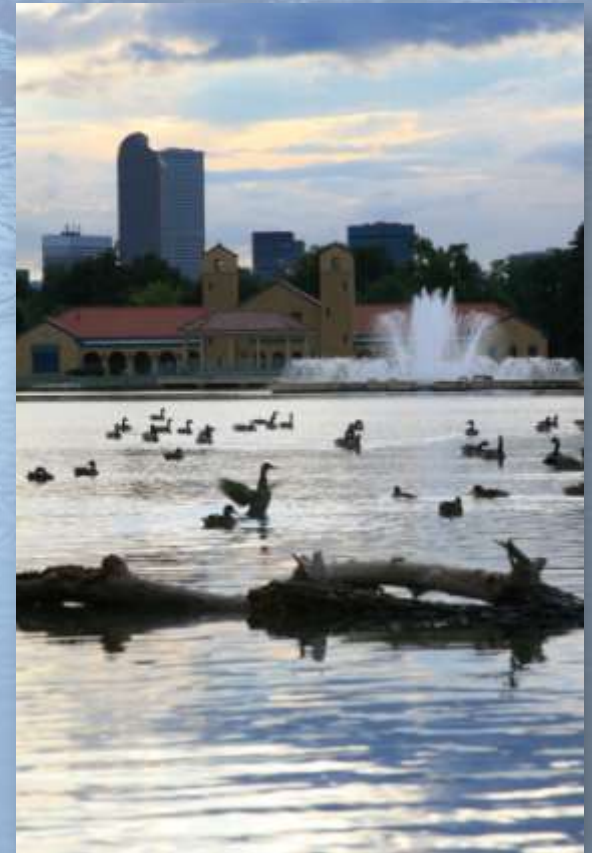
# M&I Identified Projects and Processes



# M&I Identified Projects and Processes

## Key Findings

- If 100% of the IPPs are successfully implemented, they would provide about 500,000 AFY
- IPPs, if successfully implemented, have the ability to meet some, but not all of Colorado's 2050 M&I water needs
- Implementation of these IPPs are critical to meeting Colorado's future water supply needs



