

APPENDIX D - FISH SPECIES LIST

Appendix D - 1. Fish species list by stream for Ecoregion 24; number of samples collected at each stream noted below the stream name (n = x); fish species listed phylogenetically and shaded by family.

Scientific Name	Common Name	Alamito Creek	Independence Creek	Pecos River	Rio Grande: Presidio	Rio Grande: Contrabando	Rio Grande: Johnson Ranch	Terlingua Creek
<i>Lepisosteidae</i> sp.	Gar Species				X			
<i>Campostoma ornatum</i>	Mexican Stoneroller	X						X
<i>Cyprinella lutrensis</i>	Red Shiner	X		X	X	X	X	X
<i>Cyprinella proserpina</i>	Proserpine Shiner		X	X				
<i>Cyprinella venusta</i>	Blacktail Shiner			X				
<i>Cyprinus carpio</i>	Common Carp		X	X		X		X
<i>Dionda argentosa</i>	Manantial Roundnose Minnow		X					
<i>Macrhybopsis aestivalis</i>	Speckled Chub				X	X	X	X
<i>Notropis amabilis</i>	Texas Shiner		X					
<i>Notropis braytoni</i>	Tamaulipas Shiner	X		X	X	X		X
<i>Notropis chihuahua</i>	Chihuahua Shiner	X						X
<i>Pimephales promelas</i>	Fathead Minnow							X
<i>Pimephales vigilax</i>	Bullhead Minnow			X	X			
<i>Rhinichthys cataractae</i>	Longnose Dace				X	X	X	
<i>Carpiodes carpio</i>	River Carpsucker	X			X	X	X	X
<i>Cycleptus elongatus</i>	Blue Sucker				X	X	X	
<i>Moxostoma congestum</i>	Gray Redhorse		X	X				
<i>Astyanax mexicanus</i>	Mexican Tetra	X	X	X	X	X		
<i>Ictalurus furcatus</i>	Blue Catfish						X	X
<i>Ictalurus lupus</i>	Headwater Catfish		X	X				
<i>Ictalurus punctatus</i>	Channel Catfish		X					
<i>Pylodictis olivaris</i>	Flathead Catfish		X	X		X	X	
<i>Menidia beryllina</i>	Inland Silverside			X				
<i>Fundulus grandis</i>	Gulf Killifish			X			X	
<i>Fundulus zebrinus</i>	Plains Killifish		X					X
<i>Lucania parva</i>	Rainwater Killifish		X					
<i>Gambusia affinis</i>	Western Mosquitofish	X	X	X	X			
<i>Gambusia geiseri</i>	Largespring Gambusia		X					
<i>Cyprinodon eximius</i>	Conchos Pupfish	X						
<i>Cyprinodon pecosensis x variegatus</i>	Pecos Pupfish Hybrid		X	X				
<i>Lepomis auritus</i>	Redbreast Sunfish		X	X				
<i>Lepomis cyanellus</i>	Green Sunfish	X						
<i>Lepomis macrochirus</i>	Bluegill			X				

Scientific Name	Common Name	Alamito Creek	Independence Creek	Pecos River	Rio Grande: Presidio	Rio Grande: Contrabando	Rio Grande: Johnson Ranch	Terlingua Creek
<i>Lepomis megalotis</i>	Longear Sunfish		X	X				
<i>Micropterus salmoides</i>	Largemouth Bass		X	X				
<i>Etheostoma grahami</i>	Rio Grande Darter		X	X				
<i>Herichthys cyanoguttatus</i>	Rio Grande Cichlid		X	X				
Species Richness		9	19	20	10	9	8	10
Total N Individuals		1,601	1,624	2,582	671	242	71	374
Number of Samples		n = 1	n = 2	n = 1	n = 1	n = 1	n = 1	n = 1

Appendix D - 2. Fish species list by stream for Ecoregions 25 and 26; number of samples collected at each stream noted below the stream name (n = x); fish species listed phylogenetically and shaded by family.

Scientific Name	Common Name	Bluff Creek	Buck Creek	Canadian River: US 385	Canadian River: SH 70	Chicken Creek	McClellan Creek	North Fork Wichita River	Saddlers Creek	Salt Fork Red River	White Deer Creek	Whitefish Creek	Wolf Creek
<i>Dorosoma cepedianum</i>	Gizzard Shad			X									
<i>Cyprinella lutrensis</i>	Red Shiner	X	X	X	X	X	X		X	X	X	X	X
<i>Cyprinus carpio</i>	Common Carp		X	X			X				X		X
<i>Hybognathus placitus</i>	Plains Minnow			X					X				
<i>Macrhybopsis tetranema</i>	Peppered Chub			X									
<i>Notemigonus crysoleucas</i>	Golden Shiner	X											
<i>Notropis bairdi</i>	Red River Shiner								X				
<i>Notropis girardi</i>	Arkansas River Shiner			X									
<i>Notropis stramineus</i>	Sand Shiner				X		X			X	X		X
<i>Phenacobius mirabilis</i>	Suckermouth Minnow												X
<i>Pimephales promelas</i>	Fathead Minnow	X				X	X						
<i>Pimephales vigilax</i>	Bullhead Minnow	X		X									
<i>Ameiurus melas</i>	Black Bullhead		X										
<i>Ameiurus natalis</i>	Yellow Bullhead		X			X	X				X		
<i>Ictalurus punctatus</i>	Channel Catfish			X									
<i>Fundulus zebrinus</i>	Plains Killifish		X	X		X	X	X	X	X		X	X
<i>Gambusia affinis</i>	Western Mosquitofish	X	X	X	X	X	X		X	X	X	X	X
<i>Cyprinodon rubrofluviatilis</i>	Red River Pupfish						X	X	X	X		X	
<i>Lepomis cyanellus</i>	Green Sunfish	X	X	X			X		X	X	X	X	X
<i>Lepomis gulosus</i>	Warmouth										X		
<i>Lepomis macrochirus</i>	Bluegill	X	X			X	X			X	X	X	X
<i>Lepomis megalotis</i>	Longear Sunfish	X	X				X				X		X
<i>Lepomis</i> sp.	Sunfish Species										X		
<i>Micropterus salmoides</i>	Largemouth Bass	X			X		X			X	X		X
Species Richness		9	9	11	4	6	12	2	7	8	11	6	10
Total N Individuals		404	193	303	142	342	315	278	235	248	1,035	438	142
Number of Samples		n = 2	n = 1	n = 1	n = 1	n = 1	n = 2	n = 1	n = 1	n = 1	n = 3	n = 1	n = 2

Appendix D - 3. Fish species list by stream for Ecoregions 27, 29, and 32; number of samples collected at each stream noted below the stream name (n = x); fish species listed phylogenetically and shaded by family.

Scientific Name	Common Name	Auds Creek	Bluff Creek	Clear Creek	Colony Creek	Cottonwood Creek	Cow Bayou	Cowhouse Creek	Deadman Creek	Deer Creek	Elm Creek	Geronimo Creek
<i>Lepisosteus oculatus</i>	Spotted Gar											
<i>Lepisosteus osseus</i>	Longnose Gar			X					X	X	X	
<i>Dorosoma cepedianum</i>	Gizzard Shad			X		X			X	X	X	
<i>Dorosoma petenense</i>	Threadfin Shad				X							
<i>Camptostoma anomalum</i>	Central Stoneroller		X	X	X	X	X	X		X		X
<i>Cyprinella lutrensis</i>	Red Shiner	X		X	X	X	X	X	X	X	X	X
<i>Cyprinella venusta</i>	Blacktail Shiner				X		X	X		X		
<i>Cyprinus carpio</i>	Common Carp								X		X	
<i>Hybognathus placitus</i>	Plains Minnow					X						
<i>Macrhybopsis hyostoma</i>	Shoal Chub						X					
<i>Notemigonus crysoleucas</i>	Golden Shiner	X					X					
<i>Notropis amabilis</i>	Texas Shiner											X
<i>Notropis atrocaudalis</i>	Blackspot Shiner	X										
<i>Notropis bairdi</i>	Red River Shiner											
<i>Notropis buchanani</i>	Ghost Shiner						X					
<i>Notropis stramineus</i>	Sand Shiner											X
<i>Notropis volucellus</i>	Mimic Shiner						X			X		X
<i>Phenacobius mirabilis</i>	Suckermouth Minnow	X										
<i>Pimephales promelas</i>	Fathead Minnow					X			X			
<i>Pimephales vigilax</i>	Bullhead Minnow	X		X	X	X	X	X	X	X	X	X
<i>Carpiodes carpio</i>	River Carpsucker			X			X		X		X	
<i>Ictiobus bubalus</i>	Smallmouth Buffalo									X		
<i>Minytrema melanops</i>	Spotted Sucker											
<i>Moxostoma congestum</i>	Gray Redhorse						X			X		X
<i>Astyanax mexicanus</i>	Mexican Tetra											X
<i>Ameiurus melas</i>	Black Bullhead	X										
<i>Ameiurus natalis</i>	Yellow Bullhead	X	X	X	X		X			X		X
<i>Ictalurus punctatus</i>	Channel Catfish	X		X	X	X	X	X	X	X	X	X
<i>Noturus gyrinus</i>	Tadpole Madtom						X					
<i>Noturus nocturnus</i>	Freckled Madtom			X								
<i>Pylodictis olivaris</i>	Flathead Catfish			X			X		X	X		X
<i>Menidia beryllina</i>	Inland Silverside										X	
<i>Fundulus notatus</i>	Blackstripe Topminnow			X	X		X					X

