

2012 Yuma Area Tour Arizona Legislature



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Water Supply of Arizona

Colorado River
2.8 MAF

Groundwater
2.9 MAF

Salt River
1.2 MAF

Gila River 0.4
MAF

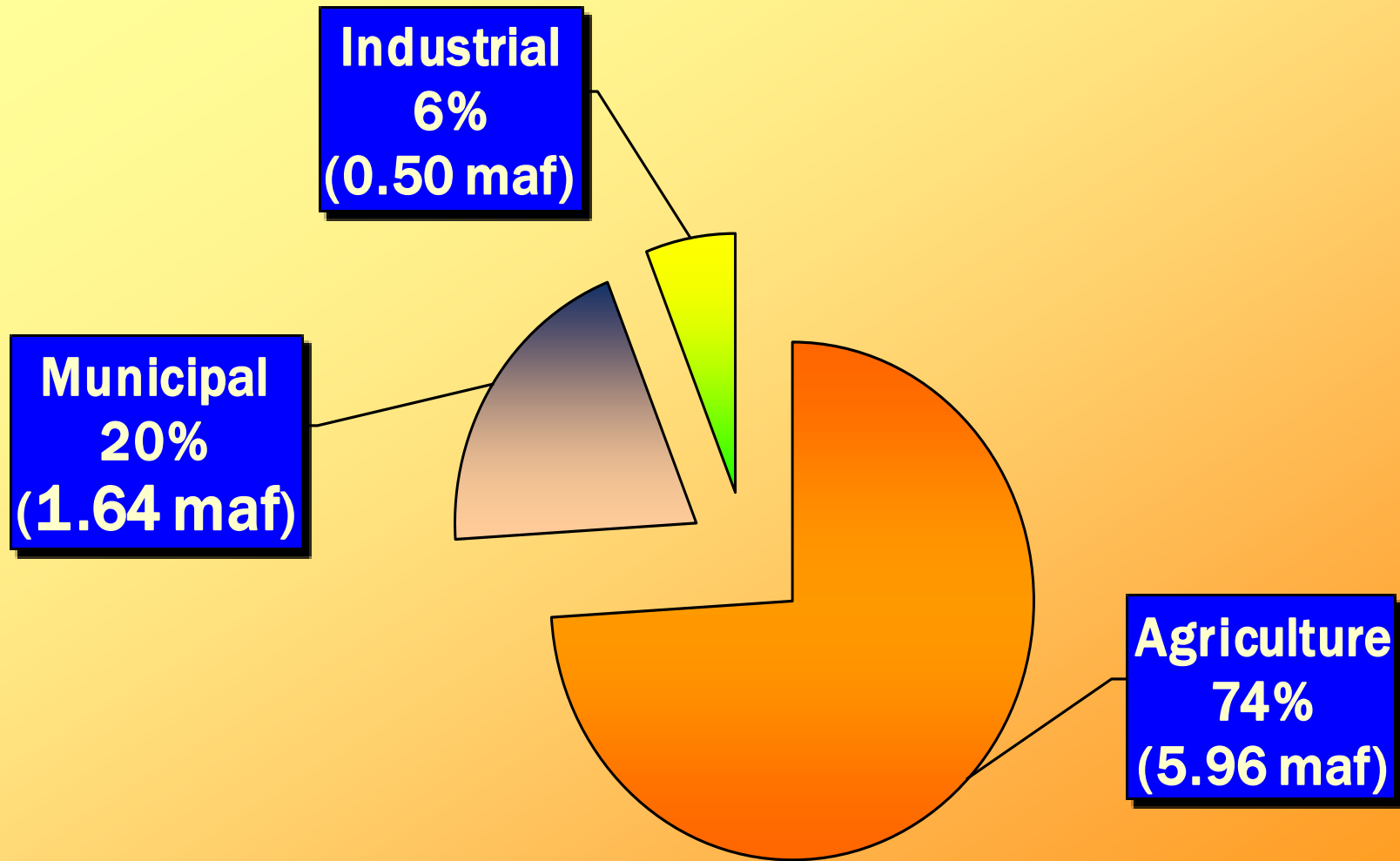


Arizona Water Supply

Annual Water Budget

Water Source	Million Acre-Feet (maf)	% of Total
SURFACE WATER		
Colorado River	2.8	36.8 %
CAP	1.6	21.0%
On-River	1.2	15.8%
In-State Rivers	1.6	21.0%
Salt-Verde	1.2	15.8%
Gila & others	0.4	5.2%
GROUNDWATER	2.9	38.2%
RECLAIMED WATER	0.3	4.0%
Total	7.6 maf	

