



TEXAS WATER QUALITY STANDARDS SUMMARY

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Revised April 1972

PREFACE

The information contained herein has been condensed from Water Quality Criteria and Plan For Implementation, State of Texas, prepared by the Texas Water Quality Board, and approved by the Administrator of the Environmental Protection Agency.* This summary is intended for all who have an interest in the quality of water in the state.

A summarization of this type, of necessity, omits many pertinent details. The complete text of the Texas Water Quality Board should be referred to for more detailed information.

^{*}Prior to December 2, 1970, the Secretary of the Interior.

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SUMMARY OF WATER QUALITY STANDARDS FOR THE INLAND AND COASTAL WATERS OF TEXAS

INTRODUCTION

In the Water Quality Act of 1965, Congress authorized the establishment of water quality standards for interstate (including coastal) waters. The purpose of these standards is to protect the public health and welfare and enhance the quality of the Nation's interstate waters to serve a variety of beneficial uses, such as public water supply, recreation, protection of aquatic life, industrial, and agricultural uses. This publication summarizes the standards for the general information of the public and Federal, State and local officials as to the uses and associated requirements for Inland and Coastal Waters of Texas.

The Act, which amended the Federal Water Pollution Control Act, provided for the States to establish standards for their interstate waters, which were then subject to review and approval by the Secretary of the Interior.* All of the States, the District of Columbia and the Territories of Guam, Puerto Rico and the Virgin Islands participated in this landmark effort to set standards.

In the course of establishing the standards, public hearings were held by the States and other Jurisdictions noted above to give the public an opportunity to participate in setting water quality objectives and standards. Texas adopted standards for its interstate and intrastate waters on June 26, 1967, which were then submitted to the Department of the Interior. Subsequently on October 5, 1967, certain revisions were made by Texas in their original standards, and the Secretary of the Interior approved the standards, as revised on January 27, 1968. At the request of the Secretary of the Interior, Texas adopted a policy to protect its high quality interstate waters, which was approved on May 2, 1969.

The approved standards are thus both State and Federal standards, enforceable under the State water pollution control statutes and the Federal Water Pollution Control Act, as amended (Section 10). The waters for which standards were adopted are shown on the map in Figure I.

^{*}After December 2, 1970, the Administrator of the Environmental Protection Agency.

The standards consist of three major components: designation of the uses which the waters are to serve, specification of narrative and numerical criteria to protect and enhance water quality, and specification of a plan of implementation and enforcement, which includes treatment and control requirements for municipal, industrial and other waste discharged to or affecting Texas waters. These components are discussed in the following sections; all three are essential to a complete standards program.

The standards are now being implemented. However, there will be continuing research on water quality requirements for various beneficial uses and improved collection and evaluation of water quality data. As more information becomes available and experience with implementing the standards is gained, the standards will be refined and improved to reflect this new knowledge.

Should more detailed information be required on any aspect of the standards, it may be obtained from the Texas Water Quality Board in Austin, Texas, or the Environmental Protection Agency Regional Office in Dallas, Texas. The addresses of these offices are given on page 43. Texas has established water quality standards for both its interstate and intrastate waters. Texas has chosen to divide their waters into an Inland Waters category and a Tidal Waters category.

The Texas Water Development Board, the Texas Parks and Wildlife Department, the Texas State Department of Health, the Texas Railroad Commission, and the General Land Office of Texas are assigned specific duties in support of State policy with respect to water quality. It is the policy of the Board to notify the appropriate State Agency when the Board has notice of conditions causing pollution which fall within the water quality control jurisdiction of that agency.

WATER USES

The State of Texas designates the following uses to be protected in various waters:

Contact Recreation
Domestic Raw Water Supply
Industrial Supply
Non-Contract Recreation
Propagation of Fish and Wildlife
Fishing
Aesthetics
Mining and Recovery of Minerals
Hydroelectric
Irrigation
Industrial Cooling Water
Navigation

The general aim in designating uses for particular Texas waters is to recognize present uses and practicable future uses, to provide where possible for a variety of uses, and to assure compatibility of standards with Federal, State and local resource planning. In order to satisfy the intent of the Federal Water Pollution Control Act to enhance water quality, the standards specifically provide that no interstate waters may be used solely or primarily for waste assimilation. All interstate waters must be aesthetically pleasing, and this quality is usually protected by narrative criteria preventing unslightly or obnoxious conditions, such as floating debris, oil slicks, unpleasant odors, and colors.

Specific use designations for all Inland Waters covered by the standards are provided in Table I and for all Tidal Waters in Table II. The State of Texas has chosen to designate uses for all waters and included among the Inland Waters will be both interstate and intrastate. In general an interstate stream is a stream that crosses a state boundary or is a part of the boundary between two or more states. The following Inland Waters are considered to be interstate streams:

Canadian River Wolf Creek Red River Salt Fork Red River North Fork Red Rever Sulphur River McKinney Bayou Cypress Creek Black Boyou Fraizier Creek Caddo Lake Bullard Creek Sabine River Cross Boyou Rio Grande River Pecos River

All Tidal Waters are considered as interstate waters.

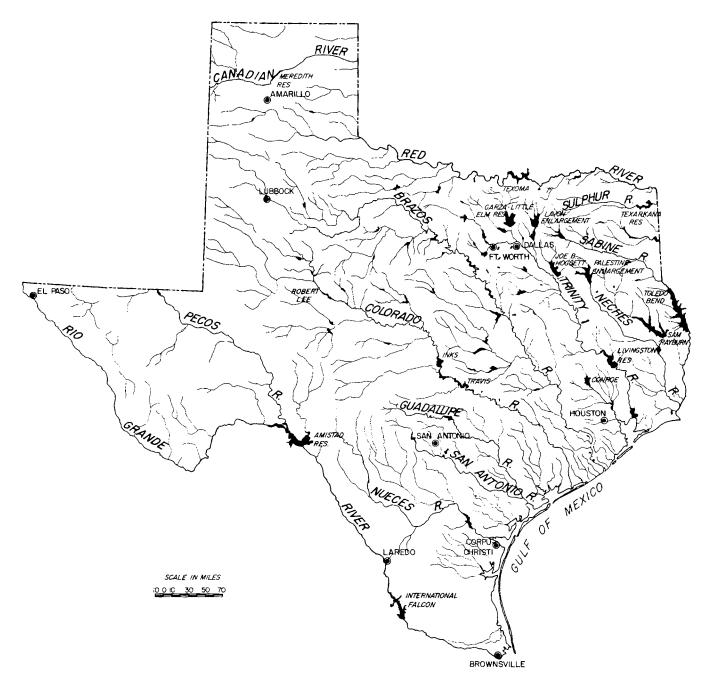


FIGURE I

STATE OF TEXAS



STATE OF TEXAS
RIVER BASINS

TABLE	Ť			WA	TE	RS	T	JSI	ES			
				V V A	1 1	113			<u> </u>			
INLAND WATERS	CONTACT	DOMESTIC RAW WATER SUPPLY	INDUSTRIAL SUPPLY	NON - CONTACT RECREATION	PROPAGATION OF FISH & WILDLIFE	FISHING	AESTHETICS	MINING & RECOVERY OF MINERALS	HYDROELECTRIC	IRRIGATION	NAVIGATION	INDUSTRIAL COOLING WATER
CANADIAN RIVER BASIN							_		-			-
STREAM:		r		т					-			Г
OIOI CANADIAN RIVER (OKLAHOMA TO LAKE MEREDITH)	x	X	X	X	X	X	X	X	X	×		X
OIO2 CANADIAN RIVER (LAKE MEREDITH)	X	X	Х	X	X	X	X	X	X	×	X	X
0103 CANADIAN RIVER (L. MEREDITH TO NEW MEXICO)	J X.	<u> </u>	X	X	X	X	X	X	X	×		×
OIO4 WOLF CREEK	×	X	X	X	×	X	X	X	X	×		X
0100 OTHER WATERS 0103 MEREOITH		[T	HOSE	USES D	ETERMI	NED TO	BE IN	THE P	UBLIC	INTERES	Τ	
AMARILLO		L		<u> </u>	<u></u>					<u> </u>		i
STREAM: 0201 RED R. TO LAKE TEXOMA		X	x	×	X	х	x	×	X	×	×	x
O2O2 L. TEXOMA	1 x	$\frac{\hat{x}}{x}$	$\frac{\hat{x}}{x}$	×	X	X	×	X	×	$\frac{\hat{x}}{x}$		×
0204 0209 0208 0200				7								
0203 RED R. (ABOVE TEXOMA)	' X	X	X	X	X	X	X	X	X	X	X	X
0204 PRAIRIE DOG TOWN FORK RED RIVER	X	X		X	X	X	X	X	X	×		X
0205 LITTLE WICHITA	X	X	X	Х	X	X	Х	X	X	X	X	X
0206 WICHITA RIVER (BYERS TO MABELLE)	X.		X	X	X	X	X	X	X	X	X	X
0207 WICHITA RIVER (ABOVE MABELLE)	X	X	X	X	X	X	X	X	X	X	X	X
0208 PEASE RIVER	X	X		X	X	X	X	X	х	X		X
0209 NORTH PEASE RIVER	х	x		X	Х	X	x	Х	X	X		X
0210 MIDDLE PEASE RIVER	X			X	Х	X	Х	X	X	X		X
0211 SALT FORK RED RIVER	Х			X	X	X	X	X	X	X		X
0212 NORTH FORK RED RIVER	х			X	Х	х	х	X	X	X		X
0200 OTHER WATERS		T	HOSE	USES (ETERMI	NED TO	BE IN	THE F	UBLIC	INTERE	\$T	

				WA	TE	RS	1	USI	E S			
INLAND WATERS	CONTACT RECREATION	DOMESTIC RAW WATER SUPPLY	INDUSTRIAL SUPPLY	NON - CONTACT RECREATION	PROPAGATION OF FISH & WILDLIFE	FISHING	AESTHETICS	MINING & RECOVERY OF MINERALS	HYDROELECTRIC	IRRIGATION	NAVIGATION	INDUSTRIAL COOLING WATER
SULPHUR RIVER BASIN STREAM:												
0301 SULPHUR RIVER 0303	×	X	X	х	X	х	х	х	X	x	X	Х
0302 SULPHUR RIVER AT STATELINE	×	X	×	X	X	x	X	X	X	Х	X	x
0303 McKINNEY BAYOU (BARKMAN)	×	X	x	Х	X	х	Х	х	х	x	X	X
0300 OTHER WATERS		Т	HOSE	USES D	ETERMII	NED TO	BE IN	THE P	UBLIC	INTERES	π	
SABINE RIVER BASIN				• • • • • • • • • • • • • • • • • • • •								
O501 SABINE PASS (NECHES ZONE I)	l x	Γ	Γ	x	х	х	X	T		[×	х
O502 SABINE LAKE (NECHES ZONE V)	X	_	X	X	X	X	×				X	X
O503 SABINE RIVER TIDAL, ZONE I SABINE LAKE TO MORGAN'S BLUFF)	×			x	х	x	×				x	х
O504 SABINE R., ZONE III (MORGAN'S BLUFF TO SABINE R. AUTHORITY PUMP STATION O505 SABINE R., ZONE III (SABINE R. AUTHORITY O507	×	х	x	x	x	×	x	×	x	×	Х	x
O505 SABINE R., ZONE III (SABINE R. AUTHORITY PUMP STATION TO TOLEDO BEND DAM)	x	x	x	×	X	x	Х	х	X	×	х	х
O506 SABINE RIVER, ZONE IV & V (TOLEDO BEND RESERVOIR)	×	x	X	x	х	X	X	x	X	X	X	X
0507 SABINE RIVER, ZONE VI (ABOVE TOLEDO BEND RESERVOIR)	X	X	X	X	X	X	X	×	X	x	X	×
0500 OTHER WATERS		Т	HOSE (JSES D	ETERMII	NED TO	BE IN	THE P	UBLIC	INTERES	T	
0505 3 3 07 07 0503												