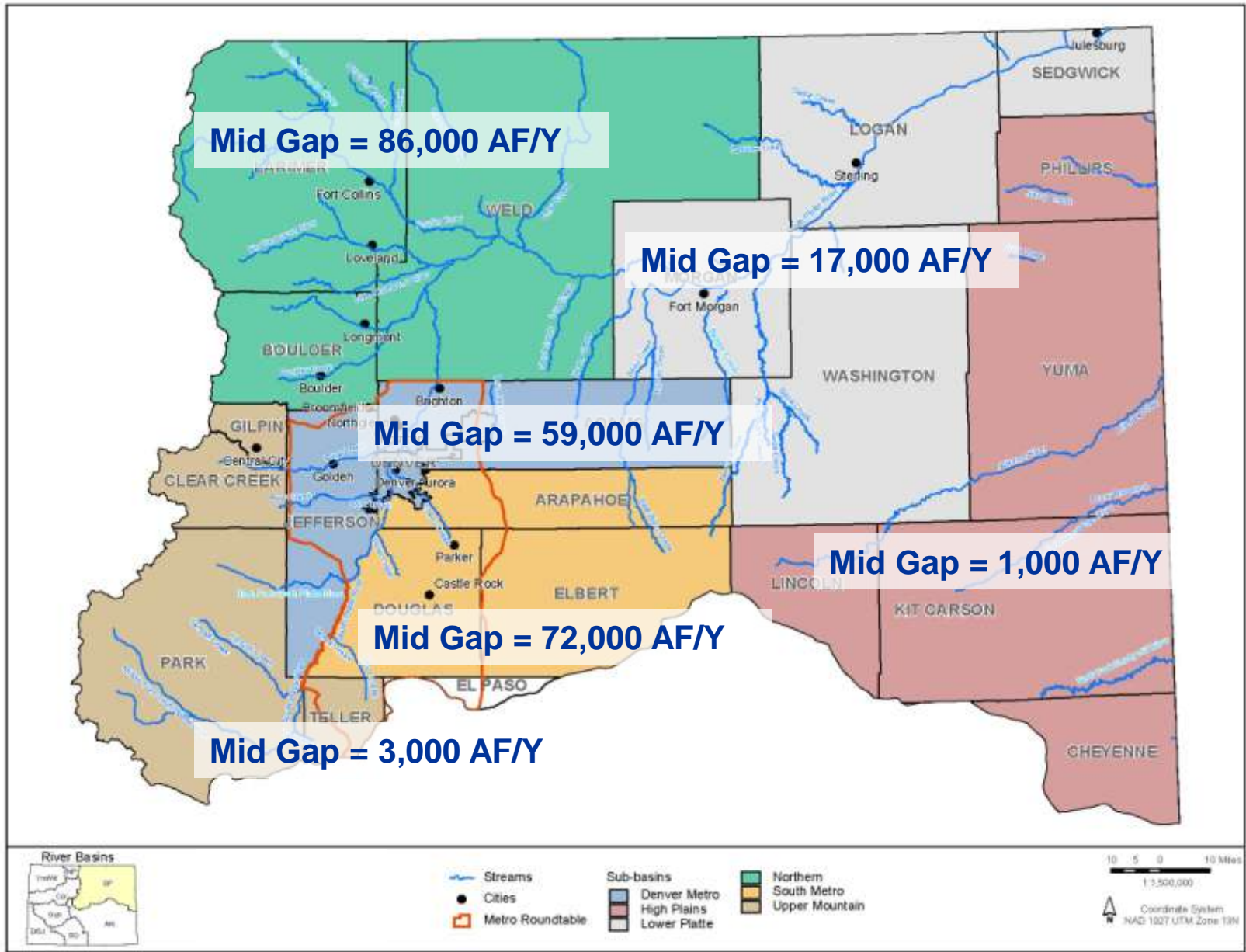
# M&I Gap Analysis Methodology

*M&I Gap = 2050 Net New Water Needs – 2050 IPPs*