Consumption



Arizona Water Supply

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UPPER DIVISION STATES

COLORADO



NEW MEXICO



UTAH



WYOMING



LOWER DIVISION STATES

ARIZONA



CALIFORNIA



NEVADA



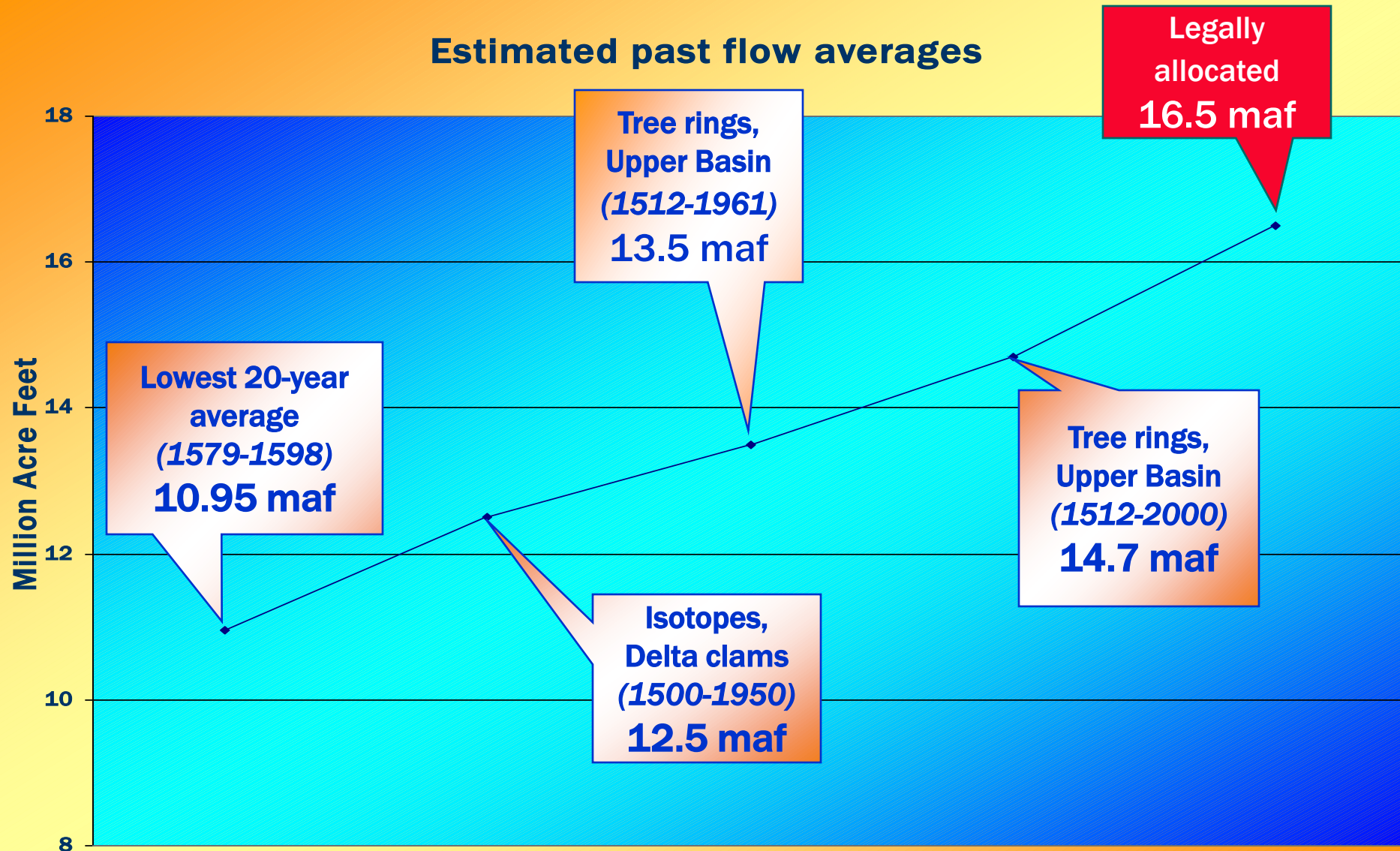
Mexican Water Treaty of 1944



Allots to Mexico 1.5 maf of Colorado River water per year, plus 200,000 acre-feet if the Secretary determines that surplus water is available.



Colorado River Flows



**Depending on which study you
subscribe to, the Colorado River
is over-appropriated by 1.8 to
4.0 maf**

Next Challenge

Upper Basin States will most likely challenge Arizona on its use of tributary water in excess of 1 maf in violation of the 1922 Colorado River Compact

This challenge would probably go to the U.S. Supreme Court

If successful the CAP diversion would be cut 400 – 600 kaf to 1.1 maf or 900 kaf respectively

This would greatly increase the urgency to find additional water

Water Rights in Arizona

- **Arizona water belongs to all the people of Arizona**
- **Individuals get a right to use the water (usufructuary) as long as they put it to beneficial use, but they don't own the water.**