				WA	TE	RS	Į	USI	ES			
INLAND WATERS	CONTACT RECREATION	DOMESTIC RAW WATER SUPPLY	INDUSTRIAL SUPPLY	NON - CONTACT RECREATION	PROPAGATION OF FISH & WILDLIFE	FISHING	AESTHETICS	MINING & RECOVERY OF MINERALS	HYDROELECTRIC	IRRIGATION	NAV! GATION	INDUSTRIAL COOLING WATER
TRINITY RIVER BASIN STREAM:												
0801 TRINITY R. (TIDAL TO ROSSER)	Х	X	×	x	×	x	X	x	X	×	X	×
0802 TRINITY R. (ROSSER TO WEST	Х	х	X	X	Х	х	x	х	X	х	X	х
OBO3 TRINITY R. (EAST FORK.) OBO4 TRINITY R. (EI M FORK.)	Х	X	Х	X	х	X	X	Х	X	X	X	x
0804 TRINITY R. (ELM FORK)	х	Х	X	х	Х	Х	X	X	X	Х	X	×
0800 OTHER WATERS		TI	HOSE (SES D	ETERMII	NED TO	BE IN	THE P	JBLIC	INTERES	Τ	
BRAZOS RIVER BASIN STREAM:										week a second or a second or a		
1201 BRAZOS R (TIDAL TO WHITNEY RESERVOIR)	x	X	x	x	x	х	x	х	х	х	X	x
1202 BRAZOS R. (WHITNEY TO LUBBOCK 1207 PALO PINTO)	X		X	X	X	X	X	X	X	X	×	×
1203 BRAZOS R. (PALO PINTO TO SALT FORK)	х		х	x	х	X	×	х		x	X	х
1204 CLEAR FORK OF BRAZOS RIVER	х		х	×	Х	X	x	X	X	х		x
1205 SALT FORK OF BRAZOS RIVER							Х	X	X			
1206 DOUBLE MOUNTAIN FORK OF BRAZOS RIVER	Х		x	X	Х	Х	X	Х	Х	Х		x
1207 WHITE RIVER	х	X	X	×	Х	X	x	X	X	х	X	Х
1208 NAVOSOTA RIVER	x	X	×	X	X	x	х	X	x	х	X	X
1209 LITTLE RIVER	х	X	X	×	X	X	X	X	X	Х	X	X
1210 SAN GABRIEL RIVER	×	X	X	×	Х	X	X	X	Х	Х	X	x
1211 LEON RIVER SOMERVILLE	Χ.	X	X	×	X	X	X	X	х	X	х	X
1212 LAMPASAS RIVER	X	X	X	×	X	X	X	Х	X	х	X	X
1213 BOSQUE RIVER	х	X	X	X	X	X	X	X	X	X	×	X
			IOSE L	SES D				ı			ΣT	1

1				WA	TE	RS	Ţ	JSI	ES			
INLAND WATERS	CONTACT RECREATION	DOMESTIC RAW WATER SUPPLY	INDUSTRIAL SUPPLY	NON – CONTACT RECREATION	PROPAGATION OF FISH & WILDLIFE	FISHING	AESTHETICS	MINING & RECOVERY OF MINERALS	HYDROELECTRIC	IRRIGATION	NAVIGATION	INDUSTRIAL COOLING WATER
SAN JACINTO RIVER BASIN												
1001 SAN JACINTO RIVER (EAST FORK)	×	X	×	х	х	X	x	х	x	x	x	Х
1002 SAN JACINTO R. (WEST FORK) (INCLUDES LAKE HOUSTON)	х	х	X	Х	X	X	X	X	X	X	_ X	X
1003 PEACH CREEK	X	Х	X	X	X	X	X	X	X	X	х	X
1004 CANEY CREEK	х	X	X	X	Х	X	×	X	X	X	_x	X
1000 OTHER WATERS		Т	HOSE I	JSES D	ETERMI	NED TO	BE IN	THE P	UBLIC	NTERES	Τ	
COLORADO RIVER BASIN STREAM:												
1401 COLORADO R. (TIDAL TO SAN SABA)	×	x	x	x	х	x	X	х	х	х	X	X
1402 COLORADO R. (SAN SABA TO BALLINGER)	X	X	х	X	X	х	×	X	X	x	X	X
1403 COLORADO R. (BALLINGER TO J. B. THOMAS DAM)	х	X	X	x	X	X	X	X	X	×		X
1404 PROPOSED ROBERT LEE RESERVOIR	х	X	Х	x	X	х	Х	X	X	X	X	X
1405 COLORADO R (LAKE J. B.) SNYDER THOMAS & TO HEAD OF RIVER)	х	X	Х	Х	X	Х	X	X	x	х		X
1905 JR THOMAS	х	X	х	х	Х	Х	X	х	Х	х	X	X
1 1406 SAN BERNARD R	+	Х	X	X	Χ.	Х	X	X	X	X	X	×
1406 SAN BERNARU R. 1407 PEDERNALES R. BIG SPRING 1403 1403 1402	Х							 		x	×	_ ^
1406 SAN BERNARU R. 1407 PEDERNALES R. 1408 11 ANO RIVER	X	X	×	X	X	X	X	X	X) ^ i	^	
1406 SAN BERNARD R. 1403 1403 1404 1405 1406 1407 1408	-	×	X	X	X	X	X	X	X	×	<u>^</u>	
1406 SAN BERNARD R. 1403 1404 1403 1402 1408 1408 LLANO RIVER 1412 1410	х			-				 				X
1406 SAN BERNARD R. 1403 1403 1404 1405 1406 1407 1408	x	х	x	x	x	X	X	X	x	X	X	x
1406	X X X	x	x	X	x	x	×	×	x x	X X	X X	X X
1406 SAN BERNARD R. 1407 PEDERNALES R. 1408 LLANO RIVER 1409 SAN SABA RIVER 1410 CONCHO RIVER 1411 SOUTH CONCHO RIVER 1411 SOUTH CONCHO RIVER	X X X	X X X	X X X	X X	x x x	X X	X X	X X	X X X	X X	X X	X X X

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				WA	TE	RS	l	USI	ES			
INLAND WATERS	CONTACT	DOMESTIC RAW WATER SUPPLY	INDUSTRIAL SUPPLY	NON-CONTACT RECREATION	PROPAGATION OF FISH & WILDLIFE	FISHING	AESTHETICS	MINING & RECOVERY OF MINERALS	HYDROELECTRIC	IRRIGATION	NAVIGATION	INDUSTRIAL COOLING WATER
NUECES RIVER BASIN												
2101 NUECES R. (TIDAL TO COTULLA)	×	x	x	x	x	x	×	x	x	×	×	X
2102 NUECES R. (ABOVE COTULLA)	T x	×	×	x	×	×	×	×	×	×	×	×
2103 FRIO RIVER	X	x	x	×	X	×	X	x	X	X	×	X
2104 SABINAL RIVER	×	x	X	x	X	x	×	x	×	x	х	×
2105 ATASCOSA RIVER 2103 CORPUS CHRISTI	х	х	X	х	Х	х	х	X	×	X	×	×
2106 MISSION RIVER	Х	х	Х	x	X	X	Х	×	X	x	x	X
2107 ARANSAS RIVER	Х	х	x	x	x	X	x	Х	X	X	X	X
2100 OTHER WATERS		T	HOSE	USES C	ETERMI	NED TO	BE IN	THE P	UBLIC	NTERE	ST	
RIO GRANDE RIVER BASIN STREAM:												
2301 RIO GRANDE R L PASO (TIDAL TO BROWNSVILLE)	Х	x	×	Х	X	х	×	X	х	X	x	X
2302 RIO GRANDE R (BROWNSVILLE TO FALCON LAKE)	X	X	X	X	х	х	×	X	×	X	х	X
2303 RIO GRANDE R (FALCON LAKE)	х	x	Х	х	х	х	х	х	×	х	x	×
2304 RIO GRANDE R (FALCON PRESIDIO	х	x	х	х	Х	х	х	х	x	х	х	X
2305 RIO GRANDE R (DEL RIO) TO PRESIDIO)	х	х	х	Х	х	Х	×	X	X	х	х	х
2306 RIO GRANDE R (PRESIDIO GRANDE TO FABENS)	х		х	Х	X	X	Х	х	x	X	х	Х
2307 RIO GRANDE R (FABENS	X	×	Х	х	Х	х	х	Х	x	X	X	Х
2308 SAN FELIPE CREEK	х	х	х	X	х	X	х	Х	X	Х	Х	X
2309 DEVILS RIVER	X	x	X	×	x	×	×	X	x	x	X	x
2310 PECOS RIVER, ZONE I- RIO GRANDE TO SHEFFIELD	X		X	×	х	X	_ x	х	х		х	Х
2311 PECOS RIVER, ZONE 11 - SHEFFIELD TO NEW MEXICO	X		X	X	x	×	x	×	×	X	X	X
2300 OTHER WATERS		ТТ	HOSE	USES (ETERMI	NED TO	BE IN	THE I	UBLIC	NTERE	ST	
INTERNATIONAL SEA												
302 BROWNSVILL	Ε											
230												

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			WA	TEI	RS	τ	JSE	S_	
	TIDAL WATERS	CONTACT RECREATION	NON - CONTACT RECREATION	PROPAGATION OF FISH & WILDLIFE	FISHING	AESTHETICS	NAVIGATION	INDUSTRIAL COOLING WATER	MINING & RECOVERY OF MINERALS
STRE	SAN JACINTO - BRAZOS COASTAL BASIN								
1101	EAST BAY	x	х	X	x	x	×	x	
1102	GALVESTON BAY -EAST OF HOUSTON SHIP CHANNEL BOUNDED BY CHANNEL MARKER 68, FISHER SHOALS DAY BEACON \$\displaystyle{1}\$, LONE OAK BAYOU, SMITH POINT, HANNA REEF 8. BOLIVAR PENNINSULA. TRINITY BAY 8. GALVESTON BAY EAST OF HOUSTON SHIP CHANNEL	x	×	x	x	x	×	×	
1103	8 NORTH OF CHANNEL MARKER #68 8 FISHER SHOALS DAY BEACON #1.	×	X	X	X	×	X	X	
1104	GALVESTON BAY-WEST OF HOUSTON SHIP CHANNEL	X	X	X	X	×	X	x	
1105	WEST BAY-EAST OF KARANKAWA REEF	х	×	X	x	×	×	x	
1106	WEST BAY- WEST OF KARANKAWA REEF	X	×	X	X	X	X	X	<u> </u>
1107	BASTROP BAYOU TIDAL	×	x	X	×	X	X	X	<u> </u>
1108	OYSTER CREEK TIDAL *	X	X	X	X	×	x	X	_
1109	BRAZOS RIVER TIDAL	X	X	X	X	X	X	X	
1100	OTHER WATERS	THOSE	USES	DETERM	NED TO	BE I	N THE	PUBLIC	INTERES
		 	-	ļ	ļ	 		ļ	
STREA	BRAZOS - COLORADO COASTAL BASIN		<u>. </u>				<u> </u>		
1301	SAN BERNARD RIVER TIDAL	X	X	X	×	X	X	X	
1302	CEDAR LAKES	X	x	X	x	X	×	x	
1303	EAST MATAGORDA BAY	×	×	X	X	×	x _	X	
1300	OTHER WATERS	THOSE	USES	DETERMI	NED TO	BE IN	THE F	PUBLIC II	TEREST
NO S MUST	SE REQUIRMENTS RELATE TO THE SURFACE WATER LAYER, THE VITY OF THE UNDERLYING SALINE WATERS WILL APPROACH OF THE CONTIQUOUS BAY OR COASTAL ZONE, WHERE THERE IS URFACE WATER LAYER OR WHERE MIXING HAS OCCURRED, JUDGMENT BE APPLIED, IN SOME STREAMS, SALT BARRIERS MAY PREVENT INSTRUSION OF MARINE WATERS,							_	

