



# SOUTH PLATTE RIVER BASIN WATER DEVELOPMENT CONCEPT

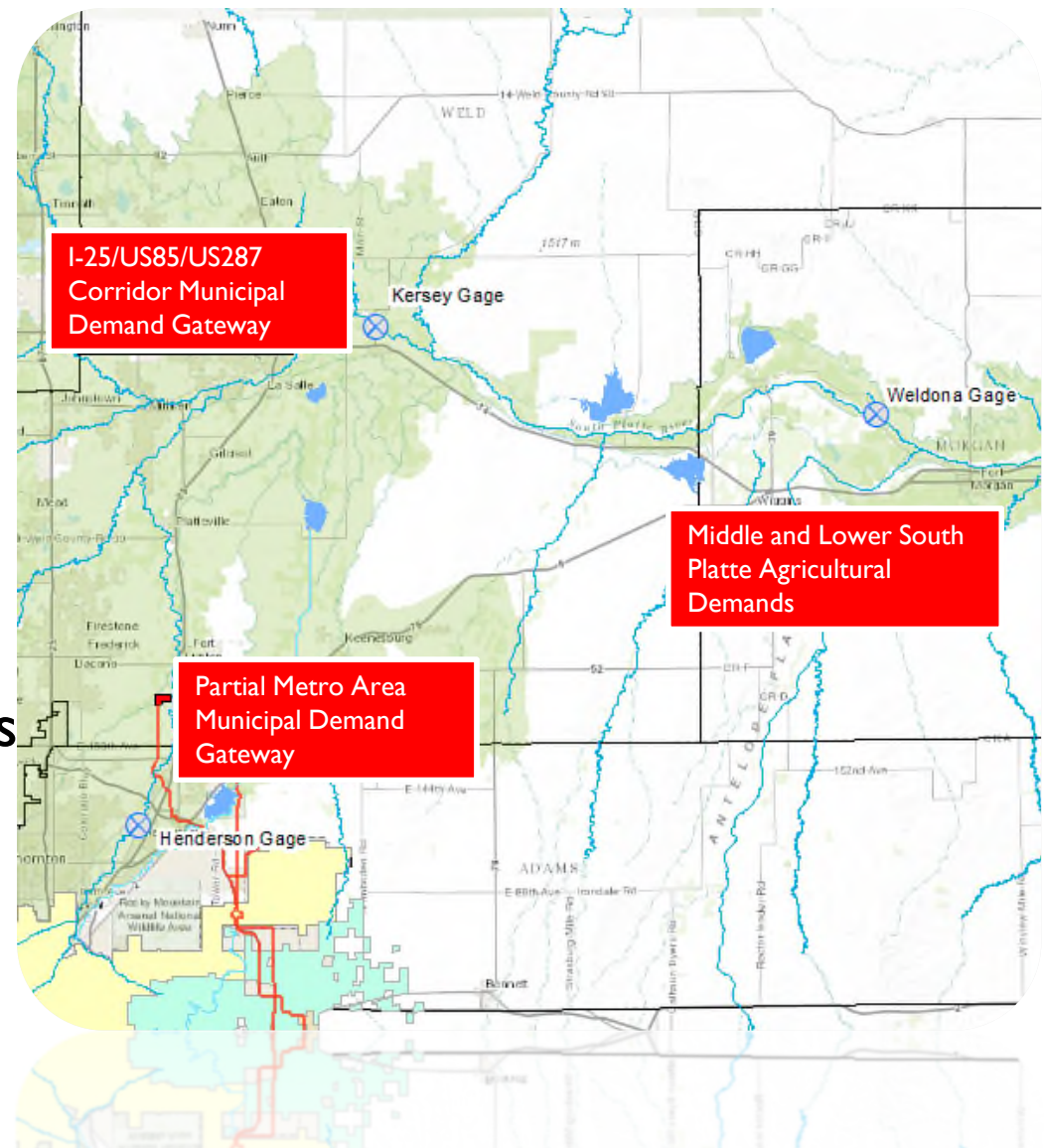
South Platte Regional Opportunities Working Group

