A Recap of the Achievements of the Desalination Committee 2016-18

Governor's Water Augmentation, Innovation and Conservation Council

Desalination Committee Meeting

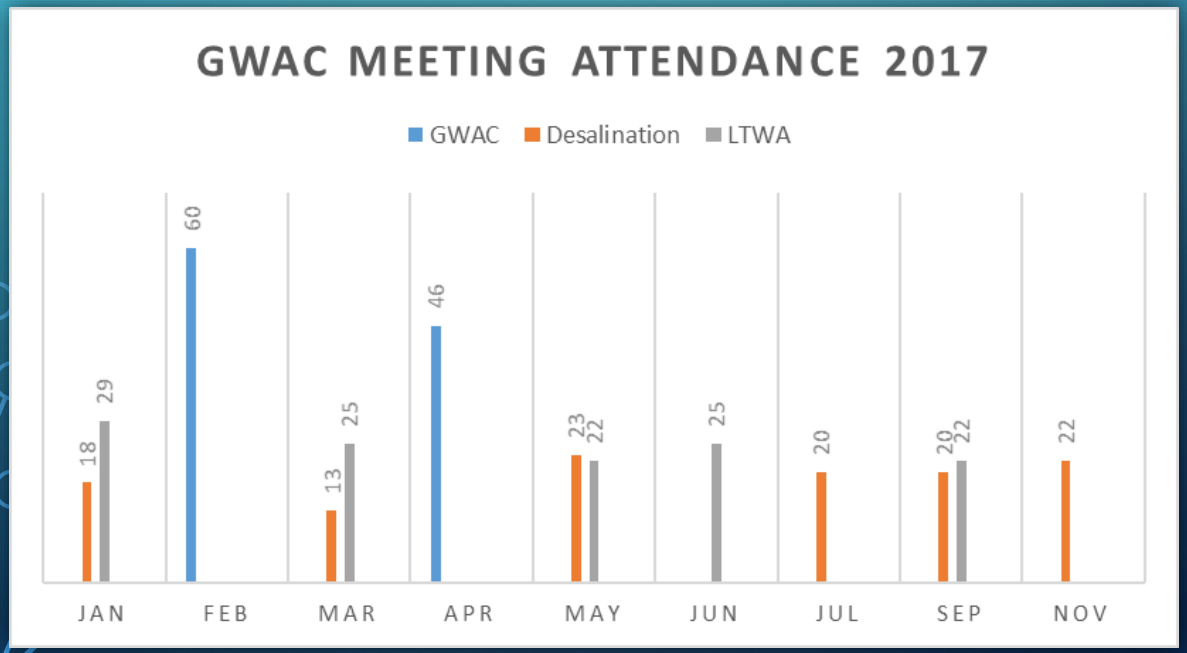
July 28, 2019

Zacary Richards

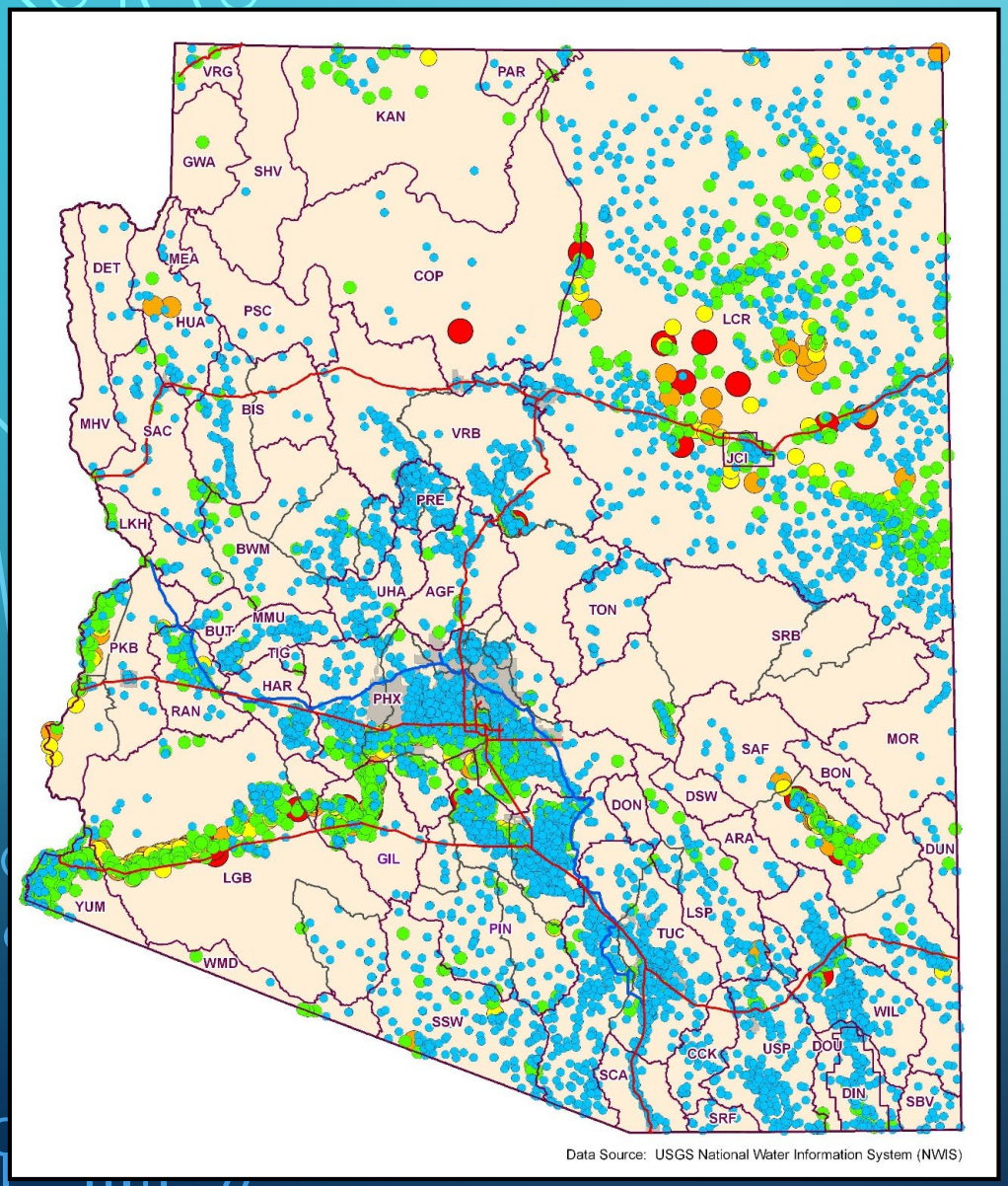
Governor's Water Augmentation Council

Desalination Committee

Long-Term Water Augmentation Committee



Desalination Committee Studies



August 11, 2008
REPORT

PHASE 1 BRACKISH GROUNDWATER INVENTORY
FOR ARIZONA

Prepared for:
CENTRAL ARIZONA WATER CONSERVATION DISTRICT