WATERS USES MINING B. RECOVERY OF MINERALS P TIDAL WATERS NON - CONTACT RECREATION PROPAGATION CONTACT RECREATION INDUSTRIAL COOLING W NAVIGATION **AESTHETICS** FISHING FISH COLORADO - LAVACA COASTAL BASIN STREAM: COLORADO RIVER TIDAL* 1501 X X X Х X X Х 1502 TRES PALACIOS BAY X Х X X X х X WEST MATAGORDA BAY 1503 X х X X х х X LAVACA RIVER TIDAL 1504 Х Х X X X х X 1505 LAVACA BAY Х X Х X. X Х Х 1500 OTHER WATERS THOSE USES DETERMINED TO BE IN THE PUBLIC INTEREST LAVACA - GUADALUPE COASTAL BASIN STREAM: ESPIRITU SANTO BAY 1701 Х Х Х х х х X VICTORIA BARGE CANAL 1702 X X X х X X X GUADALUPE RIVER TIDAL* 1703 X х Х X X X X 1704 SAN ANTONIO BAY X X OTHER WATERS 1700 THOSE JUSES DETERMINED TO BE IN THE PUBLIC INTEREST *THESE REQUIRMENTS RELATE TO THE SURFACE WATER LAYER. THE SALINITY OF THE UNDERLYING SALINE WATERS WILL APPROACH THAT OF THE CONTIQUOUS BAY OR COASTAL ZONE. WHERE THERE IS NO SUBFACE WATER LAYER OR WHERE MIXING HAS OCCURRED, JUDGMENT MUST BE APPLIED. IN SOME STREAMS, SALT BARRIERS MAY PREVENT THE INSTRUSION OF MARINE WATERS.

WATERS USES MINING B RECOVERY OF MINERALS g TIDAL WATERS PROPAGATION FISH & WILDL NON-CONTAC RECREATION NAVIGATION INDUSTRIAL COOLING W FISHING SAN ANTONIO - NUECES COASTAL BASIN STRFAM' 2001 MESQUITE BAY Х Х х Х 2002 MISSION RIVER TIDAL х х Х Х X X COPANO BAY 2003 Х Х х х X Х х ARANSAS RIVER TIDAL* 2004 Х Х Х Х Х Х Х ARANSAS BAY 2005 Х X Х X Х х х GULF OF MEXICO AT PORT ARANSAS 2006 х х × х Х Х Х NUECES RIVER TIDAL 2007 Х Х Х Х X Х Х CORPUS CHRISTI SHIP CHANNEL* х Х Х NUECES BAY 2009 Х Х Х х х Х Х 2010 CORPUS CHRISTI BAY х х х х 2000 OTHER WATERS THOSE USES DETERMINED TO BE IN THE PUBLIC INTEREST NUECES - RIO GRANDE COASTAL STREAM: Х 2201 BAFFIN BAY Х х Х Х Х Х GULF OF MEXICO AT PORT MANSFIELD 2202 х Х X 2203 LAGUNA MADRE Х Х х Х Х ARROYO COLORADO TIDAL* Х Х Х Х Х Х X BROWNSVILLE SHIP CHANNEL Х 2205 Х Х 2206 SOUTH BAY Х X Х X Х Χ X RIO GRANDE TIDAL Х Х х х Х Х 2207 THOSE USES DETERMINED TO BE IN THE PUBLIC INTEREST OTHER WATERS 2200 *THESE REQUIRMENTS RELATE TO THE SURFACE WATER LAYER. THE THESE REQUIRMENTS RELATE TO THE SURFACE WATER LAYER. THE SALINITY OF THE UNDERLYING SALINE WATERS WILL APPROACH THAT OF THE CONTIQUOUS BAY OR COASTAL ZONE. WHERE THERE IS NO SURFACE WATER LAYER OR WHERE MIXING HAS OCCURRED, JUDGMENT MUST BE APPLIED. IN SOME STREAMS, SALT BARRIERS MAY PREVENT THE INSTRUSION OF MARINE WATERS.

WATER QUALITY CRITERIA

The protection of water quality and uses requires the establishment of numerical and narrative limits on pollutants which damage these uses. The water quality criteria in this section reflect the best scientific judgment available as to the water quality requirements for the assigned uses. Numerical criteria are used whenever it is reasonable to do so. However, narrative criteria are also necessary in some cases, particularly with respect to aesthetic considerations.

Some interstate waters have a higher quality than the minimum levels assigned for protection of water uses, and the standards seek to protect this higher quality as much as possible in the face of increasing social and economic development. Scientific knowledge about the exact water quality requirements for uses is limited, and by preventing degradation in high quality waters, the standards seek to assure optimum, not marginal, conditions to protect the uses associated with clean waters.

The Texas standards contain a general narrative statement which is an integral part of the requirements for all waters.

Inasmuch as possible, the Texas standards tailor water quality criteria to present quality or that quality anticipated to result from installation of the high treatment requirements. These criteria are outlined in Tables III and IV.

GENERAL STATEMENT TEXAS WATER QUALITY REQUIREMENTS

The Texas Water Quality Act, through which the State of Texas expresses its interest in the quality of the waters in the state, sets forth the following statement of policy: "It is declared to be the policy of the State of Texas to maintain purity of the waters of the state consistent with the public health and public enjoyment thereof, the propagation and protection of fish and wildlife, including birds, mammals, and other terrestrial and aquatic life, the operation of existing industries, and the economic development of the state, and to that end to require the use of all reasonable methods to implement this policy."

The water quality requirements set forth herein have been developed under authority of State law in line with the foregoing statement of legislative policy and are considered to be in the best interests of the State of Texas. These water quality requirements, insofar as applicable to the interstate waters in Texas, are submitted to the United States Department of the Interior* for approval as the water quality standards for such waters, in accordance with Section 10(c) of the Federal Water Pollution Control Act (33 U.S.C. 466g(c). The water quality requirements applicable to the intrastate waters in Texas are provided to the Federal Water Pollution Control Administration* only for purposes related to the qualification of projects under the Federal construction grant program as authorized in Section 8 of the Act (33 U.S.C. 466(e).

In implementing the legislative policy expressed in the Texas Water Quality Act of 1967 and subject to the foregoing, it is the policy of the Texas Water Quality Board that the interstate waters in the State whose existing quality is better than the applicable water quality requirements described herein as of the date when these requirements become effective will as provided hereafter be maintained at their high quality, and no waste discharges may be made which will result in the lowering of the quality of these waters unless and until it has been demonstrated to the Texas Water Quality Board that the change is justifiable as a result of desirable economic or social development. Therefore, the Board will not authorize or approve any waste discharge which will result in the quality of any of the interstate waters in the State being reduced below the water quality standards without complying with the Federal and State laws applicable to the amendment of water quality standards. Anyone making a waste discharge from any industrial, public or private project or development which would constitute a new source of pollution or an increase source of pollution to any of the interstate waters in the State will be required, as part of the initial project design, to provide the highest and best degree of waste treatment available under existing technology consistent with the best practice in the particular field affected under the conditions applicable to the project or development. In the spirit of the Federal Water Pollution Control Act, the Board will keep the Department of the Interior informed on its activities and will furnish to the Department such reports, in such form, and containing such information as the Secretary of the Interior may from time to time reasonably require to carry out his functions under the Act. Additionally, the Board will consult and cooperate with the Department of the Interior on all matters affecting the Federal interest.

^{*}After December 2, 1970, the Environmental Protection Agency.

The Texas Water Plan presently being developed by the Texas Water Development Board is a flexible proposal for the administration of water resources to meet water needs for all purposes throughout the state to the year 2020 and beyond. The Plan, when complete, will propose a method of implementation in accordance with the statutory directive that the Plan be developed with "regard for the public interest for the entire state". in order that sufficient water will be available at reasonable cost to further the economic development of the entire state." The Texas Water Quality Requirements, or the Texas Water Quality Plan, is a companion plan to the Texas Water Plan.

The Wagstaff Act, passed in 1931, establishes the priority of uses as between applicants for permits to appropriate water from the same source of supply. The preferences of use in order of sequence are: (1) domestic and municipal, (2) industrial, (3) irrigation, (4) Mining and recovery of minerals, (5) hydroelectric power, (6) navigation, and (7) recreation. Cities are empowered to acquire the use of surface waters for domestic and municipal purposes from an appropriator who uses the water for a lower purpose, provided the appropriation from a lower use was perfected after the 1931 Wagstaff Act. Texas also has a dual riparian and appropriative rights system, which prevents the precise administration of the surface waters in the state as to particular uses, although the Texas Water Rights Adjudication Act, recently adopted by the Legislature, should alleviate this. The Texas Water Plan also envisions the transfer of waters across the face of the state to meet water needs, and this will affect the water quality requirements for those waters. The examples of water uses set forth on the water quality requirements pages following are indicators of the uses to which the water might reasonably be put. Water uses of a non-consumptive nature such as fishing, recreation, aesthetics, and navigation under some conditions may be recognized and provided for independently of statutory consumptive uses.

- 1. The surface waters of the State of Texas, for the purposes of this document, are divided into two categories, namely:
 - A. Inland Waters Those surface waters not subject to the ebb and flow of the tides.
 - B. Tidal Waters Those waters of the Gulf of Mexico within the jurisdiction of the State of Texas, bays and estuaries thereto, and those portions of the river systems which are subject to the ebb and flow of the tides, and to the intrusion of marine waters.

- 2. For inland waters, the proposed requirements are based on an evaluation of available data and reflect those quality conditions which can be attained in streams when there is a discernible flow in the stream. These requirements also apply to reservoirs, lakes and impoundments, bays and estuaries and other coastal waters of the state, except as provided in paragraph 7.
- 3. Sampling will be in accordance with fully recognized procedures. Samples must be representative of the receiving waters allowing time and distance for mixing.
- 4. The water quality requirements represent arithmetic average conditions over a period of one year, but maxima and minima for some parameters are shown where average values do not provide the necessary degree of understanding or regulatory base. The water quality requirements apply at approximately the mid-point of the zone with reasonable gradients applying toward zonal boundaries; where three consecutive samples taken in the regular course of surveillance activities reflect a water quality less than that shown in the water quality requirement, an investigation will be made to determine the cause of the lower quality water and the appropriate action to be taken.
- 5. The values established by the parameters in these water quality requirements relate to analytical procedures outlined in the latest edition of the "Standard Methods for the Examination of Water and Wastewater" as prepared and published jointly by the American Public Health Association, the American Water Works Association, and the Water Pollution Control Federation.

In evaluating toxicity, bioassay techniques are to be selected suited for the particular purpose at hand.

Where water quality requirements need supplementing to provide adequate water quality protection, such terms and conditions as may be necessary will be placed in permits for discharges of wastes.

Taste and odor producing substances shall be limited to concentrations in the waters of the state that will not interfere with the production of potable water by reasonable water treatment methods, or impart unpalatable flavors to food fish, including shellfish, or result in offensive odors arising from the waters, or otherwise interfere with the reasonable use of the waters.

6. The suitability of water for irrigation will be based on the irrigation water classification system developed by the University of California at Davis and the U. S. Salinity Laboratory at Riverside, California. Class I irrigation water is desirable, and will be assumed wherever possible. Class II or Class III irrigation water may be satisfactory under conditions of soil, climate, irrigation practices, and crops where impairment and deterioration will not ensue.

