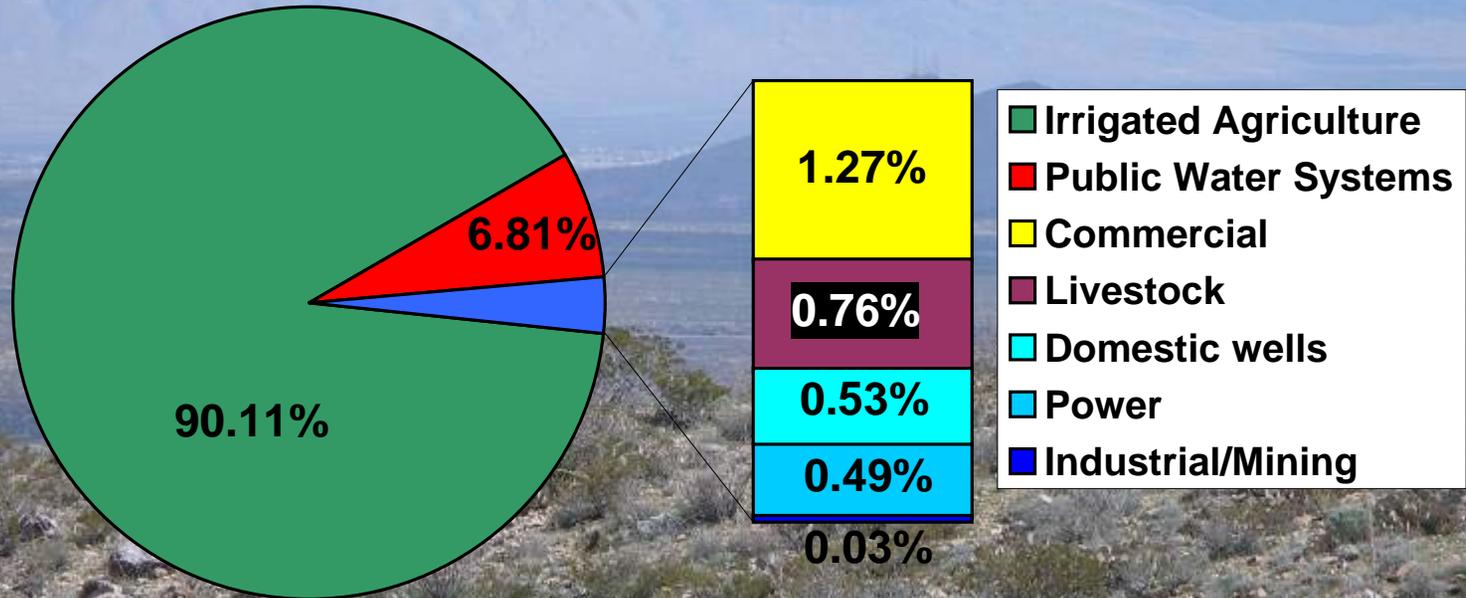


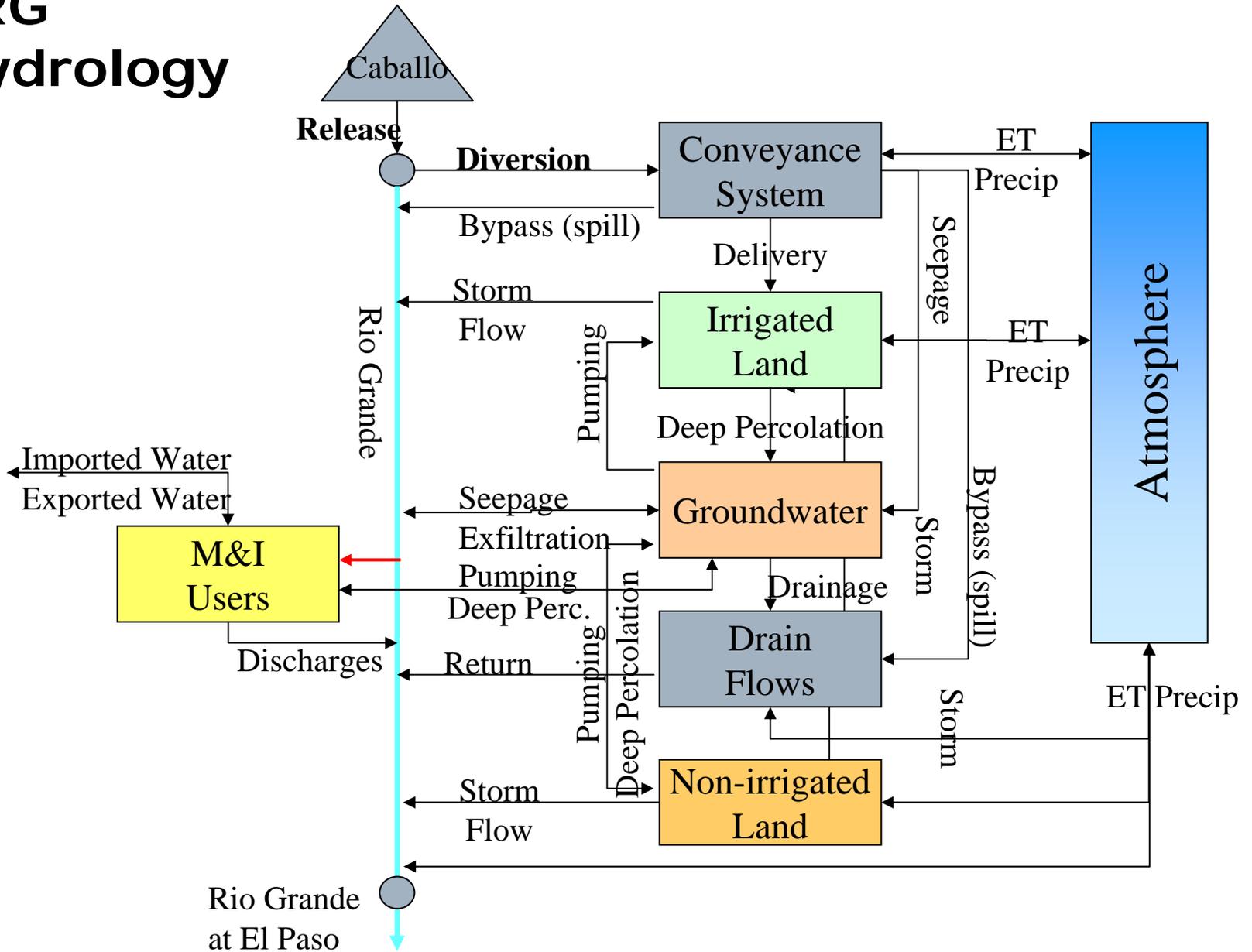
# Squaring Up with the Rio Grande

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Department of Civil Engineering  
New Mexico State University