Water Rights in Arizona

Surface Water

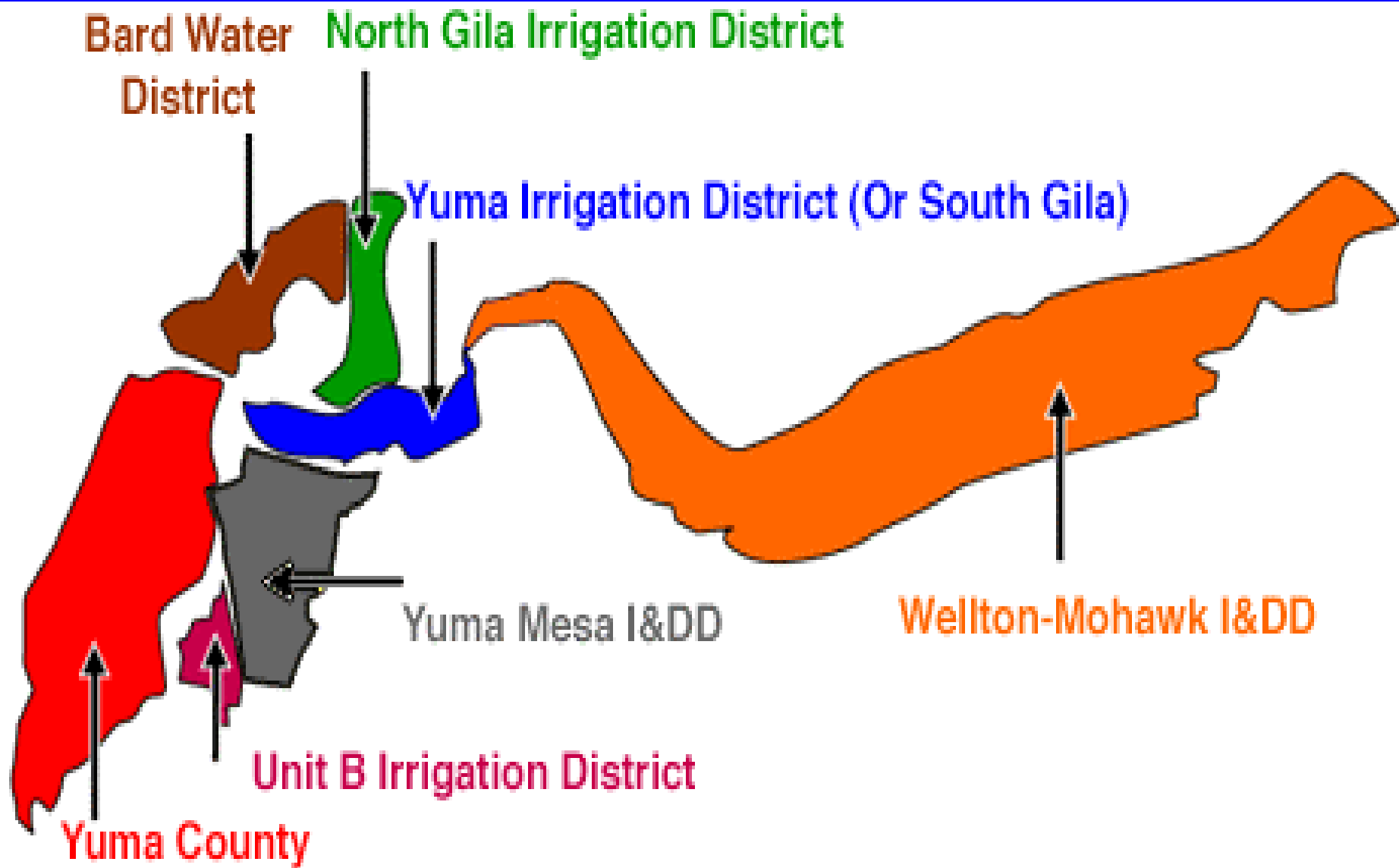
- Appropriated You need to apply to ADWR for a right to use the water
- If the proposed use does not conflict with existing rights, pose a menace to public safety or violate the public interest or welfare, ADWR will issue a certificate of water right
- Priority of the right to use the water is based on the “Doctrine of Prior Appropriation”
first in time, first in right
- An appropriated right is an exclusive right
- Without an appropriation you can not use or impound surface water

Water Rights in Arizona

Groundwater

- Groundwater is not appropriated in Arizona
- Any landowner can establish a small well (pumping less than 35 gpm) on his private property [limitations apply in Active Management Areas (AMAs)]
- The land owner has the right to withdraw a reasonable amount of groundwater from his well to use for beneficial purposes (limitations apply in AMAs)
- But the landowner does not enjoy an exclusive right to the groundwater

Yuma Area Irrigation Districts



Yuma Area Districts