Scientific Name	Common Name	Auds Creek	Bluff Creek	Clear Creek	Colony Creek	Cottonwood Creek	Cow Bayou	Cowhouse Creek	Deadman Creek	Deer Creek	Elm Creek	Geronimo Creek
<i>Fundulus zebrinus</i>	Plains Killifish											
<i>Gambusia affinis</i>	Western Mosquitofish	X	X	X	X	X	X		X	X	X	X
<i>Morone chrysops</i>	White Bass											
<i>Lepomis auritus</i>	Redbreast Sunfish											X
<i>Lepomis cyanellus</i>	Green Sunfish	X	X	X	X	X	X	X	X	X	X	X
<i>Lepomis gulosus</i>	Warmouth	X				X	X		X			X
<i>Lepomis humilis</i>	Orangespotted Sunfish	X			X	X	X	X		X		X
<i>Lepomis macrochirus</i>	Bluegill	X	X	X	X	X	X	X	X	X	X	X
<i>Lepomis megalotis</i>	Longear Sunfish	X	X	X	X	X	X	X	X	X	X	X
<i>Lepomis microlophus</i>	Redear Sunfish											
<i>Lepomis miniatus</i>	Redspotted Sunfish	X										X
<i>Lepomis</i> sp. (hybrid)	Sunfish Hybrid				X							
<i>Lepomis</i> sp.	Sunfish Species			X								
<i>Micropterus punctulatus</i>	Spotted Bass						X	X		X		X
<i>Micropterus salmoides</i>	Largemouth Bass	X	X	X	X	X	X		X	X	X	X
<i>Micropterus treculii</i>	Guadalupe Bass											X
<i>Pomoxis annularis</i>	White Crappie			X					X		X	
<i>Etheostoma gracile</i>	Slough Darter						X					
<i>Etheostoma pulchellum</i>	Orangethroat Darter		X	X			X	X		X	X	X
<i>Percina carbonaria</i>	Texas Logperch											X
<i>Percina macrolepida</i>	Bigscale Logperch			X							X	
<i>Percina sciera</i>	Dusky Darter						X			X		
<i>Aplodinotus grunniens</i>	Freshwater Drum						X					
<i>Herichthys cyanoguttatus</i>	Rio Grande Cichlid											X
Species Richness		16	8	20	15	14	27	11	16	21	16	26
Total N Individuals		797	485	453	1,203	5,043	2,494	225	874	1,444	1,791	632
Number of Samples		n = 3	n = 2	n = 2	n = 2	n = 2	n = 3	n = 1	n = 2	n = 3	n = 2	n = 6

Appendix D - 3 CONT. Fish species list by stream for Ecoregions 27, 29, and 32; number of samples collected at each stream noted below the stream name (n = x); fish species listed phylogenetically and shaded by family.

Scientific Name	Common Name	Ioni Creek	Lelia Lake Creek	Neils Creek	Reese Creek	Rocky Creek	South Fork Rocky Creek	Steele Creek	Sweetwater Creek	Willis Creek	Wilson Creek
<i>Lepisosteus oculatus</i>	Spotted Gar				X					X	
<i>Lepisosteus osseus</i>	Longnose Gar										
<i>Dorosoma cepedianum</i>	Gizzard Shad									X	
<i>Dorosoma petenense</i>	Threadfin Shad	X									
<i>Camptostoma anomalum</i>	Central Stoneroller			X	X	X	X	X		X	X
<i>Cyprinella lutrensis</i>	Red Shiner		X	X	X	X			X	X	X
<i>Cyprinella venusta</i>	Blacktail Shiner	X		X	X	X	X	X	X	X	
<i>Cyprinus carpio</i>	Common Carp					X			X	X	
<i>Hybognathus placitus</i>	Plains Minnow										
<i>Macrhybopsis hyostoma</i>	Shoal Chub										
<i>Notemigonus crysoleucas</i>	Golden Shiner					X			X	X	
<i>Notropis amabilis</i>	Texas Shiner										
<i>Notropis atrocaudalis</i>	Blackspot Shiner										
<i>Notropis bairdi</i>	Red River Shiner								X		
<i>Notropis buchanani</i>	Ghost Shiner										
<i>Notropis stramineus</i>	Sand Shiner										X
<i>Notropis volucellus</i>	Mimic Shiner			X	X	X				X	
<i>Phenacobius mirabilis</i>	Suckermouth Minnow										
<i>Pimephales promelas</i>	Fathead Minnow	X	X					X			
<i>Pimephales vigilax</i>	Bullhead Minnow	X		X		X		X	X	X	X
<i>Carpionodes carpio</i>	River Carpsucker	X									X
<i>Ictiobus bubalus</i>	Smallmouth Buffalo						X				
<i>Minytrema melanops</i>	Spotted Sucker										X
<i>Moxostoma congestum</i>	Gray Redhorse	X				X	X			X	
<i>Astyanax mexicanus</i>	Mexican Tetra					X					
<i>Ameiurus melas</i>	Black Bullhead		X					X		X	
<i>Ameiurus natalis</i>	Yellow Bullhead		X	X		X	X	X		X	X
<i>Ictalurus punctatus</i>	Channel Catfish	X		X		X	X	X		X	X
<i>Noturus gyrinus</i>	Tadpole Madtom										X
<i>Noturus nocturnus</i>	Freckled Madtom										
<i>Pylodictis olivaris</i>	Flathead Catfish				X	X				X	
<i>Menidia beryllina</i>	Inland Silverside										
<i>Fundulus notatus</i>	Blackstripe Topminnow	X		X		X		X			X

Scientific Name	Common Name	Ioni Creek	Lelia Lake Creek	Neils Creek	Reese Creek	Rocky Creek	South Fork Rocky Creek	Steele Creek	Sweetwater Creek	Willis Creek	Wilson Creek
<i>Fundulus zebrinus</i>	Plains Killifish		X						X		
<i>Gambusia affinis</i>	Western Mosquitofish	X		X		X	X	X	X	X	X
<i>Morone chrysops</i>	White Bass									X	
<i>Lepomis auritus</i>	Redbreast Sunfish										
<i>Lepomis cyanellus</i>	Green Sunfish	X	X	X	X	X	X	X	X	X	X
<i>Lepomis gulosus</i>	Warmouth					X			X	X	
<i>Lepomis humilis</i>	Orangespotted Sunfish					X	X		X	X	X
<i>Lepomis macrochirus</i>	Bluegill	X		X	X	X	X	X	X	X	X
<i>Lepomis megalotis</i>	Longear Sunfish	X		X	X	X	X	X	X	X	X
<i>Lepomis microlophus</i>	Redear Sunfish			X		X	X	X		X	
<i>Lepomis miniatus</i>	Redspotted Sunfish										
<i>Lepomis</i> sp. (hybrid)	Sunfish Hybrid			X							
<i>Lepomis</i> sp.	Sunfish Species	X				X					
<i>Micropterus punctulatus</i>	Spotted Bass			X	X						
<i>Micropterus salmoides</i>	Largemouth Bass	X		X		X	X	X	X	X	X
<i>Micropterus treculii</i>	Guadalupe Bass					X	X				
<i>Pomoxis annularis</i>	White Crappie										
<i>Etheostoma gracile</i>	Slough Darter										
<i>Etheostoma pulchellum</i>	Orangethroat Darter			X	X	X	X	X		X	
<i>Percina carbonaria</i>	Texas Logperch										
<i>Percina macrolepida</i>	Bigscale Logperch										
<i>Percina sciera</i>	Dusky Darter					X				X	
<i>Aplodinotus grunniens</i>	Freshwater Drum										
<i>Herichthys cyanoguttatus</i>	Rio Grande Cichlid										
Species Richness		14	6	17	11	25	15	15	14	25	16
Total N Individuals		844	265	1,433	648	4,196	1,077	712	157	2,599	1,042
Number of Samples		n = 2	n = 1	n = 2	n = 2	n = 7	n = 4	n = 2	n = 2	n = 7	n = 5

Appendix D - 4. Fish species list by stream for Ecoregions 30; number of samples collected at each stream noted below the stream name (n = x); fish species listed phylogenetically and shaded by family.