# Water Use by Sector in LRG



# LRG Hydrology

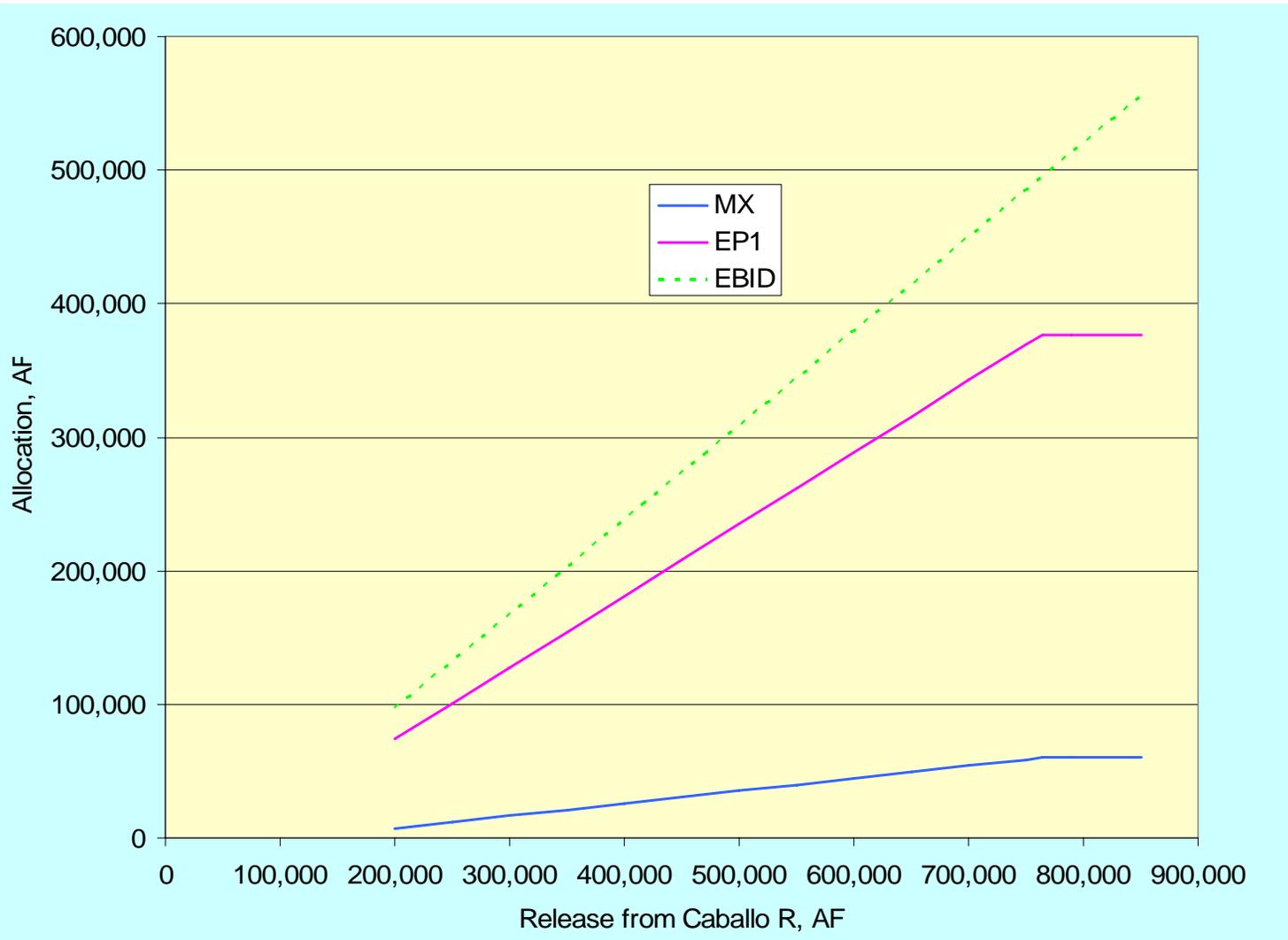


# D3 Allocation

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- $MX = 0.09375 \cdot R - 11,610$ , maximum 60,000 acre-feet
  - $EP1 = 0.53775 \cdot R - 33,872$ , maximum 376,885 acre-feet
  - $EB = R \cdot R_D - MX - EP1$
  - $R_D = \text{Total Diversion/Release}$
-

# Graphical D3



# Allotment Process

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- Diversion Allocation set by BOR a la D3
  - Adaptive strategy by EBID
    - Allotment =  $e_c \cdot \text{Allocation} / 90,640$
    - $e_c = \text{Delivery} / \text{Diversion} \approx 50\%$  in drought, 65% in full supply
    - Moving target
  - Groundwater - ???
-

# SWUAs

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- Allow entity to use surface water for M&I and other uses within District boundaries
    - Ownership of Project Water rights