## Who is SPROWG?

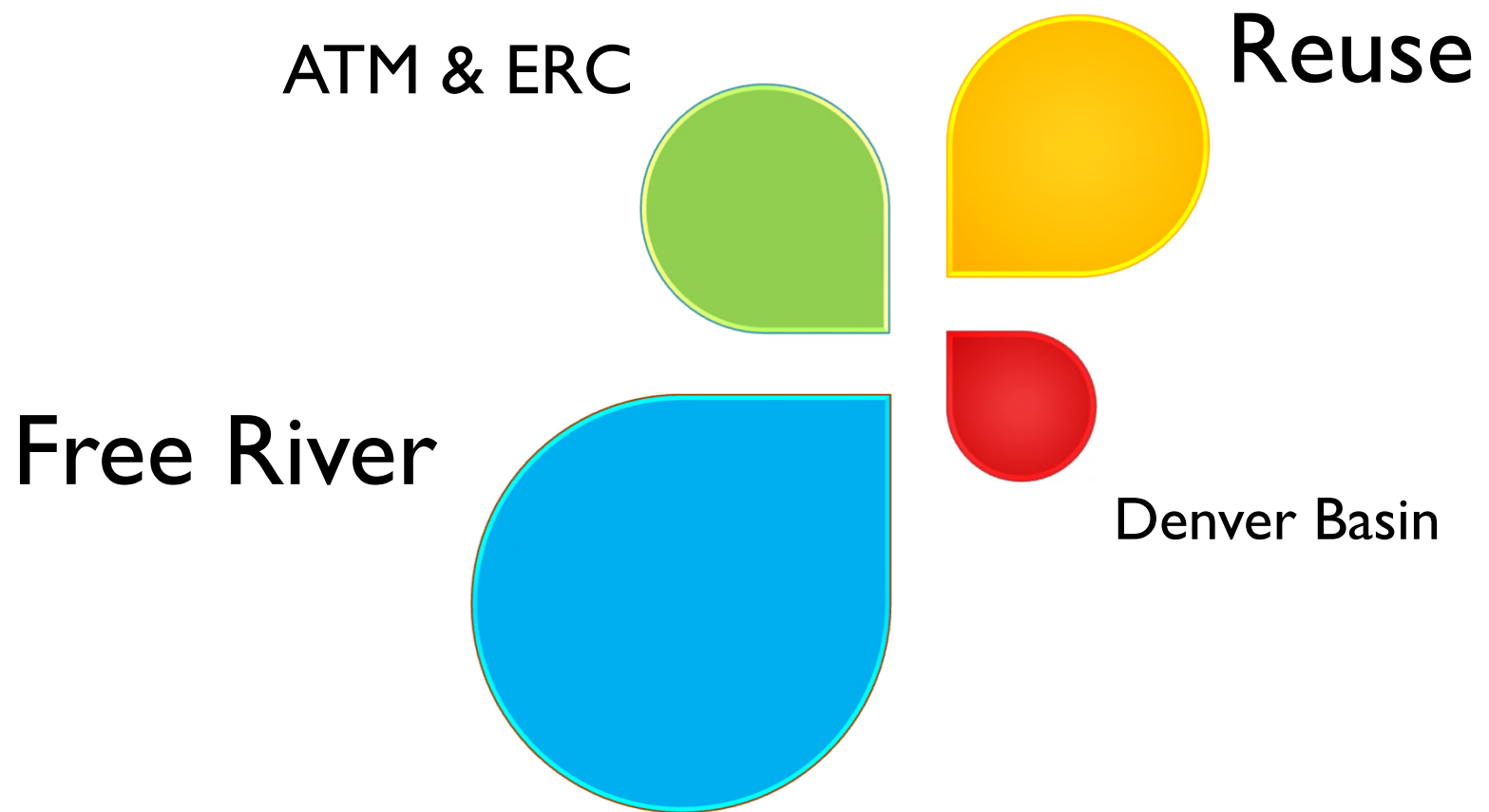
- Regional water providers came together in 2015 to investigate regional supply concepts
- Took off agency hats
- Why?
  - Maximize use and effectiveness of available water on South Platte
  - Minimize traditional agricultural “buy and dry”
  - Evaluate cooperative, multi-purpose/user supply projects to fill Ag and M&I gap.

