

# Navigating Shortages for Southwest Colorado Water Users April 1, 2022

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DP = MVIC sr rights, FS area, Ute Farm & Ranch, D/S fish pool & secure local M&I



#### McPhee Annual 350 KAF -Use 250 KAF 70% Historical carryover at 100 KAF (40%)



## Stationarity is Dead or 100% snow pack doesn't make what it used to



## We designed our projects, systems and operations on historical patterns



#### Multi Year drought, 2<sup>nd</sup> Year of La Nina with no carry over storage



What can help? Long term drought forecasting? CBRFC? ASO? Other tools



# Changing weather patterns? Long term trends? Hard to tell while in mid-course



# Annual water cycle monsoons-> soil moisture> snow pack-> runoff-> repeat



## Forrest Health - other no regret options? Cloud Seeding



#### Understanding of rising temperature impacts still developing, not necessarily predicative of future precipitation



No water,
No crops,
No revenue,
No water payments



Sharing? Limited by prior appropriation, requires funding, fallowing impacts, see Republican & Rio Grande



Emergency drill: Cut Costs - keep up morale - hard lessons - learn and continue improving, adapt.



### Structural Changes may be considered



### Ultimately demand will have to match supply



### Stay tuned, we're not done adapting to change.