District Name	Size in Irrigable Acres	2011 Operation & Maintenance Fees
<i>Yuma Project</i>		
Valley Division	50,000	\$86.00, includes first 5 acre feet.
Reservation Division	15,000	\$67.50, includes first 5 acre feet
Unit 'B'	3,300	\$150.00, includes first 10 acre feet
<i>Gila Project</i>		
North Gila Valley	6,000	\$38, includes first 5 acre feet
South Gila Valley	12,000	\$40, includes first 5 acre feet
Wellton Mohawk	60,000	\$84, includes first 4 acre feet
Yuma Mesa	19,200	\$70, includes first 9 acre feet
Total Acreage	165,500	

Arizona Colorado River Water Use

PPRs in the Yuma Area

Entity	Type of Entitlement	Priority Date	Annual Diversion (AF)	Annual Consumptive Use (AF)
Satisfaction of Present Perfected Rights (PPRs) as defined and provided for in the <i>Arizona v. California Decree (2006 Consolidated)</i> .				
Cocopah IR	PPR No. 1	1917	7,681	
	PPR No. 2	1915	1,140	
		Total	8,821	
Fort Yuma IR	PPR No. 3a	1884	6,350	
YCWUA	PPR No. 4	1901	254,200	
Unit "B" IDD	PPR No. 5	1905	6,800	
North Gila Valley ID	PPR No. 6	1905	24,500	
Powers Molina	PPR No7 PPR No 15	1915 1928	960 318	

