Metadata Documentation for Program Portal

U.S. Bureau of Reclamation Rio Grande Silvery Minnow Population Monitoring Dataset

October 9, 2020

Description
These data were collected as part of the U.S. Bureau of Reclamation's (BOR) Rio Grande Silvery Minnow Population Monitoring Program. This program monitors the status of the ichthyofaunal community associated with the Middle Rio Grande. A primary driver for this research is to evaluate how seasonal and annual changes in river flows affect the distribution and abundance of Rio Grande Silvery Minnow throughout its current range over time (since 1993). These data are collected by the American Southwest Ichthyological Researchers (ASIR) with funding by the BOR. An annual report on these data is also available on the program portal.

File Information
Rio Grande Silvery Minnow Population Monitoring.csv
2030 KB

Rio Grande Silvery Minnow Population Monitoring By Haul.csv
39 MB

Rio Grande Silvery Minnow Population Occupancy Monitoring.csv
547 KB

Rio Grande Silvery Minnow Mark Recapture.csv
35 KB

Rio Grande Silvery Minnow Reproductive Monitoring.csv
2047 KB

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Time Stamp
Data collected from 1993 to 2019

Data Collection Information
Data were collected within a portion of the Middle Rio Grande from Angostura Diversion Dam to the inflow of Elephant Butte Reservoir.

Unique Identifier
Unique identification for each dataset is described below.

Permissions
Data collection funded by USBR, who holds all rights to these data. ASIR conducted the data collection field work.

Contact Information
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Field Descriptions
Rio Grande Silvery Minnow Population Monitoring
Data for the Rio Grande Silvery Minnow Population Monitoring project.

The "By Station" dataset contains fish collection data for each sampling event on each sampling occasion. Data are aggregated across the 20 seine haul samples. Unique rows are identified by a combination of "SiteID" and "DateSampled".

Field	Description
FieldNumber	Field data identification composed of person/site, year, number
SamplesPK	Numerical sample identification to link to sample-level field data
ProjectName	Standardized name of research project
Subproject	Research site type; Valid values include "Additional", "Replacement", or "Standard"
DateSampled	Date of sample collection
ReportingYear	Report year for the data
ReportingMonth	Report month for the data; may differ from actual month sampled for balance in monthly sampling effort
SiteID	Unique identification number created for each site based on date/time when site was first sampled (i.e. higher numbers equal recently added sites);
Drainage	Drainage of site location
State	State of site location
County	County of site location
Reach	River reach of site location
Quad	USGS topographic quadrangle map where site is located
RMStart	RMStart of site location
RMStop	RMStop of site location
Locality	Locality of site location
Datum	Datum for UTM of site location
Zone	Zone For UTM of site location
UTMEastingStart	Verified UTM Easting at the start of sampling
UTMEastingStop	Verified UTM Easting at the start of sampling
UTMNorthingStart	Verified UTM Northing at the start of sampling
UTMNorthingStop	Verified UTM Northing at the start of sampling
AirTemperatureMax	Maximum air temperature in degrees C during sampling; -999 indicates missing data
WaterTemperatureMax	Maximum water temperature in degrees C during sampling; -999 indicates missing data
SecchiDepth	Secchi disk measurement of water transparency (cm)
DO	Dissolved oxygen of water (milligrams per liter: mg/L); Extremely low or high values should be interpreted cautiously; -999 indicates missing data

