

2017 State Water Plan

Water — *for* — Texas

(Includes amendment #1)



Texas Water Development Board Members

Bech Bruun, *Chairman*
Kathleen Jackson, *Board member*
Peter Lake, *Board member*

www.twdb.texas.gov
texasstatewaterplan.org



Our Mission

To provide leadership, information, education, and support for planning, financial assistance, and outreach for the conservation and responsible development of water for Texas.

Texas Water Development Board

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Dear Fellow Texans:

On behalf of my fellow Board members, Kathleen Jackson and Peter Lake, and the dedicated men and women of the Texas Water Development Board (TWDB), it is my privilege to present to you the 2017 State Water Plan. This is the 10th plan created since the agency's inception in 1957 and the fourth since the current "bottom up" regional water planning approach began in 1997. Now, decades of water planning experience and a renewed appreciation of the impacts of drought have resulted in the most comprehensive state water plan ever created.

This state water plan was produced on the heels of the worst one-year drought in our recorded history, in 2011. Over the course of one year, Texas transitioned from virtually drought free to exceptional state-wide drought. The 2011 drought taught us entirely new lessons about how fast drought can strike and how severe it can be. Simply put, 2011 provided a wake-up call for water providers across our state.

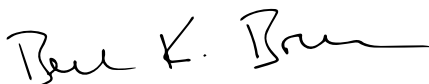
Fortunately, the five-year planning cycle allows our state water plan to adapt to and account for conditions worse than the previous drought of record. In the 2017 plan, six of the 16 regional planning groups indicated potential new droughts of record for their regions, resulting in reduced estimates of existing surface water supplies. These weather assumptions, coupled with the fact that our state's population continues to boom, made this planning cycle the most challenging yet.

Our state's 16 regional water planning groups rose to the challenge. The 2017 State Water Plan includes 5,500 water management strategies—an increase from roughly 3,700 strategies listed in the previous plan—whose diversification speaks to lessons learned from the drought. Conservation and reuse strategies increased from 34 percent to 45 percent of total future water volume. Innovative water technologies such as desalination and aquifer storage and recovery (ASR) will also play a significant role in Texas' water supply future.

To assist entities with translating their water planning efforts into water projects, the TWDB remains committed to providing low-cost financing options. For state water plan projects in particular, we are proud to offer the recently created State Water Implementation Fund for Texas (SWIFT) program, through which billions of dollars in financial assistance have already been committed.

The true measure of this plan's success, however, is represented by the dedication and hard work of more than 450 regional water planning group members who have volunteered countless hours to ensure Texas will have the water it needs for decades to come. Additionally, the Board would like to extend our sincerest appreciation and thanks to TWDB staff, without whom the state water plan would not be possible. As Board members we are truly privileged to represent an agency full of public servants dedicated to fulfilling the mission of conserving and securing Texas water for future generations.

God Bless Texas,



Bech K. Bruun, Chairman

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Acknowledgments

The 2017 State Water Plan would not have been possible without the time and expertise of numerous people and organizations throughout Texas. The Texas Water Development Board (TWDB) would like to express its sincere appreciation to all who participated in the development of the 16 regional water plans and this state water plan: the more than 450 regional water planning group voting members (listed below), their consultants, and their administrative agents (listed below); staff of

the TWDB; Texas Parks and Wildlife Department, Texas Department of Agriculture, Texas Commission on Environmental Quality, and other state and federal agencies; and the individuals and organizations that provided public input throughout the planning process.

Finally, we would like to thank the leadership of the State of Texas for their consistent support and recognition of the importance of water planning.

Regional Water Planning Group Voting Members

(Region – member) *planning group chairs at the time the 2016 regional water plans were adopted