The SAR (sodium adsorption ratio) should not exceed 8 for waters safe for irrigation. Sampling and analytical procedures and schedules are not specified but will be as appropriate for adequate protection of irrigation waters.

A resolution of the Texas State Department of Health applies as to the sanitary quality of irrigation waters.

Although temperature requirements are included in these water quality requirements, information on stream and bay temperatures and information on the effects of stream and bay temperatures on the state fisheries resource is inadequate on a statewide basis. Water uses requiring temperature control have not been inventoried and their intake water temperature needs are not known. The state has initiated a survey program to obtain adequate background data on water and waste temperatures. In addition, at Texas A & M University, under sponsorship of the Electric Utilities of Texas Committee on Water Quality, a research program has been initiated seeking to provide, from the fisheries standpoint, an acceptable basis for setting water temperature requirements. It is the intention of the Texas Water Quality Board when sufficient firm information is available, to review in full the water temperature requirements set herein as may be deemed appropriate. During this interim period, the temperature conditions shown in these water quality requirements will apply. No temperature requirements apply to off-stream or privately owned reservoirs. The temperature requirements are intended to be read broadly and with judgment. Generally speaking, temperature requirements refer to the representative temperature throughout the entire body of water into which the waste discharge is made. The extent of the receiving body of water can only be defined on the basis of judgment and knowledge of existing conditions.

- 8. Water oriented recreation, including water contact sports, is a desirable use of the waters of the state everywhere. Water contact activities in natural waters are not opposed by the state health agency where routine sanitary surveys support such activities, and where, in addition, as a flexible guideline to be used in the light of conditions disclosed by the sanitary survey, the geometric means of the number of fecal coliform bacteria is less than 200 per hundred milliliters and not more than 10% of the samples during any thirty (30) day period exceed 400 fecal coliform bacteria per hundred milliliters. This policy is advisory only and in no way limits the responsibilities and authorities of local health agencies.
- 9. It is highly desirable for waters comprising the raw water supply to a public surface water treating plant that the total coliform bacteria should not exceed 100 per 100 milliliters and the fecal coliform bacteria should not exceed 20 per 100 milliliters. Nevertheless, raw water supplies to surface water treating plants shall not be deemed unsatisfactory where the total coliform organisms do not exceed 20,000 per 100 milliliters and the fecal coliform organisms do not exceed 2,000 per 100 milliliters. The evaluation of raw water supplies cannot be reduced to the simple counting of bacteria of any kind and the foregoing must be used with judgment and discretion and this paragraph is not intended to limit the responsibilities and authorities of responsible local governments or local health agencies.
- 10. Nothing in these water quality requirements limits the authority of the Commissioner of Health of the State of Texas to take such public health protective measures as he may deem necessary.
- 11. It is the policy of the State of Texas, acting through the Texas Water Quality Board, to require primary and secondary treatment and disin-

fection (except for oxidation pond effluents) at all facilities serving the general public and which treat domestic sanitary wastes. Treatment or control of industrial wastes is equally as important as the treatment or control of municipal (domestic) wastes. It is the policy of the Texas Water Quality Board to require a comparably high standard of treatment or control of industrial wastes being discharged to the waters of the State. Therefore, anyone making a waste discharge from any industrial, public or private project or development which would constitute a new source of pollution to any of the waters in the State will be required, as part of the initial project design, to provide the highest and best degree of waste treatment available under existing technology consistent with the best practice in the particular field affected under the conditions applicable to the project or development.

- 12. The general water quality requirements listed below are applicable to all waters at all times:
 - A. Essentially free of floating debris and settleable suspended solids conducive to the production of putrescible sludge deposits or sediment layers which would adversely affect benthic biota, or other lawful uses.
 - B. Essentially free of settleable suspended solids conducive to changes in the flow character of stream bottoms, to the untimely filling of reservoirs and lakes, and which might result in unnecessary dredging costs.
 - C. The surface waters in the state shall be maintained in an aesthetically attractive condition.
 - D. There shall be no substantial visible contrast to the nature appearance of the receiving waters so far as is feasible after wastes receive the best practicable treatment or control.
 - E. There shall be no substantial increase in turbidity due to waste discharges.

NOTE: FOR THOSE WATERS WITH NUMBERICAL CRITERIA LIST-ED THE FOLLOWING REMARK APPLYS:

- A. Other Inland Waters Substances or conditions not heretofore mentioned in these requirements may be controlled or regulated as the need arises. Where these waters are the raw water to a public drinking water supply the water shall be suitable.
- B. Other Tidal Waters The control of other substances not heretofore mentioned will be guided by the U. S. Public Health Service manual "Sanitation of Shellfish Growing Areas," 1965 revision, Where waters are not shellfish growing areas, it is required only that waters entering or contiguous to a shellfish growing area not interfere with the shellfish growing area.

NOTE: FOR THOSE WATERS WITHOUT NUMBERICAL CRITERIA THE FOLLOWING NARRATIVE CRITERIA APPLY:

- A. Chloride-
- B. Sulphate-
- C. Filterable Residue—
 (Total Dissolved Solids)
- D. B.O.D.-
- E. Dissolved Oxygen-
- F. pH-
- G. MPN—See General Statement

Requirements A through F shall be the native quality of the zone water (insofar as the native quality of the water can be determined) as it may be altered or affected by receipt of legally permitted waste discharges, or other wastes not presently controllable. It is recognized that waters in this zone range from undiluted waste discharges and storm sewer flows through waters of high quality and significant local use.

- H. Temperature—As controlled by permits for legal waste discharges into the zone waters.
- I. Toxicity and Toxic Materials—As controlled by permits for legal waste discharges into the zone waters.

- J. Free of Floating Oil—Substantially free from oil.
- K. Foaming or Frothing Material-None of a persistent nature.
- L. Other—Shall not affect the receiving downstream zone beyond the water quality requirements for such zone, after mixing.
- M. Radioactive Materials—Levels of ionizing radiation materials of all kinds, from both dissolved and suspended matter, shall be regulated by the Texas Radiation Control Act, Article 4590, (f), Revised Civil Statutes of Texas, and the Texas Regulations For Control of Radiation issued thereunder.

SPECIAL CONDITIONS

- A. As adequate data become available, and where circumstances so warrant, additional specific requirements may be adopted.
- B. In authorizing (by legally issued permit or other action) the discharge or entry of a waste discharge (or the existence of a hazard of such entry) into the zone waters, the authorizing agency (Texas Water Pollution Control Board or other agency) will consider local public policy, private rights, existing water uses, public health, and other factors reasonable bearing on the propriety of the waste discharge.

