WATER FOR THE MORONGO BASIN, THE NEXT 50 YEARS

Presenter: Tom McCarthy

Saturday, September 28, 2019

Together, we’re securing water for today & tomorrow...
DISCUSSION

OUTLINE

• Background
• Morongo Basin: Looking Back
• Morongo Basin: Looking Forward
• Thoughts on Sustainability
House Keeping – Water Units

- Acre-foot
  - Football fields
- CFS
  - Basketballs

1 AC/FT = Enough Water for 2-3 Families for One Year

ABOUT 1 CUBIC FOOT

5 Cubic feet per second (CFS) is about 5 basketballs per second
Who is this guy?
Education and Experience

• Learning how to solve problems
• Learning that real world problems are... hard.
2 + 2 = 4
? + ? = 4
Who is this guy?

And where is he from?
In 1960 voters approved the formation of the Mojave Water Agency.

MWA is governed by 7 Directors representing different divisions.

The Agency service area encompasses 4,900 square miles.
Officers
Carl Coleman
President

Thurston "Smitty" Smith
V. President

Jim Ventura
Treasurer

Jeanette Hayhurst
Secretary
MWA is one of 29 State Water Contractors (SWC).

As a SWC the Agency can purchase water from the State Water Project.

MWA uses its pipelines to deliver water to locations in the Morongo Basin and the communities of the Victor Valley and Barstow area.
State Water Project augments natural supply
OUR MISSION

To manage the region’s water resources for the common benefit to assure stability in the sustained use by the citizens we serve.
MWA Roles

• Water Resources Manager
• State Water Contractor, importer, or wholesaler
• Watermaster
Morongo Basin Pipeline

- Constructed to address groundwater overdraft in Morongo Basin
- Voters endorsed proposed bond with 80% majority in 1988
- Construction began in 1991
- Completed in 1993
- 82 miles long
- Total cost of $60 Million
The Future

• What we know
• What we don’t know
• How to address uncertainty
Gallons Per Capita Per Day (GPCD)

Other Areas (2018)
- Beverly Hills: 132
- Los Angeles: 73
- Fresno: 130
- Coachella: 98
Morongo Basin Historical and Project Water Demand
(Acre-feet per Year)
Dwindling Supply Reliability
Climate Change

• U.N. Climate Report: Monumental change already here for world’s oceans and frozen regions
• What does this mean for MWA supplies?

- **50 Days** earlier runoff of snowmelt into mountain streams
- **64%** drop in average springtime Sierra snowpack volume

(UCLA Center for Climate Science, 2018)
Aging Infrastructure: SWP Intake System

- Located near endangered fish habitats
- Current pumps reverse natural river flows
- Clean water supplies are dependent on levees protecting land 10 to 20 feet below sea level
- Declining fish populations
- Drought has demonstrated unreliability of our water supply infrastructure
Path to Sustainability – Addressing Uncertainty

• Understand
• Protect
• Conserve
• Import/Store
• Constant Planning
DISCUSSION

- Background
- Morongo Basin: Looking Back
- Morongo Basin: Looking Forward
- Thoughts on Sustainability
2 + 2 = 4