A - Autrey, Emmett	B - Campsey, Jack	C - McCarter, Jim	D - Hilliard, Dennis
A - Bailliff, Tom	B - Christopher, Mark	C - Mundt, Steve	D - Holt, Robert
A - Baumgardner, Joe	B - Deweber, N.E.	C - Parks, Jim	D - Kirby, Bill
A - Clark, Nolan	B - Dodge, Rebecca L.	C - Phillips, Paul	D - Long, Sam
A - Cook, Vernon	B - Garnett, Ed	C - Puckett, Jo "Jody"*	D - McCoy, Bret
A - Cooke, Charles	B - Grant, Mitch	C - Riley, Bob	D - McCoy, Mike
A - Cooke, Dean	B - Hughes, Dale	C - Satterwhite, Drew	D - Nabors, David
A - Crowell, Amy	B - Kidd, Bobby	C - Scott, Bob	D - Nabors, Sharron
A - Derington, Jim	B - Liggett, Kenneth	C - Spicer, Gary	D - Nicholson, Tim
A - Gibson, Rick	B - McGuire, Mike	C - Standridge, Connie	D - Nickerson, Jim
A - Gilmore, Rusty	B - McMahan, Monte	C - Stevens, Jack	D - Patterson, Don
A - Green, Glen	B - Mesler, Tracy	C - Vance, Danny	D - Price, Linda*
A - Guthrie, Janet	B - Myers, Dean	C - Vogelson, Mary E.	D - Roberts, Drew
A - Hallerberg, Bill	B - Payne, Jerry	C - Ward, Kevin	D - Shaw, Kenneth
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A - Kleuskens, Tonya	B - Simpson, Gayle	D - Bradley, Johnny Mack	D - Speight, Robert, Jr.
A - Krienke, Danny	B - Stephens, Pamela	D - Brown, Michael K.	D - Spence, Kevin
A - Landis, David	B - Stephens, Tom	D - Calvin, Larry	D - Staton, Bob
A - Meyer, Robert	B - Watts, Jeff	D - Carter, Greg	D - Stuart, Cheri
A - Satterwhite, Kent	C - Bailey, David	D - Clements, Nancy	D - Wadley, Doug
A - Skaggs, Grady	C - Berry, Steve	D - Conner, Doug	D - Williams, Mark
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A - Tregellas, Janet	C - Crumb, Frank	D - DuMond, Jeremy	E - Barker, Randy
A - Walthour, Steve	C - Douglas, Gary	D - Dunn, Mike	E - Beard, Tom*
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B - Banks, Jimmy	C - Lewis, Bill	D - Glidewell, Brice	E - Davidson, Michael
B - Bell, Charlie	C - Lingenfelder, John	D - Grubbs, Darrell	E - Etzold, David
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E - Miller, Albert
E - Miller, Jim Ed
E - Mitchell, Scott
E - Norris, Kenn
E - Palacios, Arlina
E - Perez, Vincent
E - Reinert, Scott
E - Reyes, Jesus "Chuy"
E - Tate, Rick
E - Todd, Teresa
E - Waggoner, Paige
E - Webb, Summer
F - Anderson, Woody
F - Barr, Mark
F - Bearden, Jerry
F - Brown, Stephen
F - Dickson, Ricky
F - Dierschke, Kenneth
F - Gist, Richard
F - Grant, John*
F - Hagood, Charles
F - Holland, Scott
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F - Runge, Caroline
F - Scott, Terry
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F - Shepperd, Ben
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F - Turnbough, Larry
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F - Wilde, Will
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G - Newman, Gary
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G - Parker, Judy
G - Patrick, Brian
G - Peek, Gail
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G - Waclawczyk, Randy
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H - Evans, Mark*
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H - Hebert, Robert
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H - Houston, Jace
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H - Leathers, Gená
H - Leiper, Glynn
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H - Teer, William, P.E.
H - Tyler, Steve
H - Vance, Danny
H - Wallace, C. Harold
H - Ward, Kevin
H - Willcox, George "Pudge"
I - Adams, Leah
I - Alders, David
I - Branick, Jeff
I - Brock, David
I - Campbell, George P.
I - Clark, Jerry
I - David, Josh Wilson
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I - Dunn, Mark
I - Hall, Scott
I - Harbordt, Dr. C. Michael
I - Heugel, William
I - Holcomb, Joe
I - Holcomb, Kelley*
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I - Kindle, Glenda
I - Lyons, Duke
I - Martin, John
I - Montagne, David
I - Morgan, Gregory
I - Peddy, Dale
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I - Shank, Monty
I - Smith, Darla
I - Whitehead, Worth
I - Young, J. Leon, Ph.D.
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J - Bushong, Perry
J - Carver, Ken
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J - Lowery, Kent
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J - Wiedenfeld, Charles (Charlie)
J - Williams, Gene
J - Wilson, William F. (Feather)
K - Barho, Jim
K - Brasher, Jim
K - Burke, John E..*
K - Dupnik, John T., P.G.
K - Fieseler, Ronald G.
K - Gertson, Ronald
K - Gillam, Lauri
K - Haschke, Karen
K - Hoffman, John
K - Johnson, Barbara
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K - Klaeger, Donna
K - Lewis, Brenton
K - Luedecke, Bill
K - Lutes, Teresa
K - Neve, Bill
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K - Reagor, Mike
K - Roeder, W.A. (Billy)
K - Ruggiero, Rob
K - Shell, Charlie
K - Simon, Haskell
K - Sultemeier, James
K - Theodosios, Byron
K - Totten, Jim
K - Tybor, Paul
K - Van Dresar, David
K - Wade, Brandon
K - Walker, Jennifer
K - Wheelock, David
L - Ammerman, Jason
L - Andruss, Tim
L - Balin, Donna
L - Brownlow, Darrell
L - Camargo, Gene
L - Chavez, Rey
L - Cockerell, Alan
L - Conley, Will
L - Dietzmann, Don
L - Dohmann, Art
L - Fitzsimons, Blair
L - Hilderbran, Vic
L - Janak, Kevin
L - Kight, John
L - Labus, Russell
L - Leathers, Gená
L - Lord, Glenn
L - Mahoney, Mike
L - McGookey, Doug
L - Meyer, Daniel
L - Middleton, Gary
L - Mims, Con*
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L - Puente, Robert
L - Ramsey, Steve
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L - Ruiz, Roland
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L - Scott, Suzanne B.
L - Sengelmann, Greg
L - Stolte, Milton
L - Taggart, Tom
L - Wassenich, Diane
L - West, Bill
L - Yablonski, Adam
M - Barrera, Jorge
M - Benavides, Nick
M - Bruciak, John
M - Campbell, Mary Lou
M - Darling, James (Jim)
M - de la Rosa, Ella
M - Flores, Jaime
M - Fulbright, Robert E.
M - Garza, Carlos
M - Goldsberry, Dennis
M - Gonzalez, Humberto
M - Hinojosa, Sonny
M - Jarvis, Glenn*
M - Lambert, Sonia