## CANADIAN RIVER BASIN CANADIAN RIVER BASIN	TA	BLE I	<u> </u>														
INLAND WATERS						C	RI	ГΕ	RI	A							
INLAND WATERS								COL	L-M.P.N.	1	TEMP.		S		RIAL	l	
CANADIAN RIVER (OKLAHOMA TO LAKE MEREDITH)	INLAND WATERS	CHLORIDE - (mg/l) avg. not to exceed		DISSOLVED avg. not to	B.O.D (mg/1) avg. not to exceed	DISSOLVED OXYGEN - (mg / I) not less than	i &	gen. statement for	.g. avg.	IL:	5°F. RISE ABOVE NATURAL CONDITIONS	4°F RISE - Fall, Winter, Spring 8. 1.5°F RISE - Summer	TOXICITY & TOXIC MATERIALS	DATING OIL free from	OR FROTHING persistent na	OTHER - see note under general statement.	
250 200 1,000 40 40 65-85 X 93 X X X X X X X X X																	
250 260 1,000 40 40 65-8,5 X 93 X X X X X X X X X		1,000	600	3,500	12.0	4.0	6.5 - 8.5	х		93	x		×	х	x	х	X
COLOR SOCIAL STATEMENT SOCIAL	0102 CANADIAN RIVER (LAKE MEREDITH)	250	200	1,000	4.0	4.0	6.5 - 8.5	x		93	X		х	х	x	x	х
RED RIVER BASIN STREAM O201 RED R. TO LAKE TEXOMA O202 L TEXOMA O203 RED R. (ABOVE TEXOMA) O204 PRAIRIE DOG TOWN FORK RED RIVER O205 LITTLE WICHITA O206 WICHITA RIVER (ABOVE MABELLE) O207 WICHITA RIVER (ABOVE MABELLE) O208 PEASE RIVER O209 NORTH PEASE RIVER O209 NORTH PEASE RIVER O209 NORTH PEASE RIVER O201 PAIL TEXOMA O201 PRAIRIE DOG TOWN FORK RED RIVER O202 Solve PEASE RIVER O203 RED R. (ABOVE MABELLE) O204 PRAIRIE DOG TOWN FORK RED MABELLE) O205 WICHITA RIVER (ABOVE MABELLE) O206 WICHITA RIVER (ABOVE MABELLE) O207 WICHITA RIVER (ABOVE MABELLE) O208 PEASE RIVER O209 NORTH PEASE RIVER O209 NORTH PEASE RIVER O201 Solve PEASE RIVER O201 Solve PEASE RIVER O201 Solve PEASE RIVER O202 NORTH PEASE RIVER O202 NORTH PEASE RIVER O203 NORTH PEASE RIVER O204 NORTH FORK RED RIVER O205 NORTH PEASE RIVER O206 NORTH PEASE RIVER O208 O209 NORTH PEASE RIVER O201 Solve PEASE RIVER O201 NORTH FORK RED RIVER O201 NORTH FORK RED RIVER O202 NORTH FORK RED RIVER O202 NORTH FORK RED RIVER O202 NORTH FORK RED RIVER O203 NORTH FORK RED RIVER O204 NORTH FORK RED RIVER O204 NORTH FORK RED RIVER O205 NORTH FORK RED RIVER O205 NORTH FORK RED RIVER O206 NORTH FORK RED RIVER O207 NORTH FORK RED RIVER O208 NORTH FORK RED RIVER O208 NORTH FORK RED RIVER O209 NORTH FORK RED RIVER		500	400	1,500	5.0	4.0	6.5 - 8.5	x		93	X		×	X	×	x	X
RED RIVER BASIN STREAM O201 RED R. TO LAKE TEXOMA O202 L TEXOMA O203 RED R. (ABOVE TEXOMA) O204 PRAIRIE DOG TOWN FORK RED RIVER O205 LITTLE WICHITA RIVER (ABOVE MABELLE) O206 WICHITA RIVER (ABOVE MABELLE) O207 WICHITA RIVER (ABOVE MABELLE) O208 PEASE RIVER O209 NORTH PEASE RIVER O209 NORTH PEASE RIVER O210 SALT FORK RED RIVER O300 SALT FO	CANADIAN DIOL TAMAN	250	100	900	2.0	5.0	6.5 - 8.5	×		93	x	<u></u>	×	х	×	х	Х
RED RIVER BASIN STREAM 0201 RED R. TO LAKE TEXOMA 0202 L TEXOMA 0203 RED R. (ABOVE TEXOMA) 0204 PRAIRIE DOG TOWN FORK RED RIVER 0205 LITTLE WICHITA RIVER (BYERS TO MABELLE) 0206 WICHITA RIVER (BYERS TO MABELLE) 0207 WICHITA RIVER (ABOVE MABELLE) 0208 PEASE RIVER 0209 PEASE RIVER 0209 PASE RIVER 0200 1,200 1,200 6,000 60 40 6,5-8,5 X 96 X X X X X X X X X X X X X X X X X	0100 OTHER WATERS 0103 MEREDITH	L		!		SE	E GENE	RAL	STATE	MENT							
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450 300 1,500 20 5.0 6.5-8.5 X	STREAM.	365	244	1.080	4.0	4.0	6.5 - 8.5	x		96	x	Γ	×	×	×	×	
C203 RED R. (ABOVE TEXOMA) C200	0202 TEXOMA		300				·	+		-	1	×	-				
30,000 4,000 65,000 40 40 6.5-8.5 X 96 X X X X X X X X X	0209 0208 RED LAKE TEXOMA QUER		1			-						+					
0205 LITTLE WICHITA 250 50 700 5.0 4.0 65-8.5 X 96 X	0203 RED R. (ABOVE TEXOMA)	2,000	1, 200	6,000	6.0	4.0	6.5-8.5	x		96	×	_	X	X	X	x	Х
1,500 800 5,000 50 5.0 6.5-8.5 X 96 X X X X X X X X X	0204 PRAIRIE DOG TOWN FORK RED RIVER	30,000	4,000	65,000	4.0	4.0	6.5-8.5	X		96	×	<u> </u>	x	X	Х	X	X
0207 WICHITA RIVER (ABOVE MABELLE) 9,000 3,500 20,000 40 5.0 6.5-8.5 X 96 X <td>0205 LITTLE WICHITA</td> <td>250</td> <td>50</td> <td>700</td> <td>5.0</td> <td>4.0</td> <td>6.5 - 8.5</td> <td>×</td> <td></td> <td>96</td> <td>×</td> <td><u> </u></td> <td>X</td> <td>_</td> <td>-</td> <td>X</td> <td>X</td>	0205 LITTLE WICHITA	250	50	700	5.0	4.0	6.5 - 8.5	×		96	×	<u> </u>	X	_	-	X	X
0208 PEASE RIVER 9,000 3,500 20,000 40 4.0 6.5-8.5 X 96 X	0206 WICHITA RIVER (BYERS TO MABELLE)	1,500		5,000	5.0	5.0	6.5-8.5	X		96	X		X	X	X	Х	X
0209 NORTH PEASE RIVER 7,000 2,500 20,000 40 5.0 6.5-8.5 X 96 X	0207 WICHITA RIVER (ABOVE MABELLE)	9,000	3,500	20,000	4.0	5.0	6.5 - 8.5	×		96	X	ļ	X	X	X	X	X
0210 MIDDLE PEASE RIVER 2,500 1,200 7,000 50 5.0 6.5-8.5 X 96 X	0208 PEASE RIVER	9,000	3,500	20,000	4.0	4.0	6.5 - 8.5	X		96	×		X	X	X	X	X
0211 SALT FORK RED RIVER 350 1,300 3,000 5.0 6.5-8.5 X 96 X	0209 NORTH PEASE RIVER	7,000	2,500	20,000	4.0	5.0	6.5 ~ 8.5	X		96	×	_	X	X	X	X	X
0212 NORTH FORK RED RIVER 800 500 2,500 40 5.0 6.5-8.5 X 96 X X X X X X	O210 MIDDLE PEASE RIVER	2,500	1,200	7,000	50	5.0	6.5-8.5	×		96	X	-	×	X	X	X	X
	0211 SALT FORK RED RIVER	350	1,300	3,000	5.0	5.0	6.5 - 8.5	×		96	×		X	X	X	x	_ X
0200 OTHER WATERS SEE GENERAL STATEMENT	0212 NORTH FORK RED RIVER	800	500	2,500	4.0	5.0	6.5~8.5	×		96	×		X	X	X	X	X
	0200 OTHER WATERS					SE	E GENE	RAL	STATE	MENT							
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						1	COL	IM.P.N.		TEMP.				4	T	1
INLAND WATERS	CHLORIDE - (mg/l) avg. ndf to exceed	SULPHATE - (mg/l) avg. not to exceed	TOTAL DISSOLVED SOLIDS - (mg/l) avg. not to exceed	B.O.D (mg/l) avg. not to exceed	DISSOLVED OXYGEN-(mg/I)	ph RANGE	see gen. statement for value	log, avg. not mare than	AX. UPPER LIMIT	SOF RISE ABOVE NATURAL CONDITIONS	ᇟᅈ	TOXICITY 8 TOXIC MATERIALS see gen. statement		FOAMING OR FROTHING MATERIAL	OTHER - see note under	RADIOACTIVE MATERIALS - in accordance with Texas Radiation Control Act
TRINITY RIVER BASIN			_				- 11-11-1									
OROL TRINITY R (TIDAL TO ROSSER)	125	100	600	10.0	40	6,5-8.5	x		96	x	$\overline{}$	X	x	x	¦ x	х
0802 TRINITY R. (ROSSER TO WEST LANGH ENLARGEMENT FORK HEADWATER)	100	100	500	15.0		6.5-8.5	x		96	X		X	X	X	X	X
OBO3 TRINITY R. (EAST FORK.) OBO4 TRINITY R. (FI.M. FORK.)	40	40	300	10.0		6.5 - 8.5	х		96	x		X	Х	X	×	x
0804 TRINITY R. (ELM FORK)	80	60	500	4.0	4.0	6.5 8.5	X		96	x		X	х	X	×	х
OBOO OTHER WATERS			_		s	E GENE	RAL	STATE	MENT					Ī	Ī	i
LIVINGSTON	}															
BRAZOS RIVER BASIN	<u> </u>															
BRAZOS RIVER BASIN STREAM:	Ţr	150		150	E 0	65.05			00							
BRAZOS RIVER BASIN STREAM: 1201 BRAZOS R. (TIDAL TO WHITNEY RESERVOIR)	250	150	900		-	6.5-8.5	X		96	x		X	X	X	X	×
BRAZOS RIVER BASIN STREAM: 1201 BRAZOS R (TIDAL TO 1202 BRAZOS R. (WHITNEY TO LUBBOCK 1207 WHITE P. PALO PINTO)	250 500	300	1,600	3.0	6.0	6.5-8.5	x		96	x		X	X	X	×	х
BRAZOS RIVER BASIN STREAM. 1201 BRAZOS R. (TIDAL TO 1202 BRAZOS R. (WHITNEY TO 1203 BRAZOS R. (PALO PINTO TO 1204 CLEAR FORK OF BRAZOS RIVER 1204 CLEAR FORK OF BRAZOS RIVER	250 500 3,000	300 1,500	1,600 9,000	3.0 4.0	6.0 5.0	6.5-8.5 6.5-8.5	x x		96 96	x		X X	x	x	x	x
BRAZOS RIVER BASIN STREAM. 1201 BRAZOS R. (TIDAL TO 1202 BRAZOS R. (WHITNEY TO 1203 BRAZOS R. (PALO PINTO TO 1204 CLEAR FORK OF BRAZOS RIVER 1206 SALT FORK OF BRAZOS RIVER 1207 BRAZOS R. (PALO PINTO TO 1208 BRAZOS R. (PALO PINTO TO 1209 BRAZOS R. (PALO PINTO TO 1209 BRAZOS RIVER 1209 BRAZOS RIVER 1209 BRAZOS RIVER	250 500 3,000 700	300 1,500 400	1,600 9,000 2,000	3.0 4.0 5.0	6.0 5.0 5.0	6.5-8.5 6.5-8.5 6.5-8.5	x		96	x		x x x	X	X X X	×	х
BRAZOS RIVER BASIN STREAM. 1201 BRAZOS R. (TIDAL TO 1202 BRAZOS R. (WHITNEY TO 1203 BRAZOS R. (PALO PINTO TO 1204 CLEAR FORK OF BRAZOS RIVER 1205 SALT FORK OF BRAZOS RIVER 1206 DOUBLE MOUNTAIN FORK OF BRAZOS RIVER 1206 DOUBLE MOUNTAIN FORK OF BRAZOS RIVER	250 500 3,000	300 1,500	1,600 9,000	3.0 4.0 5.0 2.0	6.0 5.0	6.5-8.5 6.5-8.5	x x x		96 96 96	x x x		X X	X X X	x	x x	X X X
BRAZOS RIVER BASIN STREAM: 1201 BRAZOS R. (TIDAL TO 1202 BRAZOS R. (WHITNEY TO 1203 BRAZOS R. (PALO PINTO TO 1204 CLEAR FORK OF BRAZOS RIVER 1205 SALT FORK OF BRAZOS RIVER 1206 BRAZOS RIVER 1207 PALO PINTO) 1208 PALO PINTO) 1208 PALO PINTO TO 1209 PALO PI	250 500 3,000 700 20,000	300 1,500 400 3,000	1,600 9,000 2,000 50,000	3.0 4.0 5.0 2.0 3.0	5.0 5.0 5.0	6.5-8.5 6.5-8.5 6.5-8.5 6.5-8.5	x x x		96 96 96 96	x x x		X X X	X X X	X X X	x x x	X X X
BRAZOS RIVER BASIN STREAM. 1201 BRAZOS R. (TIDAL TO 1202 BRAZOS R. (WHITNEY TO 1203 BRAZOS R. (PALO PINTO TO 1204 CLEAR FORK OF BRAZOS RIVER 1205 SALT FORK OF BRAZOS RIVER 1206 DOUBLE MOUNTAIN FORK OF BRAZOS RIVER	250 500 3,000 700 20,000 1,200	300 1,500 400 3,000 1,500	1,600 9,000 2,000 50,000 5,000	3.0 4.0 5.0 2.0 3.0	6.0 5.0 5.0 5.0	6.5-8.5 6.5-8.5 6.5-8.5 6.5-8.5	x x x x		96 96 96 96	X X X X		x x x x	x x x x	x x x x	X X X X	X X X X
BRAZOS RIVER BASIN STREAM. 1201 BRAZOS R. (TIDAL TO 1202 BRAZOS R. (WHITNEY TO 1203 BRAZOS R. (PALO PINTO TO 1204 CLEAR FORK OF BRAZOS RIVER 1205 SALT FORK OF BRAZOS RIVER 1206 DOUBLE MOUNTAIN FORK OF BRAZOS RIVER 1207 WHITE RIVER	250 500 3,000 700 20,000 1,200	300 1,500 400 3,000 1,500 50	1,600 9,000 2,000 50,000 5,000	3.0 4.0 5.0 2.0 3.0 3.0 4.0	6.0 5.0 5.0 5.0 6.0 6.0	6.5-8.5 6.5-8.5 6.5-8.5 6.5-8.5 6.5-8.5 6.5-8.5	x x x x x		96 96 96 96 96	x x x x		x x x x x	x x x x x	x x x x x	x x x x x	X X X X
BRAZOS RIVER BASIN STREAM. 1201 BRAZOS R. (TIDAL TO 1202 BRAZOS R. (WHITNEY TO 1203 BRAZOS R. (PALO PINTO TO 1204 CLEAR FORK OF BRAZOS RIVER 1205 SALT FORK OF BRAZOS RIVER 1206 DOUBLE MOUNTAIN FORK OF BRAZOS RIVER 1207 WHITE RIVER 1208 NAVOSOTA RIVER	250 500 3,000 700 20,000 1,200 100	300 1,500 400 3,000 1,500 50	1,600 9,000 2,000 50,000 5,000 500 400	3.0 4.0 5.0 2.0 3.0 3.0 4.0	5.0 5.0 5.0 6.0 6.0 5.0	6.5-8.5 6.5-8.5 6.5-8.5 6.5-8.5 6.5-8.5 6.5-8.5 6.5-8.5	x x x x x x x x		96 96 96 96 96 96	x x x x x x x x		x x x x x	x x x x x x	x x x x x x	x x x x x	x x x x x
BRAZOS RIVER BASIN STREAM: 1201 BRAZOS R. (TIDAL TO 1202 BRAZOS R. (WHITNEY TO 1203 BRAZOS R. (PALO PINTO TO 1204 CLEAR FORK OF BRAZOS RIVER 1205 SALT FORK OF BRAZOS RIVER 1206 DOUBLE MOUNTAIN FORK OF BRAZOS RIVER 1207 WHITE RIVER 1208 NAVOSOTA RIVER 1209 LITTLE RIVER 1209 SAN GABRIEL RIVER	250 500 3,000 700 20,000 1,200 100 100	300 1,500 400 3,000 1,500 50 50	1,600 9,000 2,000 50,000 5,000 500 400	3.0 4.0 5.0 2.0 3.0 3.0 4.0 4.0 5.0	6.0 5.0 5.0 6.0 6.0 5.0 5.0	6.5-8.5 6.5-8.5 6.5-8.5 6.5-8.5 6.5-8.5 6.5-8.5 6.5-8.5	x x x x x x x x x		96 96 96 96 96 96 96	x x x x x x x x x x		x x x x x x x	x x x x x x x	x x x x x x x	x x x x x x	x x x x x x
BRAZOS RIVER BASIN STREAM: 1201 BRAZOS R. (TIDAL TO 1202 BRAZOS R. (WHITNEY TO 1203 BRAZOS R. (PALO PINTO TO 1204 CLEAR FORK OF BRAZOS RIVER 1205 SALT FORK OF BRAZOS RIVER 1206 DOUBLE MOUNTAIN FORK OF BRAZOS RIVER 1207 WHITE RIVER 1208 NAVOSOTA RIVER 1209 LITTLE RIVER 1210 SAN GABRIEL RIVER	250 500 3,000 700 20,000 1,200 100 100 75	300 1,500 400 3,000 1,500 50 50 75	1,600 9,000 2,000 50,000 5,000 500 400 400	3.0 4.0 5.0 2.0 3.0 4.0 4.0 5.0	6.0 5.0 5.0 6.0 6.0 5.0 5.0 5.0	6.5-8.5 6.5-8.5 6.5-8.5 6.5-8.5 6.5-8.5 6.5-8.5 6.5-8.5 6.5-8.5	x x x x x x x x x x x x x x x x x x x		96 96 96 96 96 96 96 96	x x x x x x x x x x		x x x x x x x	x x x x x x x x	x x x x x x x x	x x x x x x x	x x x x x x x
BRAZOS RIVER BASIN STREAM: 1201 BRAZOS R. (TIDAL TO 1202 BRAZOS R. (WHITNEY TO 1203 BRAZOS R. (PALO PINTO TO 1204 CLEAR FORK OF BRAZOS RIVER 1205 SALT FORK OF BRAZOS RIVER 1206 DOUBLE MOUNTAIN FORK OF BRAZOS RIVER 1207 WHITE RIVER 1208 NAVOSOTA RIVER 1209 LITTLE RIVER 1210 SAN GABRIEL RIVER 1211 LEON RIVER	250 500 3,000 700 20,000 1,200 100 100 75 50	300 1,500 400 3,000 1,500 50 50 75 50 75	1,600 9,000 2,000 50,000 5,000 500 400 400 400 600	3.0 4.0 5.0 2.0 3.0 4.0 4.0 5.0 4.0	6.0 5.0 5.0 6.0 6.0 5.0 5.0 5.0	6.5-8.5 6.5-8.5 6.5-8.5 6.5-8.5 6.5-8.5 6.5-8.5 6.5-8.5 6.5-8.5 6.5-8.5	x x x x x x x x x x x x x x x x x x x		96 96 96 96 96 96 96 96	x x x x x x x x x x x x x x x x x x x		x x x x x x x	x x x x x x x x x	x x x x x x x x x	x x x x x x x x x x x	x x x x x x x x