Scientific Name	Common Name	Barton Creek	Brushy Creek	Bull Creek	Bull- head Creek	Carpers Creek	Colorado River	Cypress Creek	Devils River	Guadalupe River	James River
<i>Lepisosteus oculatus</i>	Spotted Gar										
<i>Lepisosteus osseus</i>	Longnose Gar						X				
<i>Lepisosteidae</i> sp.	Gar Species										
<i>Anguilla rostrata</i>	American Eel					X					
<i>Dorosoma cepedianum</i>	Gizzard Shad						X				X
<i>Dorosoma petenense</i>	Threadfin Shad						X				
<i>Campostoma anomalum</i>	Central Stoneroller	X	X	X	X		X	X		X	X
<i>Carassius auratus</i>	Goldfish						X				
<i>Cyprinella</i> sp. (hybrid)	Minnow Hybrid				X						
<i>Cyprinella lepida</i>	Plateau Shiner				X						
<i>Cyprinella lutrensis</i>	Red Shiner						X				X
<i>Cyprinella proserpina</i>	Proserpine Shiner								X		
<i>Cyprinella venusta</i>	Blacktail Shiner	X	X		X	X	X	X	X	X	X
<i>Cyprinus carpio</i>	Common Carp						X		X		X
<i>Dionda argentosa</i>	Manantial Roundnose Minnow								X		
<i>Dionda diaboli</i>	Devils River Minnow								X		
<i>Dionda flavipinnis</i>	Roundnose Minnow sp.					X					X
<i>Dionda texensis</i> *	Roundnose Minnow sp.				X						
<i>Dionda</i> sp. 3*	Colorado Roundnose Minnow										
<i>Macrhybopsis marconis</i>	Burrhead Chub										
<i>Notemigonus crysoleucas</i>	Golden Shiner						X				
<i>Notropis amabilis</i>	Texas Shiner				X	X		X	X	X	X
<i>Notropis buechanani</i>	Ghost Shiner									X	
<i>Notropis stramineus</i>	Sand Shiner							X	X	X	X
<i>Notropis texanus</i>	Weed Shiner										
<i>Notropis volucellus</i>	Mimic Shiner		X				X	X		X	X
<i>Pimephales promelas</i>	Fathead Minnow						X				
<i>Pimephales vigilax</i>	Bullhead Minnow	X					X			X	X
<i>Carpodacus carpio</i>	River Carpsucker						X				
<i>Ictiobus bubalus</i>	Smallmouth Buffalo						X				X
<i>Minytrema melanops</i>	Spotted Sucker										
<i>Moxostoma congestum</i>	Gray Redhorse	X				X	X	X	X		
<i>Astyanax mexicanus</i>	Mexican Tetra				X			X	X		
<i>Ameiurus melas</i>	Black Bullhead										
<i>Ameiurus natalis</i>	Yellow Bullhead		X	X	X		X	X			X

Scientific Name	Common Name	Barton Creek	Brushy Creek	Bull Creek	Bull- head Creek	Carpers Creek	Colorado River	Cypress Creek	Devils River	Guadalupe River	James River
<i>Ictalurus lupus</i>	Headwater Catfish								X		
<i>Ictalurus punctatus</i>	Channel Catfish	X			X	X	X	X		X	
<i>Pylodictis olivaris</i>	Flathead Catfish						X	X	X	X	
<i>Oncorhynchus mykiss</i>	Rainbow Trout										
<i>Aphredoderus sayanus</i>	Pirate Perch										
<i>Menidia beryllina</i>	Inland Silverside						X				
<i>Fundulus notatus</i>	Blackstripe Topminnow						X				
<i>Fundulus zebrinus</i>	Plains Killifish										X
<i>Gambusia affinis</i>	Western Mosquitofish	X	X		X	X	X	X	X	X	X
<i>Gambusia geiseri</i>	Largespring Gambusia										
<i>Gambusia</i> sp.	Gambusia Species								X		
<i>Cyprinodon pecosensis</i> x <i>variegatus</i>	Pecos Pupfish Hybrid										
<i>Morone chrysops</i>	White Bass						X				
<i>Lepomis auritus</i>	Redbreast Sunfish	X	X		X	X	X	X	X	X	
<i>Lepomis cyanellus</i>	Green Sunfish	X	X	X	X	X	X	X			X
<i>Lepomis gulosus</i>	Warmouth		X			X	X	X		X	X
<i>Lepomis humilis</i>	Orangespotted Sunfish						X	X		X	
<i>Lepomis macrochirus</i>	Bluegill	X	X	X		X	X	X		X	X
<i>Lepomis megalotis</i>	Longear Sunfish	X	X	X	X	X	X	X	X	X	X
<i>Lepomis microlophus</i>	Redear Sunfish	X	X					X			
<i>Lepomis miniatus</i>	Redspotted Sunfish		X			X		X			
<i>Lepomis</i> sp. (hybrid)	Sunfish Hybrid										
<i>Lepomis</i> sp.	Sunfish Species					X			X		
<i>Micropterus dolomieu</i>	Smallmouth Bass								X	X	
<i>Micropterus punctulatus</i>	Spotted Bass							X			
<i>Micropterus salmoides</i>	Largemouth Bass	X	X	X	X		X	X	X	X	
<i>Micropterus treculii</i>	Guadalupe Bass	X					X	X		X	
<i>Micropterus</i> sp.	Bass Species					X					
<i>Pomoxis annularis</i>	White Crappie						X				
<i>Pomoxis nigromaculatus</i>	Black Crappie						X	X			
<i>Etheostoma gracile</i>	Slough Darter										
<i>Etheostoma grahami</i>	Rio Grande Darter								X		
<i>Etheostoma lepidum</i>	Greenthroat Darter				X			X		X	X
<i>Etheostoma pulchellum</i>	Orangethroat Darter		X		X		X	X		X	X
<i>Percina carbonaria</i>	Texas Logperch						X			X	
<i>Percina sciera</i>	Dusky Darter										
<i>Aplodinotus grunniens</i>	Freshwater Drum						X				
<i>Herichthys cyanoguttatus</i>	Rio Grande Cichlid				X			X	X	X	X

Scientific Name	Common Name	Barton Creek	Brushy Creek	Bull Creek	Bull- head Creek	Carpers Creek	Colorado River	Cypress Creek	Devils River	Guadalupe River	James River
<i>Oreochromis aureus</i>	Blue Tilapia								X		
	Species Richness	13	14	6	17	15	35	26	21	22	21
	Total N Individuals	534	881	53	1,970	125	6,847	1,804	1,312	2,503	197
	Number of Samples	n = 2	n = 2	n = 1	n = 2	n = 1	n = 8	n = 8	n = 2	n = 6	n = 1

Appendix D - 4 CONT. Fish species list by stream for Ecoregions 30; number of samples collected at each stream noted below the stream name (n = x); fish species listed phylogenetically and shaded by family.

Scientific Name	Common Name	Johnson Creek	Little Barton Creek	Little Blanco River	Live Oak Creek	Llano River	Medina River	Montell Creek	North Prong Medina River	Nueces River
<i>Lepisosteus oculatus</i>	Spotted Gar					X				X
<i>Lepisosteus osseus</i>	Longnose Gar					X				
<i>Lepisosteidae</i> sp.	Gar Species									
<i>Anguilla rostrata</i>	American Eel									
<i>Dorosoma cepedianum</i>	Gizzard Shad					X				
<i>Dorosoma petenense</i>	Threadfin Shad									
<i>Campostoma anomalum</i>	Central Stoneroller	X	X	X		X	X	X	X	X
<i>Carassius auratus</i>	Goldfish									
<i>Cyprinella</i> sp. (hybrid)	Minnow Hybrid									
<i>Cyprinella lepida</i>	Plateau Shiner							X		X
<i>Cyprinella lutrensis</i>	Red Shiner			X		X			X	
<i>Cyprinella proserpina</i>	Proserpine Shiner				X					
<i>Cyprinella venusta</i>	Blacktail Shiner	X	X	X		X	X		X	
<i>Cyprinus carpio</i>	Common Carp					X				
<i>Dionda argentosa</i>	Manantial Roundnose Minnow				X					
<i>Dionda diaboli</i>	Devils River Minnow									
<i>Dionda flavipinnis</i>	Roundnose Minnow sp.					X				
<i>Dionda texensis</i> *	Roundnose Minnow sp.							X		X
<i>Dionda</i> sp. 3*	Colorado Roundnose Minnow									
<i>Macrhybopsis marconis</i>	Burrhead Chub					X				
<i>Notemigonus crysoleucas</i>	Golden Shiner									
<i>Notropis amabilis</i>	Texas Shiner	X				X	X	X	X	X
<i>Notropis buechanani</i>	Ghost Shiner									
<i>Notropis stramineus</i>	Sand Shiner			X		X	X			X
<i>Notropis texanus</i>	Weed Shiner									
<i>Notropis volucellus</i>	Mimic Shiner	X				X	X		X	
<i>Pimephales promelas</i>	Fathead Minnow									
<i>Pimephales vigilax</i>	Bullhead Minnow	X				X				
<i>Carpiodes carpio</i>	River Carpsucker					X				
<i>Ictiobus bubalus</i>	Smallmouth Buffalo									
<i>Minytrema melanops</i>	Spotted Sucker					X				
<i>Moxostoma congestum</i>	Gray Redhorse	X	X			X	X		X	
<i>Astyanax mexicanus</i>	Mexican Tetra				X				X	X
<i>Ameiurus melas</i>	Black Bullhead									