    - Lease of Project Water rights
    - Transfer of Project Water
-

# Foundations for Special Water Users Associations

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- ❑ Developed by EBID, City of Las Cruces, and the State Engineer
  - ❑ EBID Policy 2003-GA8, approved November 19, 2003
  - ❑ 73-10-48 NMSA
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# SWUA Details

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- ❑ Assessed as EBID constituents
  - ❑ Share pro rata in shortages
  - ❑ Surface water rights maintain EBID's 1906 priority date
  - ❑ SWUA must lease all of the water from a parcel; land must be fallowed
  - ❑ Special Combined Unit: Small tracts (<2 acres) can be consolidated and treated as farm tract for ordering and billing
  - ❑ Maintained as Ag use until demand for direct M&I use develops
-

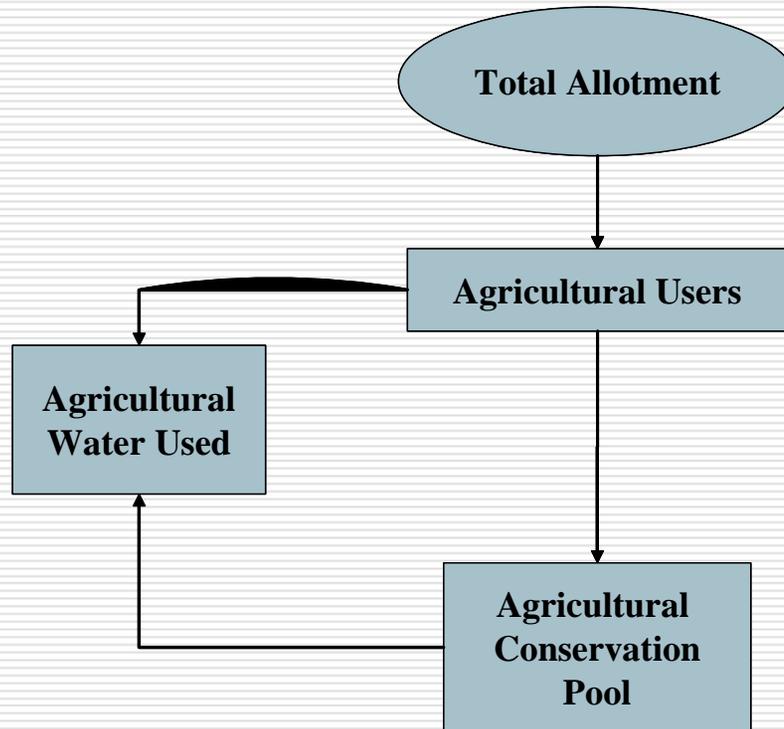
# Who Can Form SWUAs?