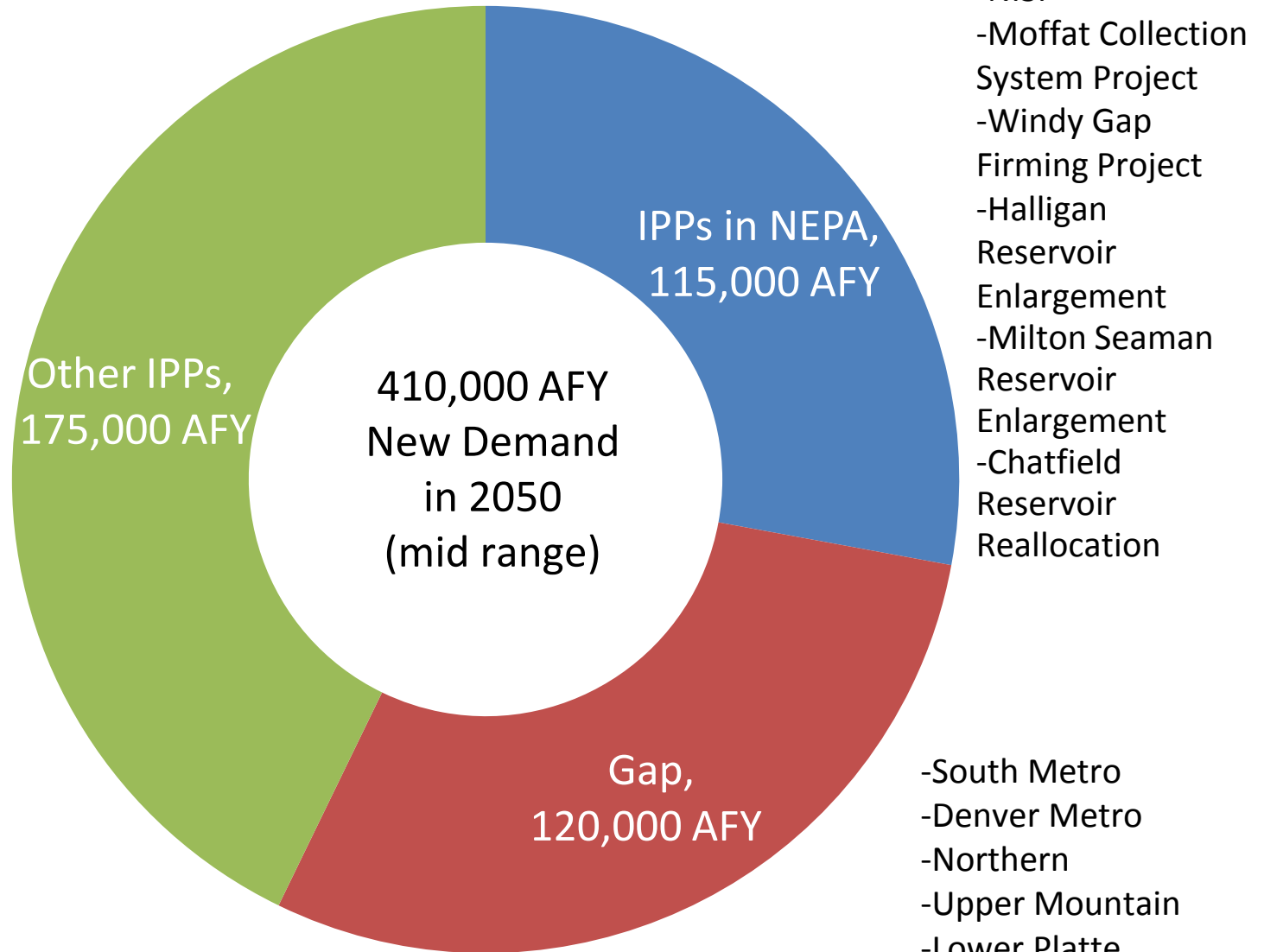
# M&I and SSI Gaps Estimated for Low, Medium, and High Scenarios