Scientific Name	Common Name	Johnson Creek	Little Barton Creek	Little Blanco River	Live Oak Creek	Llano River	Medina River	Montell Creek	North Prong Medina River	Nueces River
<i>Ameiurus natalis</i>	Yellow Bullhead		X					X	X	X
<i>Ictalurus lupus</i>	Headwater Catfish									
<i>Ictalurus punctatus</i>	Channel Catfish		X	X	X	X	X		X	X
<i>Pylodictis olivaris</i>	Flathead Catfish	X				X				X
<i>Oncorhynchus mykiss</i>	Rainbow Trout									
<i>Aphredoderus sayanus</i>	Pirate Perch			X						
<i>Menidia beryllina</i>	Inland Silverside									
<i>Fundulus notatus</i>	Blackstripe Topminnow					X				
<i>Fundulus zebrinus</i>	Plains Killifish				X					
<i>Gambusia affinis</i>	Western Mosquitofish	X	X	X	X	X	X	X	X	X
<i>Gambusia geiseri</i>	Largespring Gambusia					X				
<i>Gambusia</i> sp.	Gambusia Species									
<i>Cyprinodon pecosensis</i> x <i>variegatus</i>	Pecos Pupfish Hybrid				X					
<i>Morone chrysops</i>	White Bass									
<i>Lepomis auritus</i>	Redbreast Sunfish		X	X		X	X	X	X	
<i>Lepomis cyanellus</i>	Green Sunfish	X	X	X		X	X		X	
<i>Lepomis gulosus</i>	Warmouth	X		X		X	X			
<i>Lepomis humilis</i>	Orangespotted Sunfish									
<i>Lepomis macrochirus</i>	Bluegill	X	X	X		X	X	X	X	X
<i>Lepomis megalotis</i>	Longear Sunfish	X	X	X	X	X	X	X	X	X
<i>Lepomis microlophus</i>	Redear Sunfish	X				X		X	X	
<i>Lepomis miniatus</i>	Redspotted Sunfish	X								
<i>Lepomis</i> sp. (hybrid)	Sunfish Hybrid			X			X	X		
<i>Lepomis</i> sp.	Sunfish Species			X						
<i>Micropterus dolomieu</i>	Smallmouth Bass									
<i>Micropterus punctulatus</i>	Spotted Bass								X	
<i>Micropterus salmoides</i>	Largemouth Bass	X	X	X		X		X	X	X
<i>Micropterus treculii</i>	Guadalupe Bass	X	X			X	X		X	X
<i>Micropterus</i> sp.	Bass Species							X		X
<i>Pomoxis annularis</i>	White Crappie					X				
<i>Pomoxis nigromaculatus</i>	Black Crappie									
<i>Etheostoma gracile</i>	Slough Darter									
<i>Etheostoma grahami</i>	Rio Grande Darter									
<i>Etheostoma lepidum</i>	Greenthroat Darter					X			X	X
<i>Etheostoma pulchellum</i>	Orangethroat Darter	X				X		X	X	X
<i>Percina carbonaria</i>	Texas Logperch	X				X			X	
<i>Percina sciera</i>	Dusky Darter									
<i>Aplodinotus grunniens</i>	Freshwater Drum									

Scientific Name	Common Name	Johnson Creek	Little Barton Creek	Little Blanco River	Live Oak Creek	Llano River	Medina River	Montell Creek	North Prong Medina River	Nueces River
<i>Herichthys cyanoguttatus</i>	Rio Grande Cichlid				X	X	X	X	X	X
<i>Oreochromis aureus</i>	Blue Tilapia									
Species Richness		18	12	15	9	34	16	15	22	19
Total N Individuals		415	798	407	1,322	16,908	384	316	859	1,805
Number of Samples		n = 2	n = 2	n = 2	n = 1	n = 22	n = 1	n = 2	n = 7	n = 2

*Schonhuth et al. 2012; Dionda classification based on this publication

Appendix D - 4 CONT. Fish species list by stream for Ecoregions 30; number of samples collected at each stream noted below the stream name (n = x); fish species listed phylogenetically and shaded by family.

Scientific Name	Common Name	Oatmeal Creek	Onion Creek	Pedernales River	San Saba River	Slaughter Creek	South Concho River	South Llano River	Spring Creek	West Rocky Creek
<i>Lepisosteus oculatus</i>	Spotted Gar							X		
<i>Lepisosteus osseus</i>	Longnose Gar				X			X		
<i>Lepisosteidae sp. (unknown)</i>	Gar Species							X		
<i>Anguilla rostrata</i>	American Eel									
<i>Dorosoma cepedianum</i>	Gizzard Shad			X	X			X		
<i>Dorosoma petenense</i>	Threadfin Shad									
<i>Camptostoma anomalum</i>	Central Stoneroller	X	X	X	X	X	X	X	X	X
<i>Carassius auratus</i>	Goldfish									
<i>Cyprinella sp. (hybrid)</i>	Minnow Hybrid									
<i>Cyprinella lepida</i>	Plateau Shiner									
<i>Cyprinella lutrensis</i>	Red Shiner			X	X					
<i>Cyprinella proserpina</i>	Proserpine Shiner									
<i>Cyprinella venusta</i>	Blacktail Shiner	X	X	X	X	X	X	X	X	X
<i>Cyprinus carpio</i>	Common Carp			X	X			X		
<i>Dionda argentosa</i>	Manantial Roundnose Minnow									
<i>Dionda diaboli</i>	Devils River Minnow									
<i>Dionda flavipinnis</i>	Roundnose Minnow sp.							X		
<i>Dionda texensis*</i>	Roundnose Minnow sp.									
<i>Dionda sp. 3</i>	Colorado Roundnose Minnow						X			
<i>Macrhybopsis marconis</i>	Burrhead Chub									
<i>Notemigonus crysoleucas</i>	Golden Shiner		X							
<i>Notropis amabilis</i>	Texas Shiner			X	X	X	X	X	X	
<i>Notropis buechanani</i>	Ghost Shiner									
<i>Notropis stramineus</i>	Sand Shiner								X	
<i>Notropis texanus</i>	Weed Shiner					X				
<i>Notropis volucellus</i>	Mimic Shiner	X		X	X	X	X	X		
<i>Pimephales promelas</i>	Fathead Minnow									
<i>Pimephales vigilax</i>	Bullhead Minnow			X	X					
<i>Carpionodes carpio</i>	River Carpsucker			X	X					
<i>Ictiobus bubalus</i>	Smallmouth Buffalo				X					
<i>Minytrema melanops</i>	Spotted Sucker							X		
<i>Moxostoma congestum</i>	Gray Redhorse	X		X	X		X	X		X
<i>Astyanax mexicanus</i>	Mexican Tetra				X		X			
<i>Ameiurus melas</i>	Black Bullhead		X			X				
<i>Ameiurus natalis</i>	Yellow Bullhead	X	X	X		X	X	X		

Scientific Name	Common Name	Oatmeal Creek	Onion Creek	Pedernales River	San Saba River	Slaughter Creek	South Concho River	South Llano River	Spring Creek	West Rocky Creek
<i>Ictalurus lupus</i>	Headwater Catfish									
<i>Ictalurus punctatus</i>	Channel Catfish	X	X	X	X			X	X	X
<i>Pylodictis olivaris</i>	Flathead Catfish			X	X			X		
<i>Oncorhynchus mykiss</i>	Rainbow Trout							X		
<i>Aphredoderus sayanus</i>	Pirate Perch									
<i>Menidia beryllina</i>	Inland Silverside									
<i>Fundulus notatus</i>	Blackstripe Topminnow				X					
<i>Fundulus zebrinus</i>	Plains Killifish									
<i>Gambusia affinis</i>	Western Mosquitofish		X	X	X	X		X	X	X
<i>Gambusia geiseri</i>	Largespring Gambusia						X			
<i>Gambusia</i> sp.	Gambusia Species									
<i>Cyprinodon pecosensis</i> x <i>variegatus</i>	Pecos Pupfish Hybrid									
<i>Morone chrysops</i>	White Bass									
<i>Lepomis auritus</i>	Redbreast Sunfish		X	X	X		X	X	X	
<i>Lepomis cyanellus</i>	Green Sunfish	X	X	X	X	X	X	X		X
<i>Lepomis gulosus</i>	Warmouth			X	X	X		X	X	
<i>Lepomis humilis</i>	Orangespotted Sunfish				X			X		
<i>Lepomis macrochirus</i>	Bluegill	X	X	X	X	X	X	X	X	X
<i>Lepomis megalotis</i>	Longear Sunfish	X	X	X	X	X	X	X	X	X
<i>Lepomis microlophus</i>	Redear Sunfish		X	X	X	X	X	X		
<i>Lepomis miniatus</i>	Redspotted Sunfish					X	X			X
<i>Lepomis</i> sp. (hybrid)	Sunfish Hybrid		X			X				
<i>Lepomis</i> sp.	Sunfish Species		X			X	X			
<i>Micropterus dolomieu</i>	Smallmouth Bass									
<i>Micropterus punctulatus</i>	Spotted Bass									
<i>Micropterus salmoides</i>	Largemouth Bass	X	X	X	X	X	X	X	X	X
<i>Micropterus treculii</i>	Guadalupe Bass			X	X			X		
<i>Micropterus</i> sp.	Bass Species							X		
<i>Pomoxis annularis</i>	White Crappie									
<i>Pomoxis nigromaculatus</i>	Black Crappie				X					
<i>Etheostoma gracile</i>	Slough Darter					X				
<i>Etheostoma grahami</i>	Rio Grande Darter									
<i>Etheostoma lepidum</i>	Greenthroat Darter	X		X			X	X		
<i>Etheostoma pulchellum</i>	Orangethroat Darter	X		X	X		X	X		X
<i>Percina carbonaria</i>	Texas Logperch			X	X			X		
<i>Percina sciera</i>	Dusky Darter			X						
<i>Aplodinotus grunniens</i>	Freshwater Drum				X					
<i>Herichthys cyanoguttatus</i>	Rio Grande Cichlid							X	X	
<i>Oreochromis aureus</i>	Blue Tilapia									

Scientific Name	Common Name	Oatmeal Creek	Onion Creek	Pedernales River	San Saba River	Slaughter Creek	South Concho River	South Llano River	Spring Creek	West Rocky Creek
	Species Richness	12	15	26	30	18	19	31	12	11
	Total N Individuals	438	918	5,676	4,456	1,216	1,202	13,602	317	201
	Number of Samples	n = 2	n = 3	n = 9	n = 8	n = 6	n = 2	n = 19	n = 1	n = 1

*Schonhuth et al. 2012; Dionda classification based on this publication

Appendix D - 5. Fish species list by stream for Ecoregion 31; number of samples collected at each stream noted below the stream name (n = x); fish species listed phylogenetically and shaded by family.