ERROL L. MONTGOMERY & ASSOCIATES, INC.
WATER RESOURCE CONSULTANTS

1650 EAST PRINCE ROAD
TUCSON, ARIZONA 85719 (520) 881-4912

TUCSON • PHOENIX • SANTIAGO de CHILE

EXPLANATION

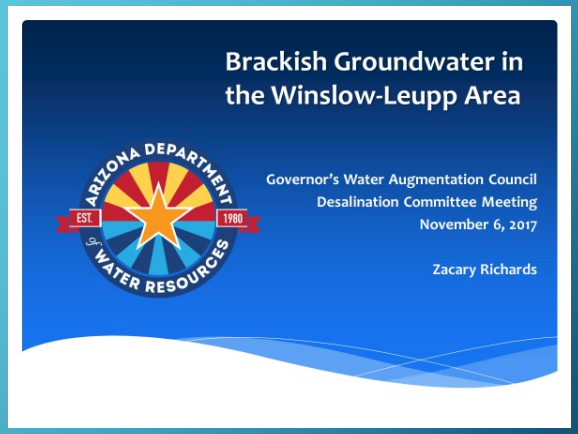
ELECTRICAL CONDUCTIVITY
(Estimated TDS Equivalent)

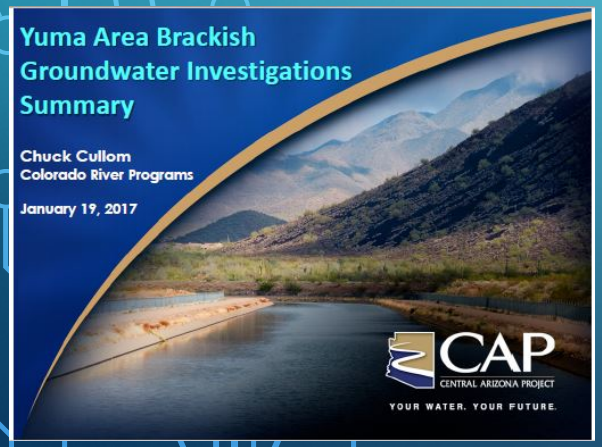
- 0 - 1,600 µS/cm (0 - 1,000 mg/L)
- 1,601 - 5,000 µS/cm (1,001 - 3,000 mg/L)
- 5,001 - 8,000 µS/cm (3,001 - 5,000 mg/L)
- 8,001 - 17,000 µS/cm (5,001 - 10,000 mg/L)
- > 17,000 µS/cm (>10,000 mg/L)
- Interstate Highway
- CAP Canal