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	_						T	IM.P.N.		EMP.			RIAL		
INLAND WATERS	CHLORIDE - (mg/l) avg. not to exceed	SULPHATE-(mg/l) avg. not to exceed	DISSOLVED SOLIDS- avg. not to exceed	B.O.D (mg/l) avg. not to exceed	ED OXYGEN-(mg/I) than	4GE	statement for value	log. avg. not than	MAX. UPPER LIMIT	F RISE ABOVE ATURAL CONDITIONS F RISE-Fall, Winter, Spring	Y 8 TOXIC MATERIALS	F =	FOAMING OR FROTHING MATERIA	-see note under statement	RADIOACTIVE MATERIALS in accordance with Texas Radiation Control Act
	CHLORID avg. not	SULPHATE avg. not to	TOTAL [B.O.D avg. not	DISSOLVED O	PH RANGE	see gen.	more th	6 6	5°F RISE NATURAL 4°F RISE- 8, 15°F RI	TOXICITY B	FREE 0 substant	FOAMING none of	OTHER- General	RADIOAC accordan Radiatio
SAN JACINTO RIVER BASIN															
1001 SAN JACINTO RIVER (EAST FORK)	80	40	400	4.0	5.0	6.5 - 8.5	X		96	x	X	X	Х	x	X
1002 SAN JACINTO R. (WEST FORK) (INCLUDES LAKE HOUSTON)	50	40	200	4.0	5.0	6.5 - 8.5	x		96	x	X	X	x	x	X
1003 PEACH CREEK	60	30	250	4.0	5.0	6.5 - 8.5	×		96	X	x	X	×	x	X
1004 CANEY CREEK	40	20	120	4.0		6.5 - 8.5	X		96	X	X	X	X	X	X
1000 OTHER WATERS					SE	E GENE	1,	STATE				J		J	L
COLORADO RIVER BASIN															
1401 COLORADO R. (TIDAL TO SAN SABA)	100	75	500	5.0	5.0	65 - 8.5	x		96	x	X	х	×	x	X
1402 COLORADO R. (SAN SABA TO BALLINGER)	150	150	1,000	4.0	5.5	65-85	x		96	x	x	×	X	х	х
1403 COLORADO R. (BALLINGER TO J. B. THOMAS DAM)	1,000	1,000	5,000	5.0	4.0	6.5 - 8.5	х		96	x	X	X	×	х	X
1404 PROPOSED ROBERT LEE RESERVOIR	250	250	1,000	4.0	5.0	6.5-8.5	х		96	х	X	X	×	×	X
1405 COLORADO R. (LAKE J. B. SNYDER THOMAS & TO HEAD OF RIVER)	50	60	500	4.0	5.0	6.5 - 8.5	×		96	x	×	х	×	x	Х
1406 SAN BERNARD R. 1405 JR THOMAS AROWNINGOO	60	50	300	4.0	5.0	6.5 - 8.5	×		96	x	×	x	×	x	×
HACT DEDERMALES BIG SPRING 1404	60	40	400	3.0	5.0	6.5 - 8.5	х		96	x	x	X	X	x	×
1407 PEDERIVALES R. ROBERT 1408 LLANO RIVER 1408 SAN SARA BURNET 1409 BURNET	50	30	300	3.0	5.0	6.5 - 8.5	X		96	×	X	X	X	X	X
1409 SAN SARA RIVER TWIN BUTTES 411 1409 1408 CO/CO	80	50	500	5.0	4.0	65-85	х		96	x	х	х	Х	X	Х
1410 CONCHO RIVER	300	200	1,000	5.0	5.0	65-85	х		96	x	х	х	X	х	х
1411 SOUTH CONCHO RIVER	150	50	600	3.0	5.0	6.5 - 8.5	X		96	x	X	×	×	Х	×
1412 MIDDLE CONCHO RIVER	50	50	300	5.0	4.0	65-8.5	x		96	×	X	X	X	X	X
1413 NORTH CONCHO RIVER	100	100	500	5.0	4.0	6.5 - 8.5	x		96	x	х	x	×	X	x

	CRITERIA															
							COL	1 M.P.N.		TEMP		"		RIAL		
INLAND WATERS	CHLORIDE - (mg/1) avg. not to exceed	SULPHATE- (mg/l) avg. nat to exceed	,	avg. not to exceed	DISSOLVED OXYGEN-(mg/l) not less than	pH RANGE	see gen. statement for value	log. avg. not more than	• F MAX. UPPER LIMIT	5°F RISE ABOVE NATURAL CONDITIONS	무딿	TOXICITY & TOXIC MATERIALS see gen. statement	FREE OR FLOATING OIL substantially free from oil	FOAMING OR FROTHING MATERIA none of a persistent nature	S. r.	RADIOACTIVE MATERIALS in accordance with Texas Radiation Control Act
LAVACA RIVER BASIN													-	· -		
1601 LAVACA RIVER	150	75	500 5	5.0	50	6.5~8.5	x		96	х	Ī	x	x	x	х	x
1602 NAVIDAD RIVER	150	75			_	65~8.5	X		96	X		X	X	X	X	X
1600 OTHER WATERS		_		\dashv	-	E GENE	RAL	STATE	MENT	,						
									Ė							
GUADALUPE RIVER BASIN STREAM: 1801 GUADALUPE R., ZONE I (TIDAL TO CON-							[]		<u> </u>						I	
FLUENCE SAN ANTONIO RIVER)	85	80	500	0.0	4.5	6.5 ~ 8.5	×		96	X		X	X	×	×	X
1802 GUADALUPE R., ZONE II (SAN ANTONIO R. TO CONFLUENCE SAN MARCOS CANYON LAKE GUADALUPE R. ZONE III RIVER)	60	50	400	5.0	5.0	6.5~8.5	x		96	x		x	×	x	×	×
GUADALUPE R., ZONE III 1803 (ABOVE CONFLUENCE SAN MARCOS R.) 1803 (ABOVE CONFLUENCE SAN MARCOS R.)	40	40	400	3.0	5.0	6.5~8.5	x		96	x		x	x	x	x	x
1804 SAN MARCOS RIVER	60	50	400	3.0	5.0	6.5~ 8.5	X		96	X		Х	Х	X	X	X
1805 COMAL RIVER	25	30			6.0	6.5~ 8.5	X		96	X		X	X	X	X	X
1806 BLANCO RIVER	25	30	400 3	3.0	6.0	6.5~8.5	X		96	X		Х	X	X	X	×
1800 OTHER WATERS					SE	E GENE	RAL	STATE	MENT					<u> </u>		
SAN ANTONIO RIVER BASIN																i
1901 SAN ANTONIO RIVER (BELOW CIBOLO CREEK)	150	150	700 8	3.0	4.0	6.5 -8.5	х		96	x		x	X	X	x	X
1902 SAN ANTONIO R. (ABOVE CIBOLO CK.)	120	120	700 10	0.0	4.0	65-85	х		96	×		X	X	X	X	х
1903 MEDINA R. (BELOW LEON CK.) 1904 MEDINA R. (AROVE LEON CK.)	120	120	700 10	0.0	4.0	6.5 ~ 8.5	Х		96	x		X	X	Х	х	x
1904 MEDINA R. (ABOVE LEON CK.) 1905 CIBOLO CREEK	50	75	400 5	0.0	5.0	6.5 - 8.5	X		96	x		X	×	X	x	X
904	75	75				6.5 ~ 8.5	X		96	x		X	х	X	X	X
1906 LEON CREEK	120	120	700 10	0.0	-	65 -8.5	X		96	X		×	X	X	X	X
1900 OTHER WATERS	<u> </u>		<u> </u>		S	E GENE	RAL	STATE	MENT	$1 \perp$				<u> </u>		

