# Portfolio and Trade-Off Tool

Allowing roundtables to define their vision for how to best meet the state's M&I Needs

- 1. Define demand levels in 2050
  - Low, mid, or high demands
     Oil Shale
     Replacement of South Metro & Northern El Paso nontributary groundwater
     Additional supply / demand factor to account for concerns like climate change
- 2. Define IPP success levels by basin and by project/type
- 3. Define conservation level and how much can be applied to the gap
- 4. Define amount of new supply and ag transfer water for both West and East Slopes
- 5. Define percent of water that can be reused (if desired)

Outputs: ♦ Statewide, regional, and basin specific portfolios ♦ Data table
♦ Statewide, regional, and basin specific portfolios by water source

Trade-Offs: Amount of irrigated acres dried up Cost of portfolio compared to status quo Amount of irrigated ag acres needed to go into rotational fallowing program Nonconsumptive benchmarks on West Slope
 Accretion / depletion of SP flows (in development)

## A Range of Mid Portfolio Options

	Base	IPPs	New Supply	Conservation	Ag
IPPs	Mid (IBCC alt)	High (Metro alt) / Low (SQ)	Mid (IBCC alt)	Mid (IBCC alt)	Mid (IBCC alt)
New Supply	Mid (100,000 AF)	Mid (100,000 AF)	High (250KAF) / Low (0KAF)	Mid (100,000 AF)	Mid (100,000 AF)
Conservation / Reuse	Mid (Cons. Committee Recs)	Mid (Cons. Committee Recs)	Mid (Cons. Committee Recs)	High (High Scenario @ 60% to gap) / LOW (0 % active cons.)	Mid (Cons. Committee Recs)
Ag Transfers	Mid (20% SP dry up per urbanization & IPPS)	Mid (20% SP dry up per urbanization & IPPS)	Mid (20% SP dry up per urbanization & IPPS)	Mid (20% SP dry up per urbanization & IPPS)	High (No new supplies) / Low (only urbanized lands)

#### **Base Portfolio Option**

	Base	0.00
IPPs	Mid (IBCC alt)	900 800 700 500 400 300 200 100
New Supply	Mid (100,000 AF)	
Conservation / Reuse	Mid (Cons. Committee Recs)	
Ag Transfers	Mid (20% SP dry up per urbanization & IPPS)	



• **20%** Ag dry up (180,000 acres)

Would trigger FWS consultation in GU or Y/W, but not likely the Green

• Decrease SP flows by about **4%** @ state line

Would require 40-55% of SP ag to be in rotational fallowing program
 SIMILAR PORTFOLIOS: High IPP Success, Low IPP Success (25% ag dry-up, 200,000 Acres dried up)

## **High New Supply Portfolio Option**

	New Supply	900.000 -
IPPs	Mid (IBCC alt)	800,000 - 2700,000 -
New Supply	High (250KAF)	- 000,000 - 500,000 - 400,000 -
Conservation / Reuse	Mid (Cons. Committee Recs)	ອັງ 300,000 - V 200,000 - 100,000 - 0 -
Ag Transfers	Mid (20% SP dry up per urbanization & IPPS)	



Only 210,000 AF of transbasin water is needed to meet demands
20% ag dry up (150,000 acres), but provide 90,000 AF of additional reuse water to ag (allow for 70,000 acres to stay in business)
Would trigger FWS consultation in GU, Y/W, and the Green
Increase SP flows by about 14% @ state line
Requires 30-40% of SP ag to be in rotational fallowing program & less if reuse goes to ag SIMILAR PORTFOLIOS: Low ag transfer (just 7% of ag lands, with decrease in IPP success)

### Low New Supply Portfolio Option

	New Supply		9(
IPPs	Mid (IBCC alt)		80 27
New Supply	Low(o KAF)		66 <b>/,Yea</b>
Conservation / Reuse	Mid (Cons. Committee Recs)		94 40 30 92 92 10 10
Ag Transfers	Mid (20% SP dry up per urbanization & IPPS)		



**30%** ag dry up (265,000 acres)

•Would keep WS nonconsumptive needs relatively whole

Decrease SP flows by about 8% @ state line

• Requires **75-95%** of SP ag to be in rotational fallowing program

SIMILAR PORTFOLIOS: High ag transfer

## **High Conservation Portfolio Option**

	Conservation	900.000	M&I Needs and Portfolio to Meet Need					s (click here for portfolio water sources by basin)		
IPPs	Mid (IBCC alt)	800,000 700,000 <b>100,000</b> <b>100,000</b>	East Slope		West S	ilope	North Rio G	North Platte/ Rio Grande		
New Supply	Mid (100,000 AF)									
Conservation / Reuse	High (High Scenario @ 60% to gap)		400,000 - 5300,000 - € 200,000 - 100,000 -							
Ag Transfers	Mid (20% SP dry up per urbanization & IPPS)	0 -	M&I Needs 2050 Oil Shal 2050 M&I W IPPs New Supply I Agricultural T Reuse for Agr	Portfolio le Water Needs ater Needs Development Transfer ricultural Use	M&I Needs ■ 2050 S ≥ 2050 F ■ Active ■ New St ■ Agricu	Portfolio SI Water Need Passive Conser Conservation upply Develop Itural Transfer	M&I Needs ls vation Savings ment Reuse Reuse	Portfolio		

• Only 50,000 AF of transbasin water is needed to meet demands

**20%** ag dry up (150,000 acres), but provide 22,000 AF of additional reuse water to ag (allow for 17,000 acres to stay in business)

• Would trigger **FWS consultation** in GU or Y/W, but not likely the Green, 80% of flows maintained for Y/W and Green)

Decrease SP flows by about 6% @ state line

Requires **30-40**% of SP ag to be in rotational fallowing program & less if reuse goes to ag Low cost option

#### **Low Conservation Portfolio Option**



**25%** ag dry up (220,000 acres)

• Would trigger FWS consultation in GU or Y/W, but not likely the Green

- Decrease SP flows by about 6% @ state line
- Requires 55-75% of SP ag to be in rotational fallowing program