Scientific Name	Common Name	Las Moras Creek	Metate Creek	Mud Creek	Nueces River	Pinto Creek	San Miguel Creek	Sycamore Creek
<i>Lepisosteus oculatus</i>	Spotted Gar				X	X	X	
<i>Lepisosteus osseus</i>	Longnose Gar				X			
<i>Dorosoma cepedianum</i>	Gizzard Shad						X	
<i>Campostoma anomalum</i>	Central Stoneroller				X			X
<i>Cyprinella lepida</i>	Plateau Shiner				X			
<i>Cyprinella lutrensis</i>	Red Shiner		X	X		X	X	X
<i>Cyprinella proserpina</i>	Proserpine Shiner							X
<i>Cyprinella venusta</i>	Blacktail Shiner	X			X	X		X
<i>Cyprinus carpio</i>	Common Carp	X		X				X
<i>Dionda argentosa</i>	Manantial Roundnose Minnow							X
<i>Dionda diaboli</i>	Devils River Minnow					X		
<i>Dionda texensis</i> *	Roundnose Minnow sp.				X			
<i>Notemigonus crysoleucas</i>	Golden Shiner						X	
<i>Notropis amabilis</i>	Texas Shiner				X	X		X
<i>Notropis stramineus</i>	Sand Shiner				X			X
<i>Notropis texanus</i>	Weed Shiner				X			
<i>Pimephales vigilax</i>	Bullhead Minnow		X				X	X
<i>Ictiobus bubalus</i>	Smallmouth Buffalo		X					
<i>Moxostoma congestum</i>	Gray Redhorse				X			
<i>Astyanax mexicanus</i>	Mexican Tetra	X		X	X	X		X
<i>Ameiurus melas</i>	Black Bullhead		X				X	
<i>Ameiurus natalis</i>	Yellow Bullhead	X			X			X
<i>Ictalurus lupus</i>	Headwater Catfish					X		X
<i>Ictalurus punctatus</i>	Channel Catfish	X		X	X	X		
<i>Noturus gyrinus</i>	Tadpole Madtom				X			
<i>Pylodictis olivaris</i>	Flathead Catfish				X			
<i>Gambusia affinis</i>	Western Mosquitofish	X	X	X	X	X	X	X
<i>Poecilia latipinna</i>	Sailfin Molly		X		X	X	X	X
<i>Lepomis auritus</i>	Redbreast Sunfish				X	X	X	X
<i>Lepomis cyanellus</i>	Green Sunfish	X		X	X	X	X	X
<i>Lepomis gulosus</i>	Warmouth		X		X	X	X	
<i>Lepomis humilis</i>	Orangespotted Sunfish						X	
<i>Lepomis macrochirus</i>	Bluegill		X	X	X	X	X	X

Scientific Name	Common Name	Las Moras Creek	Metate Creek	Mud Creek	Nueces River	Pinto Creek	San Miguel Creek	Sycamore Creek
<i>Lepomis megalotis</i>	Longear Sunfish	X		X	X	X	X	X
<i>Lepomis microlophus</i>	Redear Sunfish				X	X		
<i>Lepomis miniatus</i>	Redspotted Sunfish				X			
<i>Lepomis</i> sp. (hybrid)	Sunfish Hybrid						X	
<i>Lepomis</i> sp.	Sunfish Species		X		X	X	X	
<i>Micropterus salmoides</i>	Largemouth Bass	X		X	X	X	X	X
<i>Micropterus treculii</i>	Guadalupe Bass				X			
<i>Pomoxis annularis</i>	White Crappie						X	
<i>Etheostoma grahami</i>	Rio Grande Darter							X
<i>Etheostoma lepidum</i>	Greenthroat Darter				X			
<i>Herichthys cyanoguttatus</i>	Rio Grande Cichlid				X	X		X
<i>Oreochromis aureus</i>	Blue Tilapia				X			X
Species Richness		9	9	9	30	19	18	22
Total N Individuals		254	269	188	6,151	383	1,262	838
Number of Samples		n = 1	n = 1	n = 1	n = 10	n = 3	n = 2	n = 2

*Schonhuth et al. 2012; Dionda classification based on this publication

Appendix D - 6. Fish species list by stream for Ecoregions 33 and 35; number of samples collected at each stream noted below the stream name (n = x); fish species listed phylogenetically and shaded by family.

Scientific Name	Common Name	Beach Creek	Beech Creek	Big Cypress Creek	Black Bayou	Black Cypress Creek	Blair Creek	Catfish Creek	Cedar Creek	Cummins Creek	Cuthand Creek
<i>Ichthyomyzon castaneus</i>	Chestnut Lamprey										
<i>Ichthyomyzon gagei</i>	Southern Brook Lamprey										
<i>Atractosteus spatula</i>	Alligator Gar										
<i>Lepisosteus oculatus</i>	Spotted Gar			X				X	X	X	
<i>Lepisosteus osseus</i>	Longnose Gar										X
<i>Lepisosteidae</i> sp.	Gar Species										
<i>Amia calva</i>	Bowfin			X	X						
<i>Dorosoma cepedianum</i>	Gizzard Shad								X	X	
<i>Dorosoma petenense</i>	Threadfin Shad										
<i>Camptostoma anomalum</i>	Central Stoneroller									X	
<i>Cyprinella lutrensis</i>	Red Shiner							X		X	X
<i>Cyprinella venusta</i>	Blacktail Shiner		X	X			X	X	X	X	
<i>Cyprinus carpio</i>	Common Carp									X	
<i>Hybognathus hayi</i>	Cypress Minnow			X							
<i>Hybognathus nuchalis</i>	Mississippi Silvery Minnow								X		
<i>Hybopsis amnis</i>	Pallid Shiner			X						X	
<i>Luxilus chrysocephalus</i>	Striped Shiner					X					
<i>Lythrurus fumeus</i>	Ribbon Shiner	X	X	X		X	X	X	X	X	
<i>Lythrurus umbratilis</i>	Redfin Shiner	X	X			X	X				
<i>Macrhybopsis hyostoma</i>	Shoal Chub									X	
<i>Notemigonus crysoleucas</i>	Golden Shiner			X	X	X					
<i>Notropis amabilis</i>	Texas Shiner									X	
<i>Notropis atherinoides</i>	Emerald Shiner				X	X		X			
<i>Notropis atrocaudalis</i>	Blackspot Shiner				X		X	X	X		X
<i>Notropis buchanani</i>	Ghost Shiner										
<i>Notropis chalybaeus</i>	Ironcolor Shiner		X		X						
<i>Notropis sabinae</i>	Sabine Shiner										
<i>Notropis shumardi</i>	Silverband Shiner					X					
<i>Notropis stramineus</i>	Sand Shiner									X	
<i>Notropis texanus</i>	Weed Shiner	X		X		X		X		X	
<i>Notropis volucellus</i>	Mimic Shiner								X	X	
<i>Notropis</i> sp.	Minnow Species				X	X		X			
<i>Opsopoeodus emiliae</i>	Pugnose Minnow		X	X		X	X	X		X	
<i>Phenacobius mirabilis</i>	Suckermouth Minnow									X	

Scientific Name	Common Name	Beach Creek	Beech Creek	Big Cypress Creek	Black Bayou	Black Cypress Creek	Blair Creek	Catfish Creek	Cedar Creek	Cummins Creek	Cuthand Creek
<i>Pimephales promelas</i>	Fathead Minnow										
<i>Pimephales vigilax</i>	Bullhead Minnow			X	X	X		X	X	X	X
<i>Carpionodes carpio</i>	River Carpsucker									X	
<i>Cycleptus elongatus</i>	Blue Sucker									X	
<i>Erimyzon claviformis</i>	Western Creek Chubsucker	X			X	X					
<i>Erimyzon sucetta</i>	Lake Chubsucker							X			
<i>Ictiobus bubalus</i>	Smallmouth Buffalo							X			
<i>Minytrema melanops</i>	Spotted Sucker	X	X	X	X	X		X		X	
<i>Moxostoma congestum</i>	Gray Redhorse									X	
<i>Moxostoma poecilurum</i>	Blacktail Redhorse				X						
<i>Ameiurus melas</i>	Black Bullhead				X				X		
<i>Ameiurus natalis</i>	Yellow Bullhead	X	X	X	X	X	X	X	X	X	X
<i>Ictalurus furcatus</i>	Blue Catfish										
<i>Ictalurus punctatus</i>	Channel Catfish							X		X	X
<i>Noturus gyrinus</i>	Tadpole Madtom		X	X		X				X	
<i>Noturus nocturnus</i>	Freckled Madtom		X					X			X
<i>Pylodictis olivaris</i>	Flathead Catfish							X		X	X
<i>Esox americanus vermiculatus</i>	Grass Pickerel	X	X	X	X	X	X	X			X
<i>Esox niger</i>	Chain Pickerel										
<i>Aphredoderus sayanus</i>	Pirate Perch	X	X	X	X	X	X	X		X	
<i>Agonostomus monticola</i>	Mountain Mullet										
<i>Mugil cephalus</i>	Striped Mullet										
<i>Labidesthes sicculus</i>	Brook Silverside		X	X	X	X		X			X
<i>Fundulus chrysotus</i>	Golden Topminnow				X						
<i>Fundulus notatus</i>	Blackstripe Topminnow	X	X	X	X	X	X	X	X	X	X
<i>Fundulus olivaceus</i>	Blackspotted Topminnow		X	X	X			X			
<i>Gambusia affinis</i>	Western Mosquitofish	X	X	X	X	X	X	X	X	X	X
<i>Poecilia latipinna</i>	Sailfin Molly									X	
<i>Centrarchus macropterus</i>	Flier	X		X	X	X		X			
<i>Lepomis auritus</i>	Redbreast Sunfish									X	
<i>Lepomis cyanellus</i>	Green Sunfish		X	X	X	X	X	X	X	X	X
<i>Lepomis gulosus</i>	Warmouth	X	X	X	X	X	X	X	X	X	
<i>Lepomis humilis</i>	Orangespotted Sunfish								X	X	
<i>Lepomis macrochirus</i>	Bluegill	X	X	X	X	X	X	X	X	X	X
<i>Lepomis marginatus</i>	Dollar Sunfish		X	X	X			X			
<i>Lepomis megalotis</i>	Longear Sunfish	X	X	X	X	X	X	X	X	X	X
<i>Lepomis microlophus</i>	Redear Sunfish			X	X		X	X		X	
<i>Lepomis miniatus</i>	Redspotted Sunfish	X	X	X	X	X	X	X		X	X