Arizona Colorado River Water Use

Priority 1-3 Contracts in the Yuma Area

Entity	Type of Entitlement	Priority Date	Annual Diversion (AF)	Annual Consumptive Use (AF)
Gila Monster Farms, Inc.	<i>PPR No. 16</i>	1925	780	
Phillips, Milton and Jean	PPR No. 19	1900	42	
Parker, Town of	PPR No. 20	1905	630	400
Yuma, City of	PPR No. 21	1893	2,333	1,478
PRIORITIES 2 and 3				
Unit "B" IDD	Contract No. 14-06-300-44 12	12/22/1952	Unquantified water	

Arizona Colorado River Water Use

Priority 2-3 Contracts in the Yuma Area

Entity	Type of Entitlement	Priority Date	Annual Diversion (AF)	Annual Consumptive Use (AF)
Yuma Irrigation District	Contract Nos.14-06-W-54	1/1/1956		41,203
Yuma Irrigation District	14-06-W-102			
Yuma Irrigation District	14-06-300-1270			67,278
Yuma Mesa Irrigation and Drainage District	<i>(These 3 Districts share a consumptive use entitlement of 250,000 AF</i>			141,519
Wellton-Mohawk IDD	Contract No. 1-07-30-W0021	3/4/1952		278,000

Arizona Colorado River Water Use Priority 2-3 Contracts in the Yuma Area

Entity	Type of Entitlement	Priority Date	Annual Diversion (AF)	Annual Consumptive Use (AF)
Yuma County WUA	Contract No. 14-06-300-621	4/1/1957	Unquantified water	
Arizona, University of	Contract No. 14-06-300-144	1/1/1954	1,088	
C. Allec Company, Inc.	Contract No. 14-06-303-528	12/23/1953	120	
Desert Lawn Memorial Park Association	Contract No. 14-06-303-1079	5/1/1956	200	
Gila Monster Farms, Inc.	Contract No. 6-07-30-W0337	1/1/1952	6,285	
Yuma Union High School	Contract No. 14-06-303-158	5/3/1960	200	

Arizona Colorado River Water Use

Priority 2-3 Contracts in the Yuma Area

Entity	Type of Entitlement	Priority Date	Annual Diversion (AF)	Annual Consumptive Use (AF)
Kaman, Inc.	Contract No. 14-06-303-1555	12/2/1959	2	
Union Pacific Railroad Co.	Contract No. 14-06-303-1524	12/21/1959	48	
Yuma, City of	Contract No. 14-06-W-106 11/12/1959	11/12/1959		48,522
Yuma, City of (cemetery)	Contract No. 14-06-303-1078 6	5/1/1956	60	
Yuma Mesa Fruit Growers Association	Contract No. 14-06-303-1196	1/1/1956	15	

Why So Much Interest in Yuma Water

- Yuma Area User's have the rights to approximately 1.1 million acre feet of priority 3 or better water.**
- CAP water (priority 4 water), which serves mostly municipal providers, will take the brunt any shortages on the Colorado River.**
- The potential for shortages is intensified by:**
 - 1. The extended drought on the Colorado River watershed.**
 - 2. The unknown impacts of climate change**
 - 3. The potential for Upper Basin litigation challenging our use of tributary water**

Shortage Sharing among the Lower Basin States

- **California** **0%**
- **Arizona** **93% to 97%**
 - **Arizona assumed California's shortage responsibility (59%) in exchange for California's Congressional votes for the CAP**
- **Nevada** **3% to 7%**

Checks and Balances

- **Most of the water right contracts are held by Agricultural Districts.**
- **Yuma County Water User's Association is an exception where most of the contracts are with individuals.**
- **The basic rule applied to approval of Water Sever and Transfer Applications is "No Harm to Other Users".**