# Define Demands

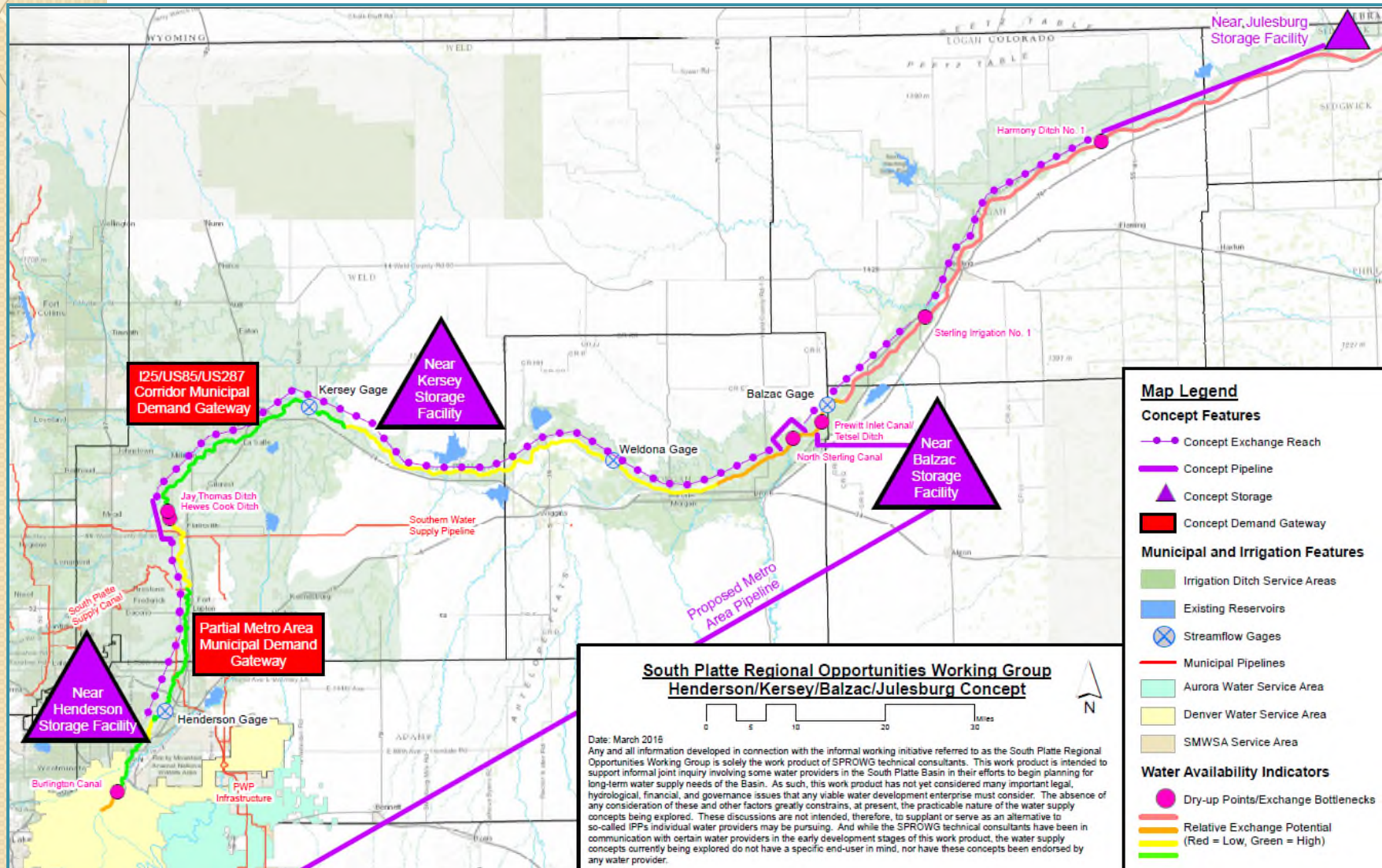
- ▶ I-25/US85/US287 Corridor Municipal Demand Gateway
- ▶ Partial Metro Area Municipal Gateway
- ▶ Middle and Lower South Platte Agricultural Demands
- ▶ **50,000 acre-feet** on average annually