Field	Description
Conductivity	Uncorrected conductivity of water (microsiemens; uS); Extremely low or high values should be interpreted cautiously; -999 indicates missing data
SpecificConductance	Specific conductance, corrected for 25 C water (microsiemens; uS); Extremely low or high values should be interpreted cautiously; -999 indicates missing data
Salinity	Salinity of water (parts per thousand; ppt); Extremely low or high values should be interpreted cautiously; -999 indicates missing data
pH	pH of water; Extremely low or high values should be interpreted cautiously; -999 indicates missing data
Collectors	Identity of field collector(s)
TimeFrom	Start time of collection
TimeTo	Stop time of collection
NotSampled	Reason sites were not sampled, if applicable; Valid values include "Not Feasible" [e.g. fire danger], "Not Safe" [e.g. dangerous flooding], or "Site Dry" [verified by walking the length of the site]; -999 indicates a sampled site
CombinedSample	Indicator for the combination of collected fish across habitats for the sample (i.e. fish-level data not separated by haul); TRUE = Yes, FALSE = No
FishPresent	Indicator for the presence of collected fish; 1 = Yes, -999 = No
AMEMEL	Number of Ameiurus melas (Black Bullhead) collected
AMENAT	Number of Ameiurus natalis (Yellow Bullhead) collected
APLGRU	Number of Aplodinotus grunniens (Freshwater Drum) collected
CAMANO	Number of Campostoma anomalum (Central Stoneroller) collected
CARAUR	Number of Carassius auratus (Goldfish) collected
CARCAR	Number of Carpiodes carpio (River Carpsucker) collected
CATCOM	Number of Catostomus commersonii (White Sucker) collected
CYPCAR	Number of Cyprinus carpio (Common Carp) collected
CYPLUT	Number of Cyprinella lutrensis (Red Shiner) collected
DORCEP	Number of Dorosoma cepedianum (Gizzard Shad) collected
DORPET	Number of Dorosoma petenense (Threadfin Shad) collected
GAMAFF	Number of Gambusia affinis (Western Mosquitofish) collected
GILPAN	Number of Gila pandora (Rio Grande Chub) collected
HYBAMA	Number of Hybognathus amarus (Rio Grande Silvery Minnow) collected
ICTBUB	Number of Ictiobus bubalus (Smallmouth Buffalo) collected
ICTFUR	Number of Ictalurus furcatus (Blue Catfish) collected
ICTPUN	Number of Ictalurus punctatus (Channel Catfish) collected
LEPCYA	Number of Lepomis cyanellus (Green Sunfish) collected
LEPGUL	Number of Lepomis gulosus (Warmouth) collected
LEPMAC	Number of Lepomis macrochirus (Bluegill) collected
LEPMEG	Number of Lepomis megalotis (Longear Sunfish) collected
MICPUN	Number of Micropterus punctulatus (Spotted Bass) collected

Field	Description
MICSAL	Number of Micropterus salmoides (Largemouth Bass) collected
MORCHR	Number of Morone chrysops (White Bass) collected
No Fish Caught	Indicator for presence of fish in collected sample; 1 = No fish Caught, 0 = Fish Caught
NOTCRY	Number of Notemigonus crysoleucas (Golden Shiner) collected
ONCMYK	Number of Oncorhynchus mykiss (Rainbow Trout) collected
PERFLA	Number of Perca flavescens (Yellow Perch) collected
PERMAC	Number of Percina macrolepida (Bigscale Logperch) collected
PIMPRO	Number of Pimephales promelas (Fathead Minnow) collected
PIMVIG	Number of Pimephales vigilax (Bullhead Minnow) collected
PLAGRA	Number of Platygobio gracilis (Flathead Chub) collected
PLAGRA x RHICAT	Number of Platygobio x Rhinichthys gracilis x cataractae (Hybrid: Flathead Chub x Longnose Dace) collected
POMANN	Number of Pomoxis annularis (White Crappie) collected
POMNIG	Number of Pomoxis nigromaculatus (Black Crappie) collected
PTEDIS	Number of Pterygoplichthys disjunctivus (Vermiculated Sailfin Catfish) collected
PYLOLI	Number of Pylodictis olivaris (Flathead Catfish) collected
RHICAT	Number of Rhinichthys cataractae (Longnose Dace) collected
RHICAT x GILPAN	Number of Rhinichthys x Gila cataractae x pandora (Hybrid: Longnose Dace x Rio Grande Chub) collected
SALTRU	Number of Salmo trutta (Brown Trout) collected
SANVIT	Number of Sander vitreus (Walleye) collected
TotalCountAllSpecies	Number of unique fish species collected in the sample
UnmarkedAgeZeroHybama	Count of unmarked age 0 HYBAMA collected in the sample; Age 0 was defined for the following pairs of (standard length (mm), reporting month): (<=15, >=3), (<= 20, >=5), (<=30, >=6), (<=40, >=7), (<=50, >=8), (<=55, >=9), (<=60, >=10)
UnmarkedAgeOneHybama	Count of unmarked age 1 HYBAMA collected in the sample; Age 1 was defined for the following pairs of (standard length (mm), reporting month): (15.01-60, <=4), (20.01-65, =5), (30.01-65, =6), (40.01-65, =7), (50.01-70, =8), (55.01-70, =9), (60.01-70, =10)
UnmarkedAgeTwoHybama	Count of unmarked age 2 HYBAMA collected in the sample; Age 2 was defined for the following pairs of (standard length (mm), reporting month): (>60, <=4), (>65, <=7), (>70, <=8)
UnmarkedNoAgeHybama	Count of unmarked unaged HYBAMA collected in the sample; Unaged was defined as outside the range of age 0, 1, or 2
VIEPresent	Indicator for presence of VIE in HYBAMA collected in the sample
SamplingEffort	Area of sampling effort (m2)
Length	Length of sampling effort (m)

Field Descriptions
Rio Grande Silvery Minnow Population Monitoring By Haul
Data for the Rio Grande Silvery Minnow Population Monitoring project.