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- Municipalities
  - Counties
  - State Universities
  - Member-owned community systems
  - Public utilities
  - Interstate Stream Commission
-

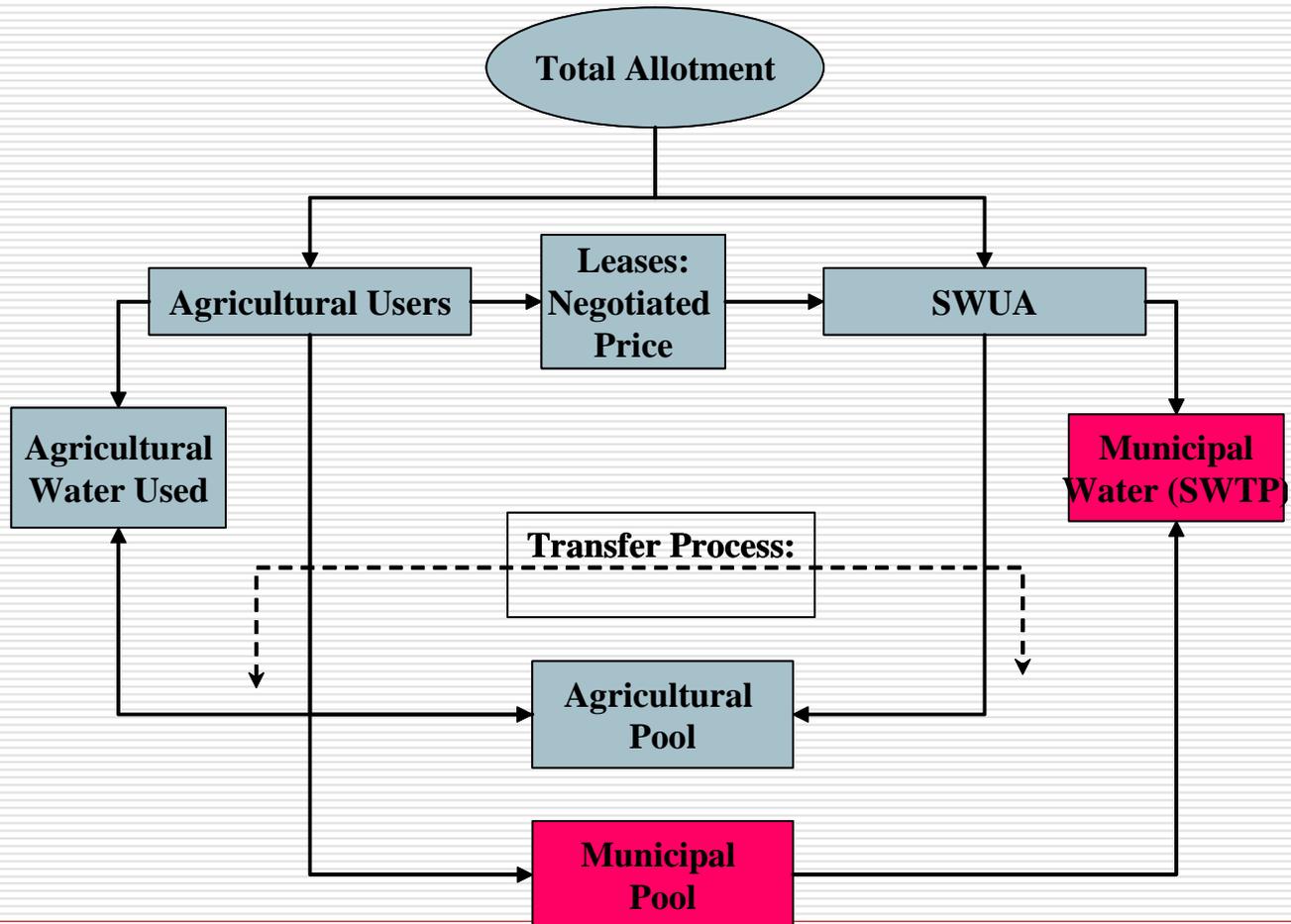
# Traditional Ag – to – Ag transfers

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# SWUA Ag – to – M&I transfers

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# Application to River Restoration

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- Restoration on water-righted land
    - Order-delivery
  - Drain restoration sites
    - Passive flow - Bosque Park
  - Instream flow order/delivery
    - Relation to downstream Project delivery
-