M - McGhee, Donald K.	N - Krebs, David	O - Everheart, Harvey	P - Brzozowski, Patrick
M - Pena, Robert, Jr.	N - Kunkel, Robert	O - Fulton, Tom	P - Butschek, John
M - Prewett, Ray	N - Ornelas, Martin	O - Gillespie, Richard	P - Clark, Gerald
M - Quintanilla, Joel	N - Paulson, Bernard	O - Harbin, Bill	P - Griffin, Roy
M - Rathmell, Joe	N - Reding, Thomas, Jr.	O - Hopper, Ronnie	P - Hudgins, Neal
M - Rodriguez, Tomas, Jr.	N - Ring, Charles	O - Hutcheson, Doug	P - Jahn, Rodney
M - Schuster, Frank	N - Scott, Mark	O - Josserand, Bob	P - Little, Lester
M - Vela, Armando	N - Serrato, Carola*	O - Kirkpatrick, Mark	P - Maloney, Jack
N - Almaraz, Joe	N - Stewart, Lonnie	O - Leonard, Richard	P - Martin, Robert
N - Ballou, Tom	N - Stockseth, Kimberly	O - McClendon, Mike	P - Miller, Phillip
N - Bledsoe, Scott, III*	N - Stockton, William	O - McElroy, Don	P - Ottis, Richard
N - Burns, Chuck	N - Sugarek, Mark	O - Montgomery, E.W. (Gene)	P - Pustka, Edward
N - Carillo, Teresa	N - Tunnell, Jace	O - Morris, Charles	P - Raun, L.G.
N - Dick, Billy	O - Barnes, Melanie	O - Rainwater, Ken	P - Shoemate, Robert
N - Dove, Bill	O - Baucum, Delaine	O - Satterwhite, Kent	P - Skalicky, Michael
N - Durham, Lavoyger	O - Blalack, Bruce	O - Simons, Tom	P - Spenrath, Philip
N - Eddins, Gary	O - Brown, Harold P. "Bo"*	O - Spear, Aubrey	P - Stafford, Harrison, II*
N - Garza, Andy	O - Campsey, Jack	O - Steiert, Jim	P - Wagner, David
N - Hennings, Bill	O - Coleman, Jason	O - Taylor, John	P - Weinheimer, Ed
N - Hubert, Pancho	O - Conkwright, Jim	O - Wedel, Jimmy	
N - Knolle, Pearson	O - DeLoach, Mike	P - Bonzer, Calvin	
N - Koenig, Lindsey	O - Ellison, Delmon, Jr.	P - Brandenberger, Tommy	

Administrative Agents

A – Panhandle Regional Planning Commission	H – San Jacinto River Authority
B – Red River Authority of Texas	I – City of Nacogdoches
C – Trinity River Authority	J – Upper Guadalupe River Authority
C – North Texas Municipal Water District	K – Lower Colorado River Authority
D – Northeast Texas Municipal Water District	L – San Antonio River Authority
E – Rio Grande Council of Governments	M – Lower Rio Grande Valley Development Council
F – Colorado River Municipal Water District	N – Nueces River Authority
F – City of San Angelo	O – High Plains UWCD No. 1
G – Brazos River Authority	P – Lavaca-Navidad River Authority



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2017 State Water Plan
Texas Water Development Board

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