Scientific Name	Common Name	Beach Creek	Beech Creek	Big Cypress Creek	Black Bayou	Black Cypress Creek	Blair Creek	Catfish Creek	Cedar Creek	Cummins Creek	Cuthand Creek
<i>Lepomis symmetricus</i>	Bantam Sunfish			X							
<i>Lepomis</i> sp. (hybrid)	Sunfish Hybrid										
<i>Lepomis</i> sp.	Sunfish Species		X		X			X			
<i>Micropterus dolomieu</i>	Smallmouth Bass										
<i>Micropterus punctulatus</i>	Spotted Bass	X		X	X	X	X	X	X	X	
<i>Micropterus salmoides</i>	Largemouth Bass		X	X	X	X	X	X	X	X	
<i>Micropterus treculii</i>	Guadalupe Bass									X	
<i>Micropterus</i> sp.	Bass Species				X			X			
<i>Pomoxis annularis</i>	White Crappie			X				X	X	X	
<i>Pomoxis nigromaculatus</i>	Black Crappie			X				X		X	
<i>Ammocrypta vivax</i>	Scaly Sand Darter										
<i>Etheostoma artesiae</i>	Redspot Darter										
<i>Etheostoma asprigene</i>	Mud Darter			X							
<i>Etheostoma chlorosoma</i>	Bluntnose Darter	X	X	X		X	X	X	X	X	
<i>Etheostoma fusiforme</i>	Swamp Darter										
<i>Etheostoma gracile</i>	Slough Darter	X	X	X	X	X	X	X		X	
<i>Etheostoma histrio</i>	Harlequin Darter										
<i>Etheostoma parvipinne</i>	Goldstripe Darter						X				
<i>Etheostoma proeliare</i>	Cypress Darter	X	X			X	X				
<i>Etheostoma radiosum</i>	Orangebelly Darter										
<i>Etheostoma whipplei</i>	Redfin Darter					X					
<i>Etheostoma</i> sp.	Darter Species										
<i>Percina carbonaria</i>	Texas Logperch									X	X
<i>Percina macrolepida</i>	Bigscale Logperch						X				
<i>Percina maculata</i>	Blackside Darter										
<i>Percina sciera</i>	Dusky Darter		X			X		X	X	X	
<i>Aplodinotus grunniens</i>	Freshwater Drum										
<i>Elassoma zonatum</i>	Banded Pygmy Sunfish	X	X	X	X						
<i>Herichthys cyanoguttatus</i>	Rio Grande Cichlid									X	
Species Richness		20	28	36	33	32	23	40	22	46	17
Total N Individuals		248	339	1,367	713	484	429	1,264	325	11,235	433
Number of Samples		n = 2	n = 3	n = 3	n = 6	n = 3	n = 2	n = 6	n = 2	n = 15	n = 2

Appendix D - 6 CONT. Fish species list by stream for Ecoregions 33 and 35; number of samples collected at each stream noted below the stream name (n = x); fish species listed phylogenetically and shaded by family.

Scientific Name	Common Name	Davidson Creek	East Fork San Jacinto River	Frazier Creek	Irons Bayou	James Bayou	Kickapoo Creek	Lake Creek	Little Cypress Creek	Little Mustang Creek	Little Pine Island Bayou
<i>Ichthyomyzon castaneus</i>	Chestnut Lamprey		X								
<i>Ichthyomyzon gagei</i>	Southern Brook Lamprey		X								
<i>Atractosteus spatula</i>	Alligator Gar							X			
<i>Lepisosteus oculatus</i>	Spotted Gar	X			X	X		X	X		
<i>Lepisosteus osseus</i>	Longnose Gar										
<i>Lepisosteidae</i> sp.	Gar Species										
<i>Amia calva</i>	Bowfin					X					
<i>Dorosoma cepedianum</i>	Gizzard Shad					X	X	X			
<i>Dorosoma petenense</i>	Threadfin Shad										
<i>Campostoma anomalum</i>	Central Stoneroller										
<i>Cyprinella lutrensis</i>	Red Shiner				X		X	X		X	
<i>Cyprinella venusta</i>	Blacktail Shiner		X	X	X			X	X		X
<i>Cyprinus carpio</i>	Common Carp	X									
<i>Hybognathus hayi</i>	Cypress Minnow										
<i>Hybognathus nuchalis</i>	Mississippi Silvery Minnow									X	
<i>Hybopsis amnis</i>	Pallid Shiner								X		
<i>Luxilus chrysocephalus</i>	Striped Shiner			X		X			X		
<i>Lythrurus fumeus</i>	Ribbon Shiner	X	X	X	X	X		X	X		X
<i>Lythrurus umbratilis</i>	Redfin Shiner		X	X		X		X	X		
<i>Macrhybopsis hyostoma</i>	Shoal Chub										
<i>Notemigonus crysoleucas</i>	Golden Shiner	X		X		X	X		X	X	X
<i>Notropis amabilis</i>	Texas Shiner										
<i>Notropis atherinoides</i>	Emerald Shiner					X		X			X
<i>Notropis atrocaudalis</i>	Blackspot Shiner					X	X			X	
<i>Notropis buchanani</i>	Ghost Shiner										
<i>Notropis chalybaeus</i>	Ironcolor Shiner					X					
<i>Notropis sabinae</i>	Sabine Shiner		X					X			
<i>Notropis shumardi</i>	Silverband Shiner										
<i>Notropis stramineus</i>	Sand Shiner										
<i>Notropis texanus</i>	Weed Shiner			X	X	X			X		
<i>Notropis volucellus</i>	Mimic Shiner		X					X			
<i>Notropis</i> sp.	Minnow Species										
<i>Opsopoeodus emiliae</i>	Pugnose Minnow	X	X	X	X	X			X	X	X

Scientific Name	Common Name	Davidson Creek	East Fork San Jacinto River	Frazier Creek	Irons Bayou	James Bayou	Kickapoo Creek	Lake Creek	Little Cypress Creek	Little Mustang Creek	Little Pine Island Bayou
<i>Phenacobius mirabilis</i>	Suckermouth Minnow										
<i>Pimephales promelas</i>	Fathead Minnow										
<i>Pimephales vigilax</i>	Bullhead Minnow		X	X	X	X	X	X	X	X	X
<i>Carpionodes carpio</i>	River Carpsucker							X			
<i>Cycleptus elongatus</i>	Blue Sucker										
<i>Erimyzon claviformis</i>	Western Creek Chubsucker			X		X					
<i>Erimyzon sucetta</i>	Lake Chubsucker					X					
<i>Ictiobus bubalus</i>	Smallmouth Buffalo									X	
<i>Minytrema melanops</i>	Spotted Sucker		X	X	X	X			X		
<i>Moxostoma congestum</i>	Gray Redhorse										
<i>Moxostoma poecilurum</i>	Blacktail Redhorse		X					X			
<i>Ameiurus melas</i>	Black Bullhead	X		X		X					
<i>Ameiurus natalis</i>	Yellow Bullhead	X	X	X	X	X			X	X	X
<i>Ictalurus furcatus</i>	Blue Catfish										
<i>Ictalurus punctatus</i>	Channel Catfish		X			X		X	X		
<i>Noturus gyrinus</i>	Tadpole Madtom		X	X	X	X			X	X	X
<i>Noturus nocturnus</i>	Freckled Madtom							X	X	X	
<i>Pylodictis olivaris</i>	Flathead Catfish							X	X		
<i>Esox americanus vermiculatus</i>	Grass Pickerel		X	X		X	X		X		X
<i>Esox niger</i>	Chain Pickerel					X					
<i>Aphredoderus sayanus</i>	Pirate Perch	X	X	X	X	X		X	X	X	X
<i>Agonostomus monticola</i>	Mountain Mullet										
<i>Mugil cephalus</i>	Striped Mullet										
<i>Labidesthes sicculus</i>	Brook Silverside			X	X	X		X	X		
<i>Fundulus chrysotus</i>	Golden Topminnow					X			X		
<i>Fundulus notatus</i>	Blackstripe Topminnow	X	X	X		X	X	X	X	X	X
<i>Fundulus olivaceus</i>	Blackspotted Topminnow				X						
<i>Gambusia affinis</i>	Western Mosquitofish	X	X	X	X	X	X	X	X	X	X
<i>Poecilia latipinna</i>	Sailfin Molly										
<i>Centrarchus macropterus</i>	Flier			X		X			X		
<i>Lepomis auritus</i>	Redbreast Sunfish										
<i>Lepomis cyanellus</i>	Green Sunfish	X	X	X	X	X	X	X	X	X	
<i>Lepomis gulosus</i>	Warmouth	X	X	X	X	X	X	X	X	X	X
<i>Lepomis humilis</i>	Orangespotted Sunfish					X	X				
<i>Lepomis macrochirus</i>	Bluegill	X	X	X	X	X	X	X	X	X	X
<i>Lepomis marginatus</i>	Dollar Sunfish			X		X					
<i>Lepomis megalotis</i>	Longear Sunfish	X	X	X	X	X	X	X	X	X	X

