



































Buffalo Red River Watershed: One Watershed, One Plan

Issue No.	Issue Statement	Map				Map Legend Item(s)	Resource Concern																	
		Surface Waters	Groundwater	Habitat & Recreation	Landuse		Agricultural Drainage Systems	Lakes	Rivers & Streams	Wetlands	Surface Runoff	Potable Water Quality	Groundwater Water Quantity	Aquatic Habitat	Terrestrial Habitat	Public Knowledge & Behavior	Monitoring & Data Collection	Planning & Coordination	Urban Landscapes	Rural Landscapes	Shoreline & Riparian Areas			
1	Unstable and degraded drainage ditches.	X				 Public Ditches	X																	
2	Unstable stream banks and channels.	X		X		 Rivers & Streams			X					X										X
3	Unstable lake shoreland.	X		X		 Lakes  Designated Wildlife Lakes		X						X								X	X	
4	Outdated benefit determination for many agricultural drainage systems.	X			X	 Public Ditches	X											X			X			
5	Increased erosion from fields and other upland sources resulting in increased sedimentation in rivers and streams impacting aquatic life and water clarity.	X		X		 2018 Impaired Streams  2018 Fish & Aquatic Invertebrate Habitat Impairments <i>*See also: Landuse map</i>	X	X	X	X	X	X		X										X
6	Increased phosphorus loading to lakes, rivers and streams impacting aquatic life.	X				 DNR Lakes of Phosphorus Sensitivity Significance  2018 Impaired Lakes For Nutrients  NPDES Sites  Lakes  Rivers & Streams		X	X	X		X												

Buffalo Red River Watershed: One Watershed, One Plan

Issue No.	Issue Statement	Map				Map Legend Item(s)	Resource Concern															
		Surface Waters	Groundwater	Habitat & Recreation	Landuse		Agricultural Drainage Systems	Lakes	Rivers & Streams	Wetlands	Surface Runoff	Potable Water Quality	Groundwater Water Quantity	Aquatic Habitat	Terrestrial Habitat	Public Knowledge & Behavior	Monitoring & Data Collection	Planning & Coordination	Urban Landscapes	Rural Landscapes	Shoreline & Riparian Areas	
7	Increased nitrogen loading to lakes, rivers and streams impacting aquatic life and drinking water quality.	X				<ul style="list-style-type: none">  NPDES Sites  Lakes  Rivers & Streams  2018 Impaired Lakes For Nutrients 		X	X			X		X								
8	Increased bacteria (E. coli) loading to rivers and streams impacting aquatic recreation and drinking water quality.	X				<ul style="list-style-type: none">  2018 Impaired Streams 		X	X		X								X	X		
9	Low dissolved oxygen in streams impacting fish and aquatic insect habitat.	X		X		<ul style="list-style-type: none">  2018 Impaired Streams  2018 Fish & Aquatic  Invertebrate Habitat  Impairments 	X		X				X									
10	Increased surface runoff contributes to flood conditions which has economic, environmental, social, and health and safety impacts.	X				<ul style="list-style-type: none">  100 yr. Floodplain  500 Yr. Floodplain 	X	X	X	X	X		X	X	X				X	X	X	
11	Degradation of high-quality wetlands.	X		X		<ul style="list-style-type: none">  Calcareous Fens  Wetlands  Developed 			X	X	X		X	X	X							

Buffalo Red River Watershed: One Watershed, One Plan

Issue No.	Issue Statement	Map				Map Legend Item(s)	Resource Concern															
		Surface Waters	Groundwater	Habitat & Recreation	Landuse		Agricultural Drainage Systems	Lakes	Rivers & Streams	Wetlands	Surface Runoff	Potable Water Quality	Groundwater Water Quantity	Aquatic Habitat	Terrestrial Habitat	Public Knowledge & Behavior	Monitoring & Data Collection	Planning & Coordination	Urban Landscapes	Rural Landscapes	Shoreline & Riparian Areas	
12	Changes in timing, magnitude and delivery of water flowing through ditches and streams, impacting bank and channel stability and stressing fish and other aquatic life.	X				 Public Ditches  Lakes  Rivers & Streams  Wetlands 2018 Fish & Aquatic  Invertebrate Habitat Impairments	X		X	X	X			X								
13	Reduced quality of habitat in streams for fish and other aquatic life.			X		2018 Fish & Aquatic  Invertebrate Habitat Impairments							X									
14	Expanding development degrading shoreland and water quality.			X	X	 Lakes  Developed		X					X							X	X	