# Evaluate Water Supplies



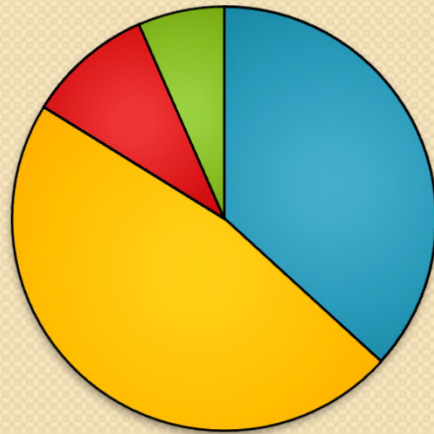
# Project Concepts



## Single Storage Facility Concept

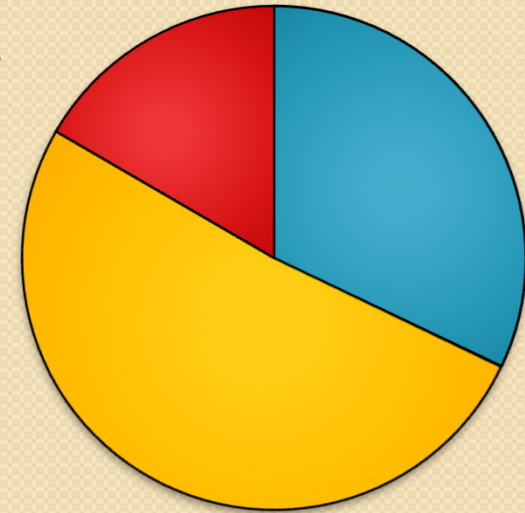
## Three Storage Facilities Concept

Project Supplies

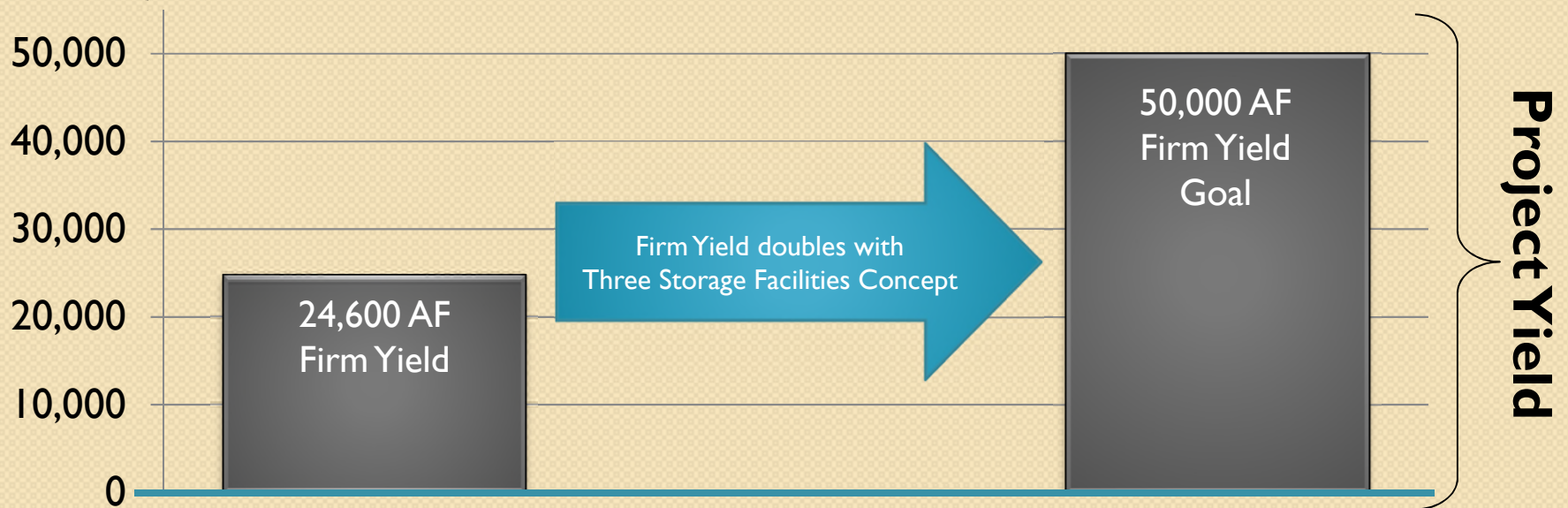


Total Supplies = 47,000 AF  
Annually on Average

- Legally reusable supplies
- Unappropriated natural flow
- ATMs/Recharge credits excess to augmentation requirements
- Denver Basin non-tributary ground water supplies



Total Supplies = 62,500 AF  
Annually on Average



Project Yield



# Initial Lessons Learned

- Storage Facility/Conveyance Infrastructure combination that feasibly could provide 50,000 AF firm yield
- Upstream storage is critical, unless willing to rely exclusively on pumps/pipelines
- Capacity is key:
  - Large intake capacity to capture Free River flows
  - Storage facility carry-over for five-year drought period (2003-2008)
- Reusable supplies are critical for firm yield

# Supporting Efforts

- **South Platte/  
Metro BIP**

- ✓ Conservation and reuse
- ✓ Maximize native South Platte River Basin supplies
- ✓ Minimize buy-and-dry and maximize ATMs
- ✓ Manage risk of increased demands and reduced supplies
- ✓ Promote multi-purpose storage projects

- **Colorado's  
Water Plan**

- ✓ Attain 400,000 acre-feet of water storage to manage and share conserved water and IPP yield by 2050
- ✓ Achieve 50,000 acre-feet of water secured through alternative transfer methods (ATMs) by 2030

- **South Platte  
Storage Study**

- ✓ Refine hydrology and exchange potential
- ✓ Cooperative storage projects with multiple users
- ✓ Storage that supports ATMs
- ✓ Storage upstream of Greeley
- ✓ Consider water sources other than free river



# Potential Next Steps

- Form Task Force (South Platte & Metro BRT members and interested stakeholders) and identify funding sources to further study the concept through:
  - Identifying Partners/Organizational Framework
  - Developing Scope of Work:
    - Integration with SPSS Results
    - Perform Additional Technical Analysis