Scientific Name	Common Name	Davidson Creek	East Fork San Jacinto River	Frazier Creek	Irons Bayou	James Bayou	Kickapoo Creek	Lake Creek	Little Cypress Creek	Little Mustang Creek	Little Pine Island Bayou
<i>Lepomis microlophus</i>	Redear Sunfish	X		X	X	X	X	X	X	X	
<i>Lepomis miniatus</i>	Redspotted Sunfish		X	X	X	X	X	X	X		X
<i>Lepomis symmetricus</i>	Bantam Sunfish					X				X	
<i>Lepomis</i> sp. (hybrid)	Sunfish Hybrid					X					
<i>Lepomis</i> sp.	Sunfish Species			X	X			X			
<i>Micropterus dolomieu</i>	Smallmouth Bass										
<i>Micropterus punctulatus</i>	Spotted Bass		X	X	X	X		X	X		
<i>Micropterus salmoides</i>	Largemouth Bass	X	X	X	X	X	X	X	X	X	X
<i>Micropterus treculii</i>	Guadalupe Bass										
<i>Micropterus</i> sp.	Bass Species										
<i>Pomoxis annularis</i>	White Crappie	X		X		X				X	
<i>Pomoxis nigromaculatus</i>	Black Crappie		X			X			X	X	
<i>Ammocrypta vivax</i>	Scaly Sand Darter		X					X			
<i>Etheostoma artesiae</i>	Redspot Darter								X		
<i>Etheostoma asprigene</i>	Mud Darter								X		
<i>Etheostoma chlorosoma</i>	Bluntnose Darter	X	X	X	X	X		X	X	X	X
<i>Etheostoma fusiforme</i>	Swamp Darter								X		
<i>Etheostoma gracile</i>	Slough Darter	X		X	X	X		X	X	X	X
<i>Etheostoma histrio</i>	Harlequin Darter								X		
<i>Etheostoma parvipinne</i>	Goldstripe Darter								X		
<i>Etheostoma proeliare</i>	Cypress Darter			X		X			X		X
<i>Etheostoma radiosum</i>	Orangebelly Darter				X						
<i>Etheostoma whipplei</i>	Redfin Darter								X		
<i>Etheostoma</i> sp.	Darter Species										
<i>Percina carbonaria</i>	Texas Logperch			X			X				
<i>Percina macrolepida</i>	Bigscale Logperch		X			X		X	X		
<i>Percina maculata</i>	Blackside Darter			X					X		
<i>Percina sciera</i>	Dusky Darter		X	X	X	X		X	X		X
<i>Aplodinotus grunniens</i>	Freshwater Drum		X			X		X			
<i>Elassoma zonatum</i>	Banded Pygmy Sunfish			X		X		X			
<i>Herichthys cyanoguttatus</i>	Rio Grande Cichlid										
Species Richness		19	31	37	27	49	17	36	44	24	21
Total N Individuals		1,535	1,507	1,081	343	5,029	216	3,692	1,560	490	349
Number of Samples		n = 4	n = 4	n = 4	n = 2	n = 17	n = 2	n = 7	n = 4	n = 3	n = 2

Appendix D - 6 CONT. Fish species list by stream for Ecoregions 33 and 35; number of samples collected at each stream noted below the stream name (n = x); fish species listed phylogenetically and shaded by family.

Scientific Name	Common Name	Lower Keechi Creek	Middle Yegua Creek	Mill Creek	Peach Creek	Piney Creek	Ponds Creek	San Pedro Creek	Smackover Creek	West Fork San Jacinto River	Wheelock Creek	White Oak Creek
<i>Ichthyomyzon castaneus</i>	Chestnut Lamprey				X							
<i>Ichthyomyzon gagei</i>	Southern Brook Lamprey				X							
<i>Atractosteus spatula</i>	Alligator Gar											
<i>Lepisosteus oculatus</i>	Spotted Gar		X	X	X							
<i>Lepisosteus osseus</i>	Longnose Gar		X							X		
<i>Lepisosteidae</i> sp.	Gar Species	X										
<i>Amia calva</i>	Bowfin			X								
<i>Dorosoma cepedianum</i>	Gizzard Shad	X	X							X		
<i>Dorosoma petenense</i>	Threadfin Shad			X								
<i>Campostoma anomalum</i>	Central Stoneroller											
<i>Cyprinella lutrensis</i>	Red Shiner	X	X	X	X			X		X		
<i>Cyprinella venusta</i>	Blacktail Shiner	X	X	X	X	X	X	X		X	X	X
<i>Cyprinus carpio</i>	Common Carp	X	X	X						X		
<i>Hybognathus hayi</i>	Cypress Minnow											
<i>Hybognathus nuchalis</i>	Mississippi Silvery Minnow			X		X		X				X
<i>Hybopsis amnis</i>	Pallid Shiner											
<i>Luxilus chrysocephalus</i>	Striped Shiner											
<i>Lythrurus fumeus</i>	Ribbon Shiner	X	X	X	X	X	X	X		X	X	X
<i>Lythrurus umbratilis</i>	Redfin Shiner				X	X				X		
<i>Macrhybopsis hyostoma</i>	Shoal Chub			X								
<i>Notemigonus crysoleucas</i>	Golden Shiner		X		X	X			X			
<i>Notropis amabilis</i>	Texas Shiner			X								
<i>Notropis atherinoides</i>	Emerald Shiner				X					X		
<i>Notropis atrocaudalis</i>	Blackspot Shiner			X	X	X	X		X		X	
<i>Notropis buchanani</i>	Ghost Shiner			X								
<i>Notropis chalybaeus</i>	Ironcolor Shiner											
<i>Notropis sabinae</i>	Sabine Shiner				X					X		
<i>Notropis shumardi</i>	Silverband Shiner		X									
<i>Notropis stramineus</i>	Sand Shiner											
<i>Notropis texanus</i>	Weed Shiner			X	X	X		X			X	X
<i>Notropis volucellus</i>	Mimic Shiner		X	X	X					X		X
<i>Notropis</i> sp.	Minnow Species			X	X		X					
<i>Opsopoeodus emiliae</i>	Pugnose Minnow		X	X	X							

Scientific Name	Common Name	Lower Keechi Creek	Middle Yegua Creek	Mill Creek	Peach Creek	Piney Creek	Ponds Creek	San Pedro Creek	Smackover Creek	West Fork San Jacinto River	Wheelock Creek	White Oak Creek
<i>Phenacobius mirabilis</i>	Suckermouth Minnow											
<i>Pimephales promelas</i>	Fathead Minnow		X	X	X					X		
<i>Pimephales vigilax</i>	Bullhead Minnow	X	X	X	X	X		X		X	X	
<i>Carpionodes carpio</i>	River Carpsucker			X								
<i>Cycleptus elongatus</i>	Blue Sucker											
<i>Erimyzon claviformis</i>	Western Creek Chubsucker				X	X						
<i>Erimyzon sucetta</i>	Lake Chubsucker										X	
<i>Ictiobus bubalus</i>	Smallmouth Buffalo		X									
<i>Minytrema melanops</i>	Spotted Sucker			X	X	X					X	
<i>Moxostoma congestum</i>	Gray Redhorse			X								
<i>Moxostoma poecilurum</i>	Blacktail Redhorse	X		X	X			X		X		
<i>Ameiurus melas</i>	Black Bullhead			X	X	X	X			X		
<i>Ameiurus natalis</i>	Yellow Bullhead			X	X	X	X	X	X	X	X	X
<i>Ictalurus furcatus</i>	Blue Catfish				X	X						
<i>Ictalurus punctatus</i>	Channel Catfish		X	X	X					X		
<i>Noturus gyrinus</i>	Tadpole Madtom		X	X	X		X			X		
<i>Noturus nocturnus</i>	Freckled Madtom	X		X	X			X		X	X	
<i>Pylodictis olivaris</i>	Flathead Catfish		X	X	X					X		
<i>Esox americanus vermiculatus</i>	Grass Pickerel	X				X	X		X			
<i>Esox niger</i>	Chain Pickerel											
<i>Aphredoderus sayanus</i>	Pirate Perch	X	X	X	X	X	X		X	X		X
<i>Agonostomus monticola</i>	Mountain Mullet			X								
<i>Mugil cephalus</i>	Striped Mullet			X								
<i>Labidesthes sicculus</i>	Brook Silverside			X	X					X		
<i>Fundulus chrysotus</i>	Golden Topminnow											
<i>Fundulus notatus</i>	Blackstripe Topminnow	X	X	X	X	X	X	X		X	X	
<i>Fundulus olivaceus</i>	Blackspotted Topminnow			X			X				X	X
<i>Gambusia affinis</i>	Western Mosquitofish	X	X	X	X	X	X	X	X	X		X
<i>Poecilia latipinna</i>	Sailfin Molly											
<i>Centrarchus macropterus</i>	Flier					X						
<i>Lepomis auritus</i>	Redbreast Sunfish			X		X						
<i>Lepomis cyanellus</i>	Green Sunfish	X	X	X	X	X	X		X		X	
<i>Lepomis gulosus</i>	Warmouth	X		X	X	X	X	X	X	X		
<i>Lepomis humilis</i>	Orangespotted Sunfish			X					X			
<i>Lepomis macrochirus</i>	Bluegill	X	X	X	X	X	X	X	X	X	X	X
<i>Lepomis marginatus</i>	Dollar Sunfish					X						
<i>Lepomis megalotis</i>	Longear Sunfish	X	X	X	X	X	X	X	X	X	X	X