Bottom Line

- **Another entity cannot condemn a water right**
- **It takes a willing buyer and a willing seller**
- **Other area water users including Districts, would have to support the transaction**
- **Unlikely to happen unless a concerted effort involving all area users**

Possible Alternative

- Large municipalities could enter into dry year following agreements with high priority irrigation districts.
- Those agreements would contain an option to fallow a specified number of acres of active agricultural production and make that water available to the municipality.
- When a declared shortage on the Colorado River is anticipated to affect municipal contracts, the municipality could activate the option and import the water.

Possible Alternative

- **Agreements must place limits on the amount of acreage that can be fallowed to limit local impacts.**
- **Local impacts should be mitigated by including community improvement funding in the agreements.**
- **Transportation of fallowed water would be via the CAP system.**
- **The fallowed water simply replaces Colorado River water that would have been diverted without a shortage.**

Possible Alternative

- If fallowed water is augmentation water, additional transportation arrangements would have to be negotiated with CAP.
- Following agreements must be with the Irrigation Districts.
- All water users in the area should be consulted during the negotiations to avoid protests during the sever and transfer process.

MWD – Palo Verde ID

An Example of a Successful Limited Fallowing Agreement

Contract initiated January 2005

Contract Valid Until 2040 With Indexing

MWD – PVID Fallow Agreement

- Provides for up to 111,000 acre feet of water to MWD annually.**
- Payments to Landowners**
- Sign up payment of \$3,170 per acre.**
Paid over 2 to 5 years – landowner's option.
- First installment paid upon signup.**

Cash Flow - 100 Acre Farm

Example

- **Sign Sign-up payment**

$$100 \text{ acres} \times 0.29 \times \$3170 = \$91,930$$

- **Annual Payment would range**

from: Base load water supply developed (7%)

$$100 \text{ acres} \times 0.07 \times \$602/\text{acre} = \$4,124/\text{yr}$$

to: Maximum water supply developed (29%)

$$100 \text{ acres} \times 0.29 \times \$602/\text{acre} = \$17,458/\text{yr}$$

MWD General Obligation

- **Metropolitan shall reimburse PVID for all Reimbursable Costs.**
- **Reimbursable Costs are costs reasonably incurred by PVID in (1) developing the Program, the Program Agreement, and the Landowner Agreement.**

MWD General Obligation

- **The amount of reimbursement for the cost of legal services shall not exceed \$192,500.00.**
- **PVID will also be reimbursed for performing its obligations, with respect to administration of the Program, this Program Agreement, and the Landowner Agreements. Reimbursable Costs shall include, without limitation, capital outlays for computers, computer programs, and other purposes.**

MWD General Obligation

- MWD to provide \$5 million for a Community Improvement Program (CIP)**
- PVID formed a Community Improvement Fund Board (Board)**

Duties of Board:

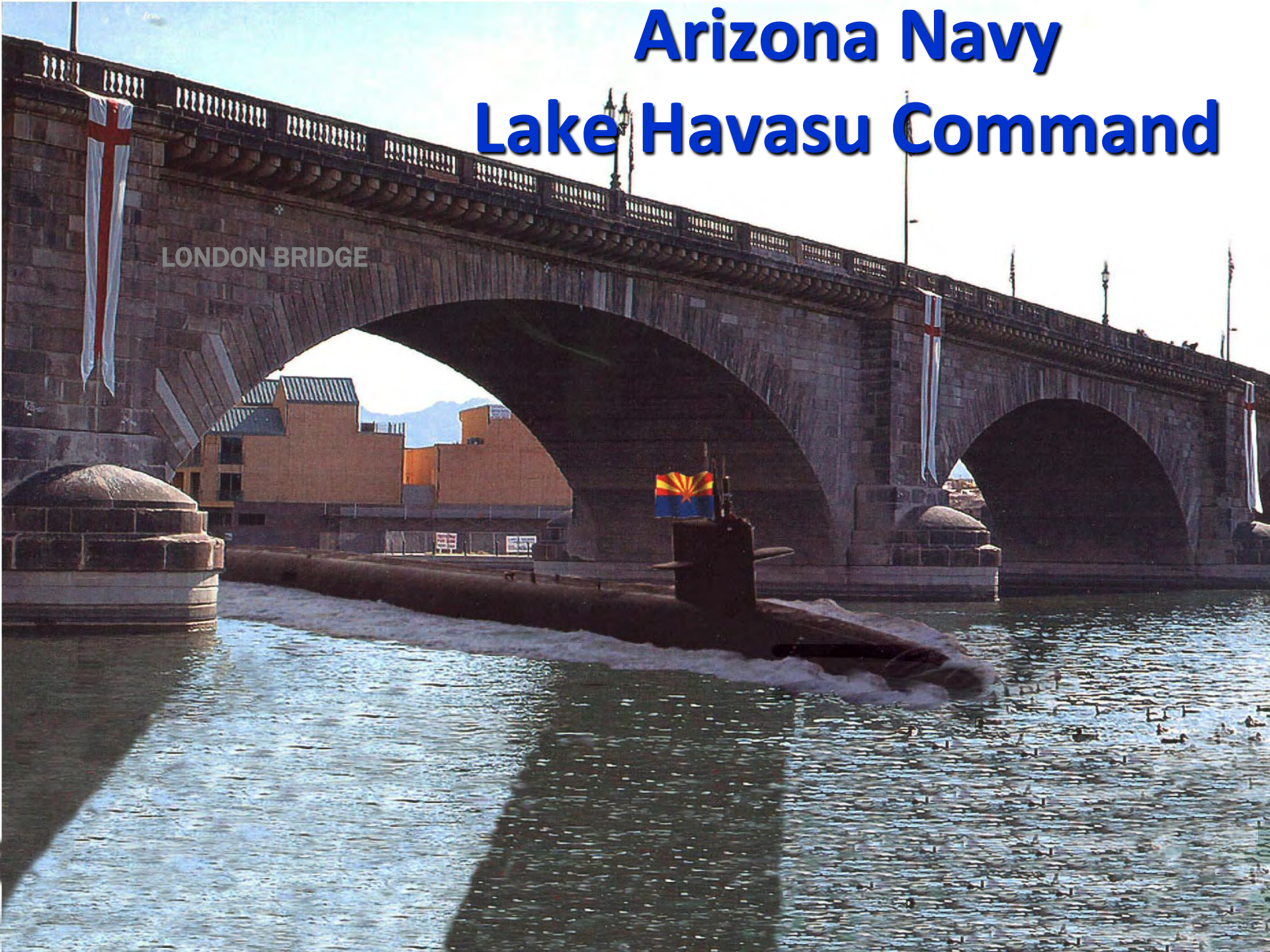
- Manage funds provided by MWD**
- Develop a Regional Business Plan**
- Develop a Local Business Plan**

Arizona Navy

**The Arizona Navy is Still
Active**

Arizona Navy Lake Havasu Command

LONDON BRIDGE





Arizona Navy Lake Mead Command

**“Securing Arizona’s
Water Future”**

ADWR Mission



Arizona Navy v. California - 1934

Stop Parker Dam!