The "By Haul" dataset contains fish collection data for each haul at a sampling event on each sampling occasion. Data were recorded separately for the 20 seine haul samples, identified by "HabitatNumber", beginning 03/25/2002. Unique rows are identified by a combination of "SiteID" and "DateSampled" and "HabitatNumber". The "By Haul" information contains the specific information about each haul, including mesohabitat type, the number of each species of fish caught, and VIE markings of Rio Grande Silvery Minnow.

Field	Description
FieldNumber	Field data identification composed of person/site, year, number
HabitatNumber	Unique identifier of the individual haul within the station on a collection date
SamplesPK	Numerical sample identification to link to sample-level field data
ProjectName	Standardized name of research project
Subproject	Research site type; Valid values include "Additional", "Replacement", or "Standard"
DateSampled	Date of sample collection
ReportingYear	Report year for the data
ReportingMonth	Report month for the data; may differ from actual month sampled for balance in monthly sampling effort
SiteID	Unique identification number created for each site based on date/time when site was first sampled (i.e. higher numbers equal recently added sites);
Drainage	Drainage of site location
State	State of site location
County	County of site location
Reach	River reach of site location
Quad	USGS topographic quadrangle map where site is located
RMStart	RMStart of site location
RMStop	RMStop of site location
Locality	Locality of site location
Datum	Datum for UTM of site location
Zone	Zone For UTM of site location
UTMEastingStart	Verified UTM Easting at the start of sampling
UTMEastingStop	Verified UTM Easting at the start of sampling
UTMNorthingStart	Verified UTM Northing at the start of sampling
UTMNorthingStop	Verified UTM Northing at the start of sampling
AirTemperatureMax	Maximum air temperature in degrees C during sampling; -999 indicates missing data
WaterTemperatureMax	Maximum water temperature in degrees C during sampling; -999 indicates missing data
SecchiDepth	Secchi disk measurement of water transparency (cm)

Field	Description
DO	Dissolved oxygen of water (milligrams per liter: mg/L); Extremely low or high values should be interpreted cautiously; -999 indicates missing data
Conductivity	Uncorrected conductivity of water (microsiemens; uS); Extremely low or high values should be interpreted cautiously; -999 indicates missing data
SpecificConductance	Specific conductance, corrected for 25 C water (microsiemens; uS); Extremely low or high values should be interpreted cautiously; -999 indicates missing data
Salinity	Salinity of water (parts per thousand; ppt); Extremely low or high values should be interpreted cautiously; -999 indicates missing data
pH	pH of water; Extremely low or high values should be interpreted cautiously; -999 indicates missing data
Collectors	Identity of field collector(s)
TimeFrom	Start time of collection
TimeTo	Stop time of collection
NotSampled	Reason sites were not sampled, if applicable; Valid values include "Not Feasible" [e.g. fire danger], "Not Safe" [e.g. dangerous flooding], or "Site Dry" [verified by walking the length of the site]; -999 indicates a sampled site
CombinedSample	Indicator for the combination of collected fish across habitats for the sample (i.e. fish-level data not separated by haul); TRUE = Yes, FALSE = No
Habitat	Code for Mesohabitat at an individual haul within the station on a collection date
HabitatDescription	Description of Mesohabitat at an individual haul within the station on a collection date
Length	Length of sampling effort (m)
SamplingEffort	Area of sampling effort (m2)
FishPresent	Indicator for the presence of collected fish; 1 = Yes, -999 = No
AMEMEL	Number of Ameiurus melas (Black Bullhead) collected
AMENAT	Number of Ameiurus natalis (Yellow Bullhead) collected
APLGRU	Number of Aplodinotus grunniens (Freshwater Drum) collected
CARAUR	Number of Carassius auratus (Goldfish) collected
CARCAR	Number of Carpiodes carpio (River Carpsucker) collected
CATCOM	Number of Catostomus commersonii (White Sucker) collected
CYPCAR	Number of Cyprinus carpio (Common Carp) collected
CYPLUT	Number of Cyprinella lutrensis (Red Shiner) collected
DORCEP	Number of Dorosoma cepedianum (Gizzard Shad) collected
DORPET	Number of Dorosoma petenense (Threadfin Shad) collected
GAMAFF	Number of Gambusia affinis (Western Mosquitofish) collected
GILPAN	Number of Gila pandora (Rio Grande Chub) collected
TotalHYBAMA	Number of Hybognathus amarus (Rio Grande Silvery Minnow) collected
ICTBUB	Number of Ictiobus bubalus (Smallmouth Buffalo) collected