Scientific Name	Common Name	Lower Keechi Creek	Middle Yegua Creek	Mill Creek	Peach Creek	Piney Creek	Ponds Creek	San Pedro Creek	Smackover Creek	West Fork San Jacinto River	Wheelock Creek	White Oak Creek
<i>Lepomis microlophus</i>	Redear Sunfish			X	X		X		X	X	X	X
<i>Lepomis miniatus</i>	Redspotted Sunfish	X		X	X	X				X	X	
<i>Lepomis symmetricus</i>	Bantam Sunfish			X	X							
<i>Lepomis</i> sp. (hybrid)	Sunfish Hybrid			X	X					X		
<i>Lepomis</i> sp.	Sunfish Species			X		X	X					
<i>Micropterus dolomieu</i>	Smallmouth Bass			X								
<i>Micropterus punctulatus</i>	Spotted Bass	X		X	X			X		X		X
<i>Micropterus salmoides</i>	Largemouth Bass	X		X	X	X	X		X	X	X	X
<i>Micropterus treculii</i>	Guadalupe Bass											
<i>Micropterus</i> sp.	Bass Species											
<i>Pomoxis annularis</i>	White Crappie			X					X	X		
<i>Pomoxis nigromaculatus</i>	Black Crappie			X								
<i>Ammocrypta vivax</i>	Scaly Sand Darter				X			X		X		X
<i>Etheostoma artesiae</i>	Redspot Darter											
<i>Etheostoma asprigene</i>	Mud Darter											
<i>Etheostoma chlorosoma</i>	Bluntnose Darter			X	X	X		X		X	X	X
<i>Etheostoma fusiforme</i>	Swamp Darter											
<i>Etheostoma gracile</i>	Slough Darter	X	X	X	X	X	X	X				X
<i>Etheostoma histrio</i>	Harlequin Darter											
<i>Etheostoma parvipinne</i>	Goldstripe Darter										X	X
<i>Etheostoma proeliare</i>	Cypress Darter				X					X		
<i>Etheostoma radiosum</i>	Orangebelly Darter											
<i>Etheostoma whipplei</i>	Redfin Darter											
<i>Etheostoma</i> sp.	Darter Species	X		X			X					
<i>Percina carbonaria</i>	Texas Logperch											
<i>Percina macrolepida</i>	Bigscale Logperch			X								
<i>Percina maculata</i>	Blackside Darter											
<i>Percina sciera</i>	Dusky Darter	X	X	X	X	X		X	X	X	X	X
<i>Aplodinotus grunniens</i>	Freshwater Drum				X							
<i>Elassoma zonatum</i>	Banded Pygmy Sunfish				X		X			X		X
<i>Herichthys cyanoguttatus</i>	Rio Grande Cichlid											
Species Richness		23	25	56	48	30	22	19	15	37	20	20
Total N Individuals		262	627	11,725	7,612	393	1,604	123	237	1,642	377	157
Number of Samples		n = 2	n = 2	n = 33	n = 27	n = 3	n = 3	n = 1	n = 2	n = 4	n = 2	n = 1

Appendix D - 7. Fish species list by stream for Ecoregion 34; number of samples collected at each stream noted below the stream name (n = x); fish species listed phylogenetically and shaded by family.

Scientific Name	Common Name	Arenosa Creek	Big Creek	Garcitas Creek	Placedo Creek	San Bernard River	West Bernard Creek	West Carancahua Creek	West Mustang Creek
<i>Lepisosteus oculatus</i>	Spotted Gar	X	X	X	X	X	X	X	X
<i>Lepisosteus osseus</i>	Longnose Gar			X			X		X
<i>Anguilla rostrata</i>	American Eel	X			X		X	X	
<i>Dorosoma cepedianum</i>	Gizzard Shad		X		X		X	X	X
<i>Dorosoma petenense</i>	Threadfin Shad		X						
<i>Cyprinella lutrensis</i>	Red Shiner	X	X	X	X	X	X	X	X
<i>Cyprinella venusta</i>	Blacktail Shiner		X	X		X	X	X	X
<i>Cyprinus carpio</i>	Common Carp	X	X				X	X	
<i>Hybopsis amnis</i>	Pallid Shiner		X			X			
<i>Luxilus chrysocephalus</i>	Striped Shiner						X		
<i>Lythrurus fumeus</i>	Ribbon Shiner		X			X			
<i>Lythrurus umbratilis</i>	Redfin Shiner		X			X			X
<i>Macrhybopsis hyostoma</i>	Shoal Chub		X						
<i>Macrhybopsis marconis</i>	Burrhead Chub			X					
<i>Notemigonus crysoleucas</i>	Golden Shiner	X		X					
<i>Notropis atherinoides</i>	Emerald Shiner		X						
<i>Notropis atrocaudalis</i>	Blackspot Shiner		X						
<i>Notropis buchani</i>	Ghost Shiner		X					X	
<i>Notropis shumardi</i>	Silverband Shiner		X				X		
<i>Notropis texanus</i>	Weed Shiner	X		X					
<i>Notropis volucellus</i>	Mimic Shiner		X			X	X	X	X
<i>Opsopoeodus emiliae</i>	Pugnose Minnow	X	X				X	X	X
<i>Pimephales vigilax</i>	Bullhead Minnow		X			X	X	X	X
<i>Carpionodes carpio</i>	River Carpsucker							X	
<i>Ictiobus bubalus</i>	Smallmouth Buffalo	X		X			X		
<i>Ameiurus natalis</i>	Yellow Bullhead	X	X	X	X			X	X
<i>Ictalurus furcatus</i>	Blue Catfish		X					X	X
<i>Ictalurus punctatus</i>	Channel Catfish	X	X	X	X	X	X	X	X
<i>Noturus gyrinus</i>	Tadpole Madtom	X				X	X	X	X
<i>Noturus nocturnus</i>	Freckled Madtom		X						X
<i>Pylodictis olivaris</i>	Flathead Catfish		X			X	X		X
<i>Hypostomus plecostomus</i>	Suckermouth Catfish		X						
<i>Aphredoderus sayanus</i>	Pirate Perch		X			X	X	X	X
<i>Mugil cephalus</i>	Striped Mullet		X						
<i>Mugil curema</i>	White Mullet		X						
<i>Labidesthes sicculus</i>	Brook Silverside					X			

Scientific Name	Common Name	Arenosa Creek	Big Creek	Garcitas Creek	Placedo Creek	San Bernard River	West Bernard Creek	West Carancahua Creek	West Mustang Creek
<i>Menidia beryllina</i>	Inland Silverside		X			X			X
<i>Fundulus chrysotus</i>	Golden Topminnow	X		X					
<i>Fundulus notatus</i>	Blackstripe Topminnow						X		
<i>Gambusia affinis</i>	Western Mosquitofish	X	X	X	X	X	X	X	X
<i>Poecilia latipinna</i>	Sailfin Molly		X			X	X		
<i>Cyprinodon variegatus</i>	Sheepshead Minnow		X	X					
<i>Morone chrysops</i>	White Bass		X						
<i>Lepomis auritus</i>	Redbreast Sunfish	X		X					
<i>Lepomis cyanellus</i>	Green Sunfish	X	X	X	X	X	X	X	X
<i>Lepomis gulosus</i>	Warmouth	X	X	X	X	X	X	X	X
<i>Lepomis humilis</i>	Orangespotted Sunfish		X				X		
<i>Lepomis macrochirus</i>	Bluegill	X	X	X	X	X	X	X	X
<i>Lepomis marginatus</i>	Dollar Sunfish		X						X
<i>Lepomis megalotis</i>	Longear Sunfish	X	X	X	X	X	X	X	X
<i>Lepomis microlophus</i>	Redear Sunfish	X	X	X					
<i>Lepomis miniatus</i>	Redspotted Sunfish	X		X			X	X	
<i>Lepomis symmetricus</i>	Bantam Sunfish	X							X
<i>Lepomis</i> sp. (hybrid)	Sunfish Hybrid					X			
<i>Lepomis</i> sp.	Sunfish Species	X		X	X		X	X	
<i>Micropterus punctulatus</i>	Spotted Bass		X			X	X		X
<i>Micropterus salmoides</i>	Largemouth Bass	X	X	X			X	X	
<i>Pomoxis annularis</i>	White Crappie	X	X		X		X	X	X
<i>Pomoxis nigromaculatus</i>	Black Crappie					X			X
<i>Etheostoma chlorosoma</i>	Bluntnose Darter	X		X		X			
<i>Etheostoma gracile</i>	Slough Darter	X	X	X		X	X		X
<i>Percina sciera</i>	Dusky Darter			X		X	X		X
<i>Oreochromis aureus</i>	Blue Tilapia		X						
<i>Dormitator maculatus</i>	Fat Sleeper		X						
<i>Microgobius gulosus</i>	Clown Goby							X	
<i>Trinectes maculatus</i>	Hogchoker				X				
Species Richness		26	44	25	14	26	32	26	29
Total N Individuals		4,021	6,842	869	2,069	711	622	5,171	1,920
Number of Samples		n = 5	n = 13	n = 3	n = 3	n = 4	n = 4	n = 4	n = 4