- **Low Gap Scenario:** Low M&I and SSI Demands with 100 percent IPP Yield Success
- **Medium Gap Scenario:** Medium M&I and SSI Demands with 70 percent IPP Yield Success
- **High Gap Scenario:** High M&I and SSI Demands with 60 percent IPP Yield Success

**The 2050 M&I Gap is estimated to be between  
190,000 and 630,000 AFY**



## South Platte Basin and Metro 2050 New Demand

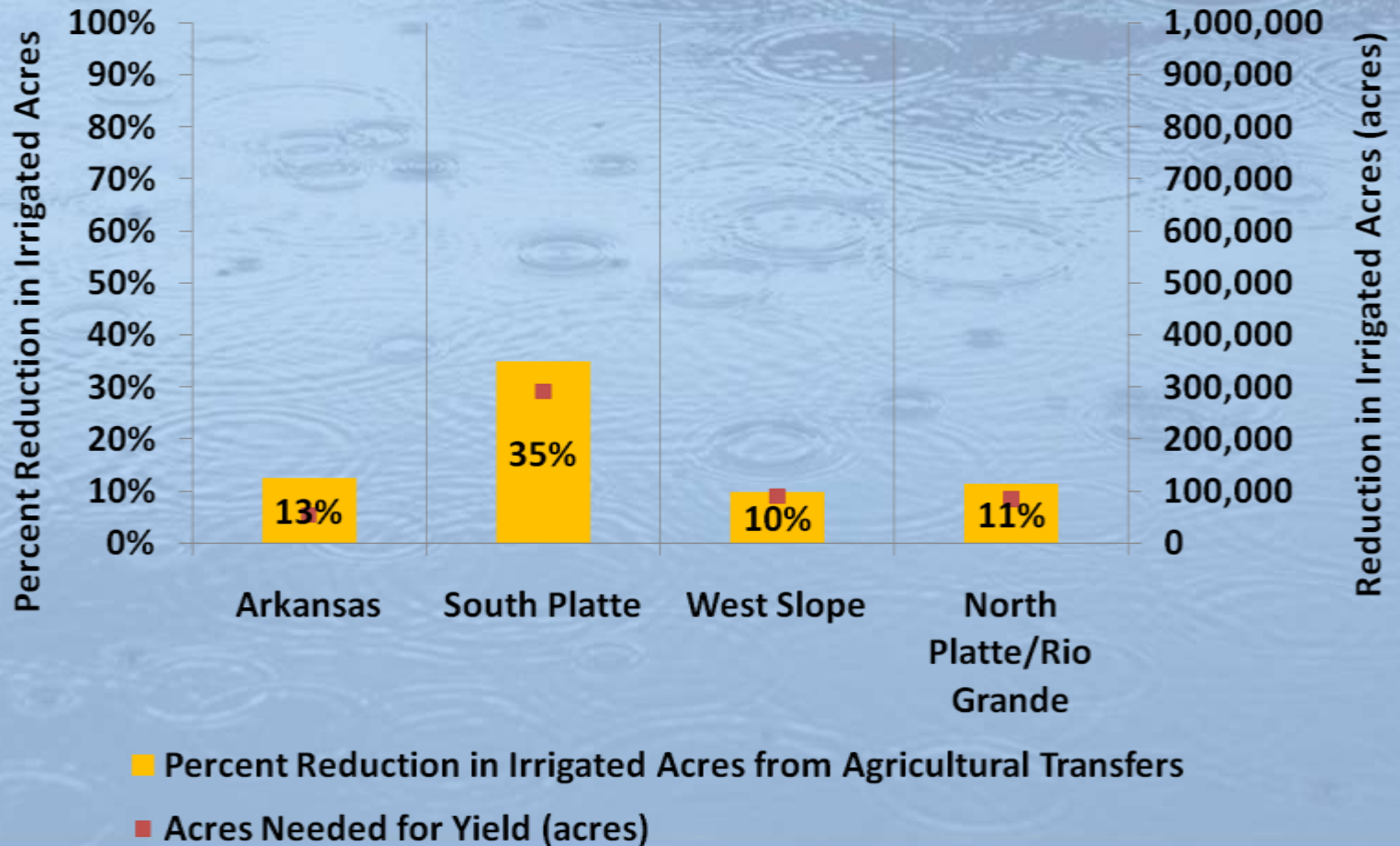


- Growth Into Existing Supplies
- Agricultural Transfers
- Gravel Lakes
- Recapture and exchange plans
- Augmentation Plans
- Denver Water system refinements and modifications
- Aurora Prairie Waters Project
- Eagle River Joint Use Project
- Box Creek Reservoir
- ECCV Northern Pipeline Project
- South Metro Counties Rueter-Hess Reservoir
- WISE

- NISP
- Moffat Collection System Project
- Windy Gap Firming Project
- Halligan Reservoir Enlargement
- Milton Seaman Reservoir Enlargement
- Chatfield Reservoir Reallocation
- South Metro
- Denver Metro
- Northern
- Upper Mountain
- Lower Platte

# Status Quo Trade-Off Reduction in Irrigated Acres

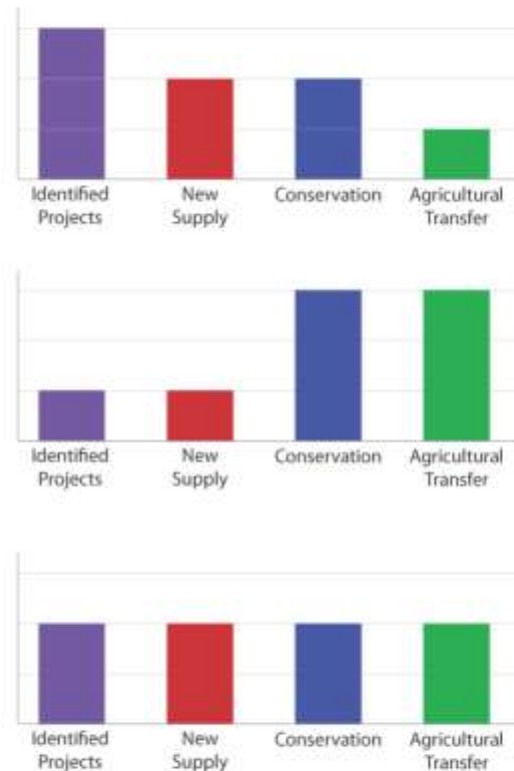
## Reduction in Irrigated Acres in 2050 Based on Scenarios



# In Order to Avoid the Status Quo, Colorado Will Need a Mix of Solutions



**Example Statewide Portfolios**



**IBCC and Subcommittees**

- Reconcile common elements
- Arrange by thematic portfolios
- Explore trade-offs of thematic portfolios
- Determine implementation elements of portfolios



# Questions or Further Detail

Visit: [www.CWCB.state.co.us](http://www.CWCB.state.co.us)

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