	CRITERIA															
							COLI	M.P.N.	7	TEMP						
INLAND WATERS	CHLORIDE - {mg/l} ovg. not to exceed	SULPHATE - (mg/l) avg. not to exceed	TOTAL DISSOLVED SOLIDS- (mg/l) avg. not to exceed	B.O.D (mg/1) avg. not to exceed	DISSOLVED OXYGEN- (mg/I) not less than		see gen. statement for value	log avg. not more than	* F. MAX. UPPER LIMIT	5° F RISE ABOVE NATURAL CONDITIONS A° E BISE: Foll Winder Socied	8 15°F RISE-Summer TOXICITY & TOXIC MATERIALS	see gen statement	substantially free from oil	f a persistent nat	ment.	RADIOACTIVE MATERIALS-in accordance with Texas Radiation Control Act
NUECES RIVER BASIN																
STREAM: 2101 NUCCES R. (TIDAL TO COTULLA)	80	80	500	4.0	4.0	6.5-85	x		96	×		×	x	x	x	×
2102 NUECES R (ABOVE COTULLA)	50	50	300	4.0	5.0	6.5-8.5	X		96	X	-+		$\frac{2}{x}$	-	$\frac{\hat{x}}{x}$	
2103 FRIO RIVER	100	100	800	5.0	5.0	6.5-8.5	x		96	x	-+	-+	$\frac{\lambda}{x}$	-+	x	
2104 SABINAL RIVER	100	50	500	4.0	5.0	6.5 - 8.5	x		96	x	-+		x	-+	x	×
2105 ATASCOSA RIVER	100	100	500	4.0	4.0	6.5-8.5	х		96	x	_	x	x	x	x	×
2106 MISSION RIVER	100	50	400	5.0	4.0	6.5 - 8.5	х		96	x		x	X	×	x	X
2107 ARANSAS RIVER	100	50	400	5.0	4.0	6.5-8.5	х		96	x		x	X	x	X	×
2100 OTHER WATERS					s	EE GENE	RAL	STATE	MENT							
				<u> </u>												
RIO GRANDE RIVER BASIN																
2301 RIO GRANDE R. EL PASO (TIDAL TO BROWNSVILLE)	500	300	1,500	5.0	4.0	6.5-8.5	х		96	x		x	x	x	x	X
2302 RIO GRANDE R. (BROWNSVILLE TO FALCON LAKE)	200	200	750	4.0	5.0	6.5-8.5	×		96	х		x	X	x	x	X
2303 RIO GRANDE R. (FALCON LAKE)	75	150	600	3.0	6.0	6.5-8.5	X	11	96	x		x	x	X	x	X
2304 RIO GRANDE R. (FALCON PRESIDAD	180	200	750	5.0	5.0	6.5-8.5	x		96	x		x	x	x	X	х
2305 RIO GRANDE R. (DEL RIO)	150	400	1,000	5.0	5.0	6.5-85	X		96	х		x	x	x	X	Х
2306 RIO GRANDE R (PRESIDIO GRANDE) TO FABENS)	1,000	900	4,000	5.0	5.0	6.5 8.5	X		96	x		x	X	x	X	X
2307 RIO GRANDE R (FABENS	200	350	1,000	10.0	4.0	6.5-8.5	X	-	96	x	\perp	x	x	x	x	x
2308 SAN FELIPE CREEK	20	30	300	2.0	6.0	6.5 - 8.5	X		96	×		×	x	X	x	X
2309 DEVILS RIVER	20	20	300	2.0	6.0	6.5- 85	X		96	x		×	x	x	x	x
2310 PECOS RIVER, ZONE I- RIO GRANDE TO SHEFFIELD	2,000	1,000	6,000	3.0	5.0	6.5 - 8.5	X		96	X		x	х	X	x	X
2311 PECOS RIVER, ZONE 11 - SHEFFIELD TO NEW MEXICO	6,000	4,000	20,000	5.0	4.0	6.5- 8.5	×	ļ	96	X		×	X	X	x	X
2300 OTHER WATERS					S	EE GENE	RAL	STATE	MENT	<u>ا</u>						
INTERNATIONAL V.C. FALCON			1		\	<u> </u>				· ·				: 		
Sac Broweville			<u> </u>	1_		<u> </u>	_			1						
230			<u> </u>	L												

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l	· · · · · · · · · · · · · · · · · · ·								L-M.PN.	TE	AP.	(0		ATERIA	
	TIDAL WATERS	CHLORIDE - (mg /1) avg. not to exceed	SULPHATE - (mg/l) avg. not to exceed	TOTAL DISSOLVED SOLIDS - (mg/l) avg. not to exceed	B.O.D (mg /1) avg. not to exceed	DISSOLVED OXYGEN - (mg/I) not less than	PH RANGE	see gen. statement for value	log. avg. not more than	FALL, WINTER, & SPRING not to exceed a 4.º E rise	SUMMER not to exceed a 1.5° F. rise	TOXICITY B TOXIC MATERIALS see gen. statement	FREE OR FLOATING OIL substantially free from oil	FOAMING OR FROTHING MATE	OTHER - see note under general statement RADIOACTIVE MATERIALS- in accordance with Texas
STREA	SAN JACINTO - BRAZOS COASTAL BASIN											_			_
1101	EAST BAY	12,000	1,200	25,000	3.0	6.0	7.0 - 9.0		70/100	x	х	x	×	x	x x
1102	GALVESTON BAY -EAST OF HOUSTON SHIP CHANNEL BOUNDED BY CHANNEL MARKER 68, FISHER SHOALS DAY BEACON \$1, LONE OAK BAYOU, SMITH POINT, HANNA REEF 8. BOLIVAR PENNINSULA. TRINITY BAY 8. GALVESTON BAY EAST OF HOUSTON SHIP CHANNEL	12,000	1,200	25,000	-		7.0 - 9.0		70/100		x	,х	x	×	x x
1103	8 NORTH OF CHANNEL MARKER # 68 8 FISHER SHOALS DAY BEACON # 1	10,000	700	20,000	—-	5.0	7.0- 9.0		70/100		X	X	X	X	X X
1104	GALVESTON BAY-WEST OF HOUSTON SHIP CHANNEL	12,000	1,500	25,000	6.0		70-9.0		70/100		. x	! X	×	X	X X
1105	WEST BAY-EAST OF KARANKAWA REEF	16,000	2,000	32,000		5.0	7.0 - 9.0		70/100		X	X	X	X	X X
1106	WEST BAY- WEST OF KARANKAWA REEF BASTROP BAYOU TIDAL*	16,000	1,500	32,000 25,000		6.0 4.0	7.0 - 9.0 7.0 - 9.0	_	70/100		X	X	X	X	x x
1108	OYSTER CREEK TIDAL	15,000	2,000	32,000	5.0		7.0 - 9.0		,000/100		×	<u></u> +^-		x	$\frac{1}{x}$
1109	BRAZOS RIVER TIDAL*	6,500	800	15,000		3.0	7.0 - 9.0		,000/100		×	, x	×	x	x X
1100	OTHER WATERS					,	E GENE	RAL	STATE			Ť	-	1	
	1109														
												L			
STREA	BRAZOS - COLORADO COASTAL BASIN											- +-			
1301	SAN BERNARD RIVER TIDAL	12,000	1,500	25,000	5.0	5.0	7.0 - 9.0	_ '	000/100	×	×	X	X	X	x x
1302	CEDAR LAKES	14,000	2,000	30,000	3.0	-	7.0 - 9.0		70/100		×	X	×	X	x x
1303	EAST MATAGORDA BAY	10,000	1,000	20,000	30	+	7.0 - 9.0		70/100		×	×	X	×	X X
1300 ★ _{THE}	OTHER WATERS SE REQUIRMENTS RELATE TO THE SURFACE MATER LAYER, THE		L			SE	E GENE	RAL	STATE	NENT_			<u> </u>		
SALI THAT NO S MUST THE	SE REQUIRMENTS RELATE TO THE SURFACE WATER LAYER. THE NITY OF THE UNDERLYING SALINE MATERS MILL APPROACH OF THE CONTIQUOUS BAY OR COASTAL ZONE. WHERE THERE IS INFACE WATER LAYER OR WHERE MIXING MAS OCCURRED, JUDDEMENT BE APPLIED. IN SOME STREAMS, SALT BARRIERS MAY PREVENT NSTRUSION OF MARINE WATERS.					_							_		

	CRITERIA							
TIDAL WATERS	CHLORIDE - (mg/l) avg. not to exceed Sul_PHATE - (mg/l) avg. not to exceed Bo.D (mg/l) avg. not to exceed Bo.D (mg/l) avg. not to exceed Bo.D (mg/l) avg. not to exceed DISSOLVED OXYGEN- (mg/l) not less than log. avg. not log. avg. not log. avg. not pH RANGE see gen. statement for value log. avg. not more than rowe than TALL, WINTER, & SPRING not to exceed a 4° E rise SUMMER not to exceed a 1.5° F. rise TOXICITY & TOXIC MATERIALS see gen. statement FREE OR FLOATING ON Substantially free from all FOAMING OR FROTHING MATERIAL FOAMING OR FOOTHING MATERIAL See gen. statement OTHER - see note under general statement GREEC ARE STATEMES. IN RADIOACTIVE MATERIALS.							
COLORADO - LAVACA COASTAL BASIN STREAM: 1501 COLORADO RIVER TIDAL* 1502 TRES PALACIOS BAY 1503 WEST MATAGORDA BAY 1504 LAVACA RIVER TIDAL* 1505 LAVACA BAY 1500 OTHER WATERS	8,200 800 18,000 3.0 5.0 6.5-8.5 L000/100 X X X X X X X X X X X X X X X X X X							
LAVACA - GUADALUPE COASTAL BASIN STREAM. 1701 ESPIRITU SANTO BAY 1702 VICTORIA BARGE CANAL* 1703 GUADALUPE RIVER TIDAL* 1704 SAN ANTONIO BAY 1700 OTHER WATERS *THESE REQUIRMENTS RELATE TO THE SURFACE WATER LAYER. THE SALINITY OF THE UNDERLYING SALINE WATERS WILL APPROACH THAT OF THE CONTIQUOUS BAY OR COASTAL ZONE. WHERE THERE IS NO SURFACE WATER LAYER OR WHERE MIXING MAS OCCURRED, JUDGMENT MUST BE APPLIED. IN SOME STREAMS. SALT BARRIERS MAY PREVENT THE INSTRUSION OF MARINE WATERS.	17,000 2,000 40,000 2.0 7.0 7.0 9.0 70/100 X X X X X X X X X X X X X X X X X X							