ISSUE:

- California had wealth to build huge water delivery systems to farmers and Los Angeles
- Arizona feared it would never get its full Colorado River entitlement

ACTION:

- Moeur dispatched 60 fully armed Arizona National Guardsmen
- Guardsmen commandeered the “Julia B” paddle wheeler from Parker

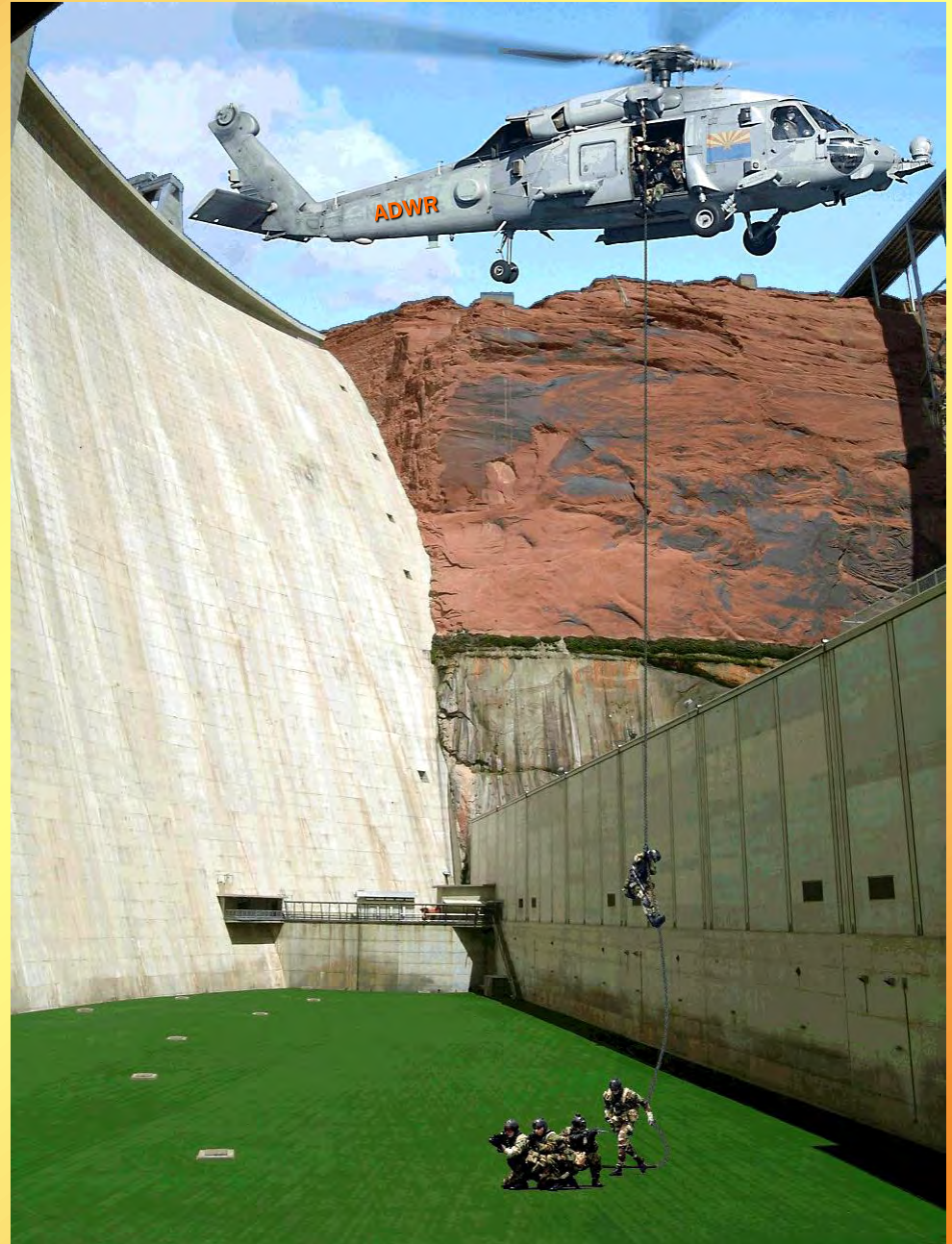
RESULT:

- Work on Parker Dam was halted until the issue was settled



Arizona Governor
B. B. Moeur

Arizona Navy Glen Canyon Dam Special OPS Training 2012



Arizona Navy



Lower Basin No - Fly Zone



Questions

The Arizona Navy is now under contract

Questions?

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