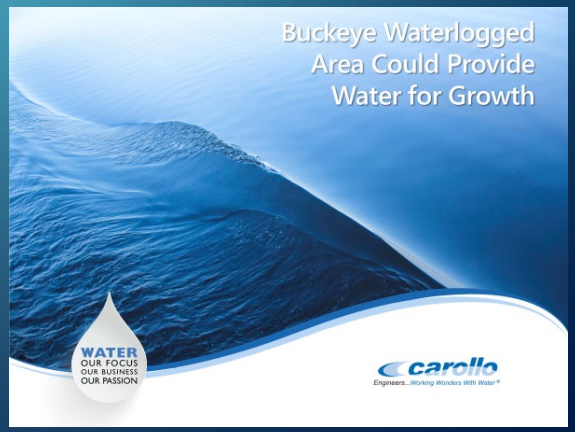
Brackish Groundwater Area Ranking

Basin	Sub-basin or Area	Estimated Desalination Potential	Fatal Flaws
WEST SALT RIVER VALLEY	Buckeye	Most promising	None
GILA BEND BASIN	Gila Bend	Most promising	None
YUMA	Yuma Mesa and Yuma Valley	Most promising	Existing desalting plant
LOWER SANTA CRUZ	Picacho-Eloy	Most promising	None
LITTLE COLORADO RIVER	Winslow-Leupp	Most promising	None
WILLCOX BASIN	Willcox Playa	Most promising	Brackish storage unknown
COL. RVER-HOOVER TO IMPERIAL DAMS	Parker	Potentially promising	Possibly Indian water rights
LITTLE COLORADO RIVER	Concho-Petrified National Forest	Potentially promising	None
GILA-PAINTED ROCK TO TEXAS HILL	Painted Rock Reservoir to Texas Hill	Potentially promising	Small groundwater storage
GILA-TEXAS HILL TO DOME	Wellton-Mohawk	Potentially promising	Surface water particulates; other uses
HARQUAHALA PLAINS	Harquahala	Potentially promising	Generally low TDS
LITTLE COLORADO RIVER	Holbrook-Joseph City	Potentially promising	None
LITTLE COLORADO RIVER	Hopi Reservation	Potentially promising	Depth to water, excessive salinity
HUALAPAI VALLEY	Red Lake	Potentially promising	Volume of brackish groundwater unknown
LOWER HASSAYAMPA	Tonopah Desert/Centennial Wash	Potentially promising	Low TDS
LOWER SAN PEDRO	San Manuel-Winkleman	Potentially promising	Small well yields and storage
RANEGRAS PLAIN (RAN)	Ranegras Plain	Potentially promising	Low TDS
SAFFORD BASIN	Gila Valley	Potentially promising	None
LITTLE COLORADO RIVER	Cameron-Wupatki N.M.	Potentially promising	None
SAFFORD BASIN	San Simon	Potentially promising	None
LITTLE COLORADO RIVER	St. Johns-Springerville	Potentially promising	None
TUCSON AMA	Avra Valley	Less promising	Mostly low TDS
BIG SANDY VALLEY	Big Sandy	Less promising	Low TDS, small yield
DOUGLAS BASIN	Douglas	Less promising	Low TDS
DUNCAN BASIN	Duncan Valley	Less promising	Low TDS
UPPER SAN PEDRO	Sierra Vista	Less promising	Low TDS, base flow protection
TUCSON AMA	Tucson	Less promising	Low TDS (?)
MIDDLE VERDE RIVER	Camp Verde	Less promising	Small well yields and storage
VIRGIN RIVER	Littlefield	Less promising	Small storage
WATERMAN WASH	Rainbow Valley	Less promising	Low TDS, small storage
WESTERN MEXICAN DRAIN	Ajo	Less promising	Low TDS, small well yields and storage

Desalination Committee Presentations







Desalination Committee Conclusions