Buffalo Red River Watershed: One Watershed, One Plan

Issue No.	Issue Statement	Map				Map Legend Item(s)	Resource Concern															
		Surface Waters	Groundwater	Habitat & Recreation	Landuse		Agricultural Drainage Systems	Lakes	Rivers & Streams	Wetlands	Surface Runoff	Potable Water Quality	Groundwater Water Quantity	Aquatic Habitat	Terrestrial Habitat	Public Knowledge & Behavior	Monitoring & Data Collection	Planning & Coordination	Urban Landscapes	Rural Landscapes	Shoreline & Riparian Areas	
16	Aquatic Invasive Species (AIS) impacts on habitat, recreation, and economic development.			X	X	<ul style="list-style-type: none"> ● Aquatic Invasive Species Observations ● Public Structural Fishing Sites ● Public Water Access Sites Designated Infested Waters *See also: Landuse map		X	X	X					X							
17	Terrestrial invasive species impacts on areas with high quality vegetation.			X		<ul style="list-style-type: none"> ● Terrestrial Invasive Species Observations Sites of Biodiversity <ul style="list-style-type: none"> Below Moderate High Outstanding 										X						
18	Groundwater is at risk of being depleted because of overuse and loss of recharge due to pressures from agriculture, development, and industry.		X			<ul style="list-style-type: none"> Major Aquifers ● Groundwater Withdrawals (10K Gal/Day or 1 mil Gal/yr.) 								X								
19	Lack of resilience planning for extreme weather events.	N/A				N/A	X	X	X	X	X	X		X	X		X	X	X	X	X	X

Buffalo Red River Watershed: One Watershed, One Plan

Issue No.	Issue Statement	Map				Map Legend Item(s)	Resource Concern															
		Surface Waters	Groundwater	Habitat & Recreation	Landuse		Agricultural Drainage Systems	Lakes	Rivers & Streams	Wetlands	Surface Runoff	Potable Water Quality	Groundwater Water Quantity	Aquatic Habitat	Terrestrial Habitat	Public Knowledge & Behavior	Monitoring & Data Collection	Planning & Coordination	Urban Landscapes	Rural Landscapes	Shoreline & Riparian Areas	
20	Lack of resilience planning for the increased probability of prolonged drought.	N/A				N/A	X	X	X	X		X	X	X	X		X	X	X	X	X	
21	Lack of public awareness and understanding of water issues like drainage, erosion, salt application, chemical contaminants (e.g. fertilizers, pesticides, household waste, prescription drugs) and legacy contaminants (e.g. mercury & PCBs).	N/A				N/A	X	X	X	X		X	X	X		X			X	X	X	
22	Lack of sustainable and coordinated approach to planning and management of groundwater resources and their interconnection to surface waters.	N/A				N/A						X	X				X	X	X	X		
23	Lack of a coordinated approach to flood management and planning in accordance with Flood Damage Reduction principles.	N/A				N/A					X								X	X	X	X

Buffalo Red River Watershed: One Watershed, One Plan

Issue No.	Issue Statement	Map				Map Legend Item(s)	Resource Concern														
		Surface Waters	Groundwater	Habitat & Recreation	Landuse		Agricultural Drainage Systems	Lakes	Rivers & Streams	Wetlands	Surface Runoff	Potable Water Quality	Groundwater Water Quantity	Aquatic Habitat	Terrestrial Habitat	Public Knowledge & Behavior	Monitoring & Data Collection	Planning & Coordination	Urban Landscapes	Rural Landscapes	Shoreline & Riparian Areas
24	Lack of a coordinated approach among LGUs to administering statutory obligations.	N/A				N/A				X								X		X	
25	Lack of consistent and dedicated funding to implement programs of common good to make improvements and manage water resources effectively.	N/A				N/A												X	X	X	X
26	Lack of comprehensive monitoring and data collection including surface and groundwater quality, flow and stage monitoring, volunteer monitoring, and digital elevation data.	N/A				N/A										X					

Buffalo Red River Watershed: One Watershed, One Plan

Issue No.	Issue Statement	Map				Map Legend Item(s)	Resource Concern															
		Surface Waters	Groundwater	Habitat & Recreation	Landuse		Agricultural Drainage Systems	Lakes	Rivers & Streams	Wetlands	Surface Runoff	Potable Water Quality	Groundwater Water Quantity	Aquatic Habitat	Terrestrial Habitat	Public Knowledge & Behavior	Monitoring & Data Collection	Planning & Coordination	Urban Landscapes	Rural Landscapes	Shoreline & Riparian Areas	
27	The need to prioritize protection of surface water and groundwater drinking water supplies.	X		X		Wellhead Protection Areas Domestic Wells Drinking Water Supply Management Areas Water-Table Aquifer Contamination Vulnerability High Medium Low Unrated						X								X		
28	Decreased soil health and its impact on agricultural productivity, water quality and water-holding capacity.				X	Highly Erodible Soils	X	X	X	X	X										X	
29	Lack of emphasis on wild rice habitat enhancement, protection, and restoration for cultural, economic, and wildlife benefit.			X		Wild Rice Lakes Aquatic Invasive Species Observations		X	X	X			X								X	X
30	Lack of suitable recreational access to lakes, rivers, and streams.	X		X		Public Structural Fishing Sites Public Water Access Sites 2018 Impaired Lakes For Nutrients 2018 Impaired Streams		X	X								X					X