			CRITERIA													
ļ			S-S-S-MAN TEMP.									<u>e</u>				
	TIDAL	WATERS	CHLORIDE - (mg / I) avg. not to exceed	SULPHAME - (mg/1) awg. not to exceed	TOTAL DISSOLVED SOLIDS- (mg/l) avg. not to exceed	B.O.D. – (mg/l) avg. not to exceed	DISSOLVED OXYGEN-(mg/l) not less than	ph RANGE	see gen. statement for volue log, avg. not more than	FALL, WINTER, B. SPRING not to exceed a 4°F rise	SUMMER not to exceed a 1.5°F rise	TOXICITY B. TOXIC MATERIA see gen. statement		VG OR FROTHING f a persistent natu	,	RADIOACTIVE MATERIALS- accordance with Texas Radiation Control Act
	SAN ANTONIO - NUECE	S COASTAL BASIN				•										
STREA	AM.	City Man a south of														
2001	MESQUITE BAY	The state of the s	15,000	2,000	35,000	2.0	7.0	7.0 - 9.0	70/10	o x	x	x	X	x	X	x
2002	MISSION RIVER TIDAL		13,000	750	28,000	5.0	5.0	7.0- 9.0	1,000/10	c x	X	X	х	x	X	х
2003	COPANO BAY	AT STATE OF THE ST	15,000	2,000	35,000	2.0	7.0	7.0- 9.0	70/10	o x	x	x	×	x	x	x
2004	ARANSAS RIVER TIDAL*		17,000	2,000	40,000	5.0	5.0	7.0 - 9.0	01/000/10	o x	×	x	x	×	x	x
2005	ARANSAS BAY	2002 2007	17,000	2,000	40,000	2.0	7.0	7.0- 9.0	70/10	d x	×	,X	X	x	X	_x
2006	GULF OF MEXICO AT PORT ARANSAS		20,000	3,000	45,000	1.0	7.0	7.0 - 9.0	5/10	У Х	x	×	X	x	x	X.
2007	NUECES RIVER TIDAL*	200	20,000	2,500	45,000	5.0	5.0	7.0 - 9.0	1000/10	o x	X	x	x	X	X	_x
2008	CORPUS CHRISTI SHIP CHANNEL*		20,000	3,000	45,000	5.0	4.0	7.0- 9.0	1,000/10	d x	X	X	X	X	X	×
2009	NUECES BAY		20,000	2,500	45,000	5.0	5.0	7.0 - 9.0	70/10	0 X	X	x	Х	x	X	×
2010	CORPUS CHRISTI BAY	2006	20,000	2,500	45,000	2.5	7.0	7.0- 9.0	70/10	o x	X	x	×	x	x	×
2000	OTHER WATERS	2006	<u> </u>		<u> </u>		SE	E GENE	RAL STATE	MENT_	<u> </u>			Щ		
<u></u>	NUECES - RIO GRAND	E COASTAL BASIN	<u> </u>						<u> </u>							
STREA		1/80														İ
2201	BAFFIN BAY		30,000	4,000	62,000	4.0	7.0	7.0- 9.0	70/10	o x	×	x	x	x	х	×
2202	GULF OF MEXICO AT PORT MANSFIELD		20,000	3,000	45,000	-	7.0	7.0 - 9.0	5/10		X	X	X	_	x	×
2203	LAGUNA MADRE		30,000	4,000	62,000	4.0	7.0	7.0 - 9.0	70/10	d x	×	×	x	x	x	
2204	ARROYO COLORADO TIDAL		7,000	1,500	20,000	5.0	4.0	6.5 - 8.5	1,000/10	ю x	×	×	x	x	x	×
2205	BROWNSVILLE SHIP CHANNEL	2201	20,000	3,000	45,000	5.0	4.0	7.0 - 9.0	1,000/10	c x	x	X	х	x	x	X
2206	SOUTH BAY		20,000	2,500	48,000	2.0	70	7.0- 9.0	70/10	σх	х	x	×	x	×	X
2207	RIO GRANDE TIDAL*		2,300	500	5,000	5.0	5.0	70-9.0	,000/10	οх	×	×	x	×	X	×
2200	OTHER WATERS	The state of the s					SE	E GENE	RAL STATI	EMENT						
THAT NO SU MUST	SE REQUIRMENTS RELATE TO THE SURFACE WATER LAYER. THE NITY OF THE UNDERLYING SALINE WATERS WILL APPROACH OF THE CONTIQUOUS BAY OR COASTAL ZONE, WHERE THERE IS URFACE WATER LAYER OR WHERE MIXING HAS OCCURRED, JUDGMENT BE APPLIED. IN SOME STREAMS, SALT BARRIERS MAY PREVENT WASTRUSION OF MARINE WATERS.	220														

IMPLEMENTATION PLAN

The "action" plan of the standards is the plan of implementation and enforcement. This plan sets forth the requirements for treatment and/or control of all conventional municipal and industrial waste discharges in the State which affect interstate waters, specifies the time within which this is to be accomplished, and contains programs for dealing with other water pollution control problems.

It is the policy of the State of Texas, acting through the Texas Water Quality Board, the Texas State Department of Health, and other agencies participating in Texas Water Quality Board activities, to require primary and secondare treatment and disinfection (except for oxidation pond effluents) at all facilities serving the general public and which treat domestic sanitary wastes. Treatment or control of industrial wastes is equally important as the treatment or control of municipal (domestic) wastes. It is the policy of the Texas Water Quality Board to require a comparably high standard of treatment or control of industrial wastes being discharged to the waters in the state.

All municipalities in the State of Texas are operating under permits calling for secondary treatment plus disinfection except effluent from sewage lagoons where disinfection is not required. Present municipal non-compliance results from obsolescence or municipal growth. A continuing review of current municipal and industrial permits is conducted using field studies, surveillance results, and self reporting information. In circumstances where the Texas Water Quality Board determine a discharge is being made in violation of a permit, or discharges being made without a permit, remedial action is taken by the Board.

When a municipality or industry proposes to construct pollution abatement facilities, either on their own initiative or on the instruction of the Board, the average time table followed is:

I. Municipal

		Min. Days	Av. Days
1.	Retain services of professional	15	30
	engineer		
la.	If planning assistance is sought		
	through Department of Housing		
	and Urban Developlment	90	200

2.	Conduct engineering study and		
	prepare preliminary report	30	60
3.	Obtain Federal grant for		
	construction	45	240
4.	Obtain Right-of-way, prepare		
	construction plans, hold		
	bond election, and sell bonds	90	200
5.	Advertise for bids and award		
	contract	30	45
6.	Complete construction		
	approximately 30 days per each		
	\$50,000 of construction costs	100	270
	TOTAL	400	1045

If Federal financial assistance is not requested the average time can be reduced by 440 days. However, if Federal construction funds are requested, steps 3 and 4 can be executed concurrently, thereby reducing the average time by 200 days. The practical minimum amount of time in which facilities can be provided is 435 days. This schedule is computed by eliminating steps 1a and 3 and allowing an average construction time of 270 days.

II. Industrial

		Min. Days	Av. Days
1.	Retain services of professional engineer	3	15
2.	Conduct engineering study and		
	preapre engineering report	30	120
3.	Prepare construction plans	30	60
4.	Advertise for bids and award		
	contract	20	45
5.	Complete construction approxi-		
	mately 30 days per each \$50,000		
	of construction costs	100	300
	TOTAL	183	540

Information on the requirements for any particular discharger may be obtained from the Texas Water Quality Board.

DEFINITIONS

(As listed in Section 115 Rules of the Texas Water Quality Board)

RULE 115.1 DEFINITIONS OF TERMS: In performance of its duties, the Board relies upon the following definitions of terms.

- (a) "Act" means Chapter 313, Acts of the 60th Legislature, Regular Session, 1967, known as the Texas Water Quality Act of 1967 (Article 7621d-1).
- (b) "Board" means the Texas Water Quality Board created by Article 7621d-1.
- (c) "Person" means any individual, public or private corporation, political subdivision, governmental agency, municipality, copartnership, association, firm, trust, estate or any other entity whatsoever.
- (d) "Waters" or "waters in the State" means ground waters, percolating or otherwise, lakes, bays, ponds, imponding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Gulf of Mexico within the territorial limits of the State of Texas, and all other bodies of surface waters, natural or artificial, inland or coastal, fresh or salt, that are wholly or partially within or bordering the State or within its jurisdiction.
- (e) "Waste" means sewage, industrial waste, municipal waste, recreational waste, agricultural waste, and other wastes, or any of them as hereinbelow defined.
- (f) "Sewage" means the water-carried human or animal wastes from residences, buildings, industrial establishments, cities, towns, or other places, together with such ground water infiltration and surface waters with which it may be commingled.
- (g) "Municipal waste" means any water-borne liquid, gaseous, solid, or other waste substance, or a combination thereof, resulting from any and all discharges within or emanating from within, or subject to the control of, any municipality, city, town, village, or any type of municipal corporation.

- (h) "Recreational waste" means any water-borne liquid, gaseous, solid, or other waste substances, or a combination thereof, arising within or emanating from within any public park, beach, or recreational area of any kind, public or private.
- (i) "Agricultural waste" means any water-borne liquid, gaseous, solid, or other waste substances arising from any type of agricultural pursuit, public or private, including but not limited to, poisons and insecticides used in such pursuits.
- (j) "Industrial waste" means any water-borne liquid, gaseous, solid, or other waste substances, or a combination thereof, resulting from any process of industry, manufacturing, trade, or business.
- (k) "Other wastes" means garbage, refuse, decayed wood, sawdust, shavings, bark, sand, lime, cinders, ashes, offal, oil, tar, dyestuffs, acids, chemicals, salt water, and all other substances not sewage, industrial waste, municipal waste, recreational waste or agricultural waste, that may cause impairment of the quality of the waters in the State.
- (l) "Radioactive material" means any material, solid, liquid or gas, which emits ionizing radiation. Ionizing radiation includes gamma rays and X-rays; alpha, and beta particles, high-speed electrons, neutrons, protons, and other nuclear particles; but not sound or radio waves, or visible, infrared, or ultraviolet light.
- (m) "Pollution" means any discharge or deposit of waste into or adjacent to the waters in the State, or any act of omission in connection therewith, that by itself, or in conjunction with any other act or omission or acts or omissions, causes or continues to cause or will cause such waters to be unclean, noxious, odorous, impure, contaminated, altered or otherwise affected to such an extent that they are rendered harmful, detrimental or injurious to public health, safety, or welfare, or to terrestrial or aquatic life, or the growth and propagation thereof, or to the use of such waters for domestic, commercial, industrial, agricultural, recreational or other lawful reasonable use.

Where water quality criteria have been established by the Board created by this Act, "pollution" means any discharge of deposit of waste into or adjacent to the waters in the State, or any act or omission in connection therewith, that by itself, or in conjunction with any other act or omission or acts or omissions, causes or

continues to cause or will cause such waters to be of a lesser quality than that established by the Board as the criteria for those waters; notwithstanding the foregoing, nothing in this Subsection (m) is intended to limit the authority of the Water Quality Board to issue or to require permits for the discharge of waste into or adjacent to the waters in the State, or to establish criteria for any of the waters in the State.

- (n) "Sewer system" or "Sewerage system" means pipelines or conduits, canals, pumping stations, and force mains, and all other constructions, devices, and appliances appurtenant thereto, used for conducting sewage, industrial waste, municipal waste, recreational waste or agricultural waste, or other wastes to a point of ultimate disposal.
- (o) "Treatment facilities" means any plant, disposal field, lagoon, pumping station, constructed drainage ditch or surface water intercepting ditch, incinerator, area devoted to sanitary land fills, or other works not specifically mentioned herein, installed for the purpose of treating, neutralizing, stabilizing or disposing of sewage, industrial waste, municipal waste, recreational waste or agricultural waste, or other wastes.
- (p) "Disposal system" means a system for disposing of sewage, industrial waste, municipal waste, recreational waste or agricultural waste, or other wastes, and including sewer systems and treatment facilities.
- (q) "Local government" means an incorporated city, a county, river authority, or a water district or authority acting under Section 52, Article III, or Section 59, Article XVI, of the Constitution of the State of Texas.
- (r) "Outfall" means the point or location where waste discharges from a sewer system, treatment facility or disposal system into or adjacent to the waters in the State.
- (s) "Permit" means the authority or the written evidence thereof granted by the Board to discharge waste into or adjacent to the waters in the State, and includes the regular permit and statutory permit.

- (t) "Article", whenever used herein followed by a number, refers to provisions of law as compiled in Vernon's Texas Civil Statutes, as amended.
- (u) "B.O.D." means the five-day, 20° Centigrade biochemical oxygen demand as determined by the procedures specified in the latest edition of "Standard Methods for the Examination of Water and Waste Water." (See Rule 120.3 (c) on analytical procedures.)
- (v) "Rule" includes regulation and mode of procedure.
- (w) "Water quality criteria" includes water quality standards and water quality requirements.

RULE 115.2 OTHER DEFINITIONS: Where not specifically defined in these Rules, the technical terms used by the Board shall have the definitions given in the latest issue of Glossary Water and Sewage Control Engineering prepared under the joint sponsorship of American Public Health Association, American Society of Civil Engineers, American Waterworks Association and Federation of Sewage Works Associations.

STATE AND FEDERAL AGENCY ADDRESSES

A. STATE

Texas Water Qualtiy Board P. O. Box 13246, Capitol Station Austin, Texas 78711

B. FEDERAL

Environmental Protection Agency Region VI 1600 Patterson, Suite 1100 Dallas, Texas 75201

Environmental Protection Agency Washington, D. C. 20460