Field	Description
ICTFUR	Number of Ictalurus furcatus (Blue Catfish) collected
ICTPUN	Number of Ictalurus punctatus (Channel Catfish) collected
LEPCYA	Number of Lepomis cyanellus (Green Sunfish) collected
LEPMAC	Number of Lepomis macrochirus (Bluegill) collected
MICSAL	Number of Micropterus salmoides (Largemouth Bass) collected
MORCHR	Number of Morone chrysops (White Bass) collected
No Fish Caught	Indicator for presence of fish in collected sample; 1 = No fish Caught, 0 = Fish Caught
ONCMYK	Number of Oncorhynchus mykiss (Rainbow Trout) collected
PERFLA	Number of Perca flavescens (Yellow Perch) collected
PERMAC	Number of Percina macrolepida (Bigscale Logperch) collected
PIMPRO	Number of Pimephales promelas (Fathead Minnow) collected
PIMVIG	Number of Pimephales vigilax (Bullhead Minnow) collected
PLAGRA	Number of Platygobio gracilis (Flathead Chub) collected
PLAGRA x RHICAT	Number of Platygobio x Rhinichthys gracilis x cataractae (Hybrid: Flathead Chub x Longnose Dace) collected
POMANN	Number of Pomoxis annularis (White Crappie) collected
PTEDIS	Number of Pterygoplichthys disjunctivus (Vermiculated Sailfin Catfish) collected
PYLOLI	Number of Pylodictis olivaris (Flathead Catfish) collected
RHICAT	Number of Rhinichthys cataractae (Longnose Dace) collected
RHICAT x GILPAN	Number of Rhinichthys x Gila cataractae x pandora (Hybrid: Longnose Dace x Rio Grande Chub) collected
SALTRU	Number of Salmo trutta (Brown Trout) collected
SANVIT	Number of Sander vitreus (Walleye) collected
TotalCountAllSpecies	Number of unique fish species collected in the sample
UnmarkedAgeZeroHybama	Count of unmarked age 0 HYBAMA collected in the sample; Age 0 was defined for the following pairs of (standard length (mm), reporting month): (<=15, >=3), (<= 20, >=5), (<=30, >=6), (<=40, >=7), (<=50, >=8), (<=55, >=9), (<=60, >=10)
UnmarkedAgeOneHybama	Count of unmarked age 1 HYBAMA collected in the sample; Age 1 was defined for the following pairs of (standard length (mm), reporting month): (15.01-60, <=4), (20.01-65, =5), (30.01-65, =6), (40.01-65, =7), (50.01-70, =8), (55.01-70, =9), (60.01-70, =10)
UnmarkedAgeTwoHybama	Count of unmarked age 2 HYBAMA collected in the sample; Age 2 was defined for the following pairs of (standard length (mm), reporting month): (>60, <=4), (>65, <=7), (>70, <=8)
UnmarkedNoAgeHybama	Count of unmarked unaged HYBAMA collected in the sample; Unaged was defined as outside the range of age 0, 1, or 2
blue;left anal	VIE marking of HYBAMA with color, side and location
blue;left dorsal	VIE marking of HYBAMA with color, side and location
green;left anal	VIE marking of HYBAMA with color, side and location
green;left dorsal	VIE marking of HYBAMA with color, side and location

Field	Description
green;NA	VIE marking of HYBAMA with color, side and location
green;right anal	VIE marking of HYBAMA with color, side and location
green;right dorsal	VIE marking of HYBAMA with color, side and location
orange;left anal	VIE marking of HYBAMA with color, side and location
orange;left dorsal	VIE marking of HYBAMA with color, side and location
orange;right anal	VIE marking of HYBAMA with color, side and location
orange;right dorsal	VIE marking of HYBAMA with color, side and location
pink;left dorsal	VIE marking of HYBAMA with color, side and location
pink;right dorsal	VIE marking of HYBAMA with color, side and location
purple;left dorsal	VIE marking of HYBAMA with color, side and location
red;left anal	VIE marking of HYBAMA with color, side and location
red;left dorsal	VIE marking of HYBAMA with color, side and location
red;right anal	VIE marking of HYBAMA with color, side and location
red;right dorsal	VIE marking of HYBAMA with color, side and location
white;left dorsal	VIE marking of HYBAMA with color, side and location
white;right dorsal	VIE marking of HYBAMA with color, side and location
yellow;left dorsal	VIE marking of HYBAMA with color, side and location
yellow;right anal	VIE marking of HYBAMA with color, side and location
yellow;right dorsal	VIE marking of HYBAMA with color, side and location
VIETotal	Total number of HYBAMA with VIE collected in the sample

Field Descriptions
Rio Grande Silvery Minnow Population Occupancy Monitoring
Data for the Rio Grande Silvery Minnow Population Monitoring Repeated project.

Format similar to the "By Station" dataset described above, a summary of fish collection data for each sampling event on each sampling occasion. Sampling was repeated on multiple occasions at standard sites in November for use in Occupancy Analyses. Data are aggregated across the 20 seine haul samples. Unique rows are identified by a combination of "SiteID" and "DateSampled".

Field	Description
FieldNumber	Field data identification composed of person/site, year, number
SamplesPK	Numerical sample identification to link to sample-level field data
ProjectName	Standardized name of research project
Subproject	Research site type; Valid values include "Additional", "Replacement", or "Standard"
DateSampled	Date of sample collection
ReportingYear	Report year for the data
ReportingMonth	Report month for the data; may differ from actual month sampled for balance in monthly sampling effort
SiteID	Unique identification number created for each site based on date/time when site was first sampled (i.e. higher numbers equal recently added sites);
Drainage	Drainage of site location
State	State of site location
County	County of site location
Reach	River reach of site location
Quad	USGS topographic quadrangle map where site is located
RMStart	RMStart of site location
RMStop	RMStop of site location
Locality	Locality of site location
Datum	Datum for UTM of site location
Zone	Zone For UTM of site location
UTMEastingStart	Verified UTM Easting at the start of sampling
UTMEastingStop	Verified UTM Easting at the start of sampling
UTMNorthingStart	Verified UTM Northing at the start of sampling
UTMNorthingStop	Verified UTM Northing at the start of sampling
AirTemperatureMax	Maximum air temperature in degrees C during sampling; -999 indicates missing data
WaterTemperatureMax	Maximum water temperature in degrees C during sampling; -999 indicates missing data
SecchiDepth	Secchi disk measurement of water transparency (cm)
DO	Dissolved oxygen of water (milligrams per liter: mg/L); Extremely low or high values should be interpreted cautiously; -999 indicates missing data

Field	Description
Conductivity	Uncorrected conductivity of water (microsiemens; uS); Extremely low or high values should be interpreted cautiously; -999 indicates missing data
SpecificConductance	Specific conductance, corrected for 25 C water (microsiemens; uS); Extremely low or high values should be interpreted cautiously; -999 indicates missing data
Salinity	Salinity of water (parts per thousand; ppt); Extremely low or high values should be interpreted cautiously; -999 indicates missing data
pH	pH of water; Extremely low or high values should be interpreted cautiously; -999 indicates missing data
Collectors	Identity of field collector(s)
TimeFrom	Start time of collection
TimeTo	Stop time of collection
NotSampled	Reason sites were not sampled, if applicable; Valid values include "Not Feasible" [e.g. fire danger], "Not Safe" [e.g. dangerous flooding], or "Site Dry" [verified by walking the length of the site]; -999 indicates a sampled site
CombinedSample	Indicator for the combination of collected fish across habitats for the sample (i.e. fish-level data not separated by haul); TRUE = Yes, FALSE = No
AMEMEL	Number of Ameiurus melas (Black Bullhead) collected
AMENAT	Number of Ameiurus natalis (Yellow Bullhead) collected
CARCAR	Number of Carpiodes carpio (River Carpsucker) collected
CATCOM	Number of Catostomus commersonii (White Sucker) collected
CYPCAR	Number of Cyprinus carpio (Common Carp) collected
CYPLUT	Number of Cyprinella lutrensis (Red Shiner) collected
DORCEP	Number of Dorosoma cepedianum (Gizzard Shad) collected
GAMAFF	Number of Gambusia affinis (Western Mosquitofish) collected
HYBAMA	Number of Hybognathus amarus (Rio Grande Silvery Minnow) collected
ICTBUB	Number of Ictiobus bubalus (Smallmouth Buffalo) collected
ICTPUN	Number of Ictalurus punctatus (Channel Catfish) collected
LEPCYA	Number of Lepomis cyanellus (Green Sunfish) collected
LEPMAC	Number of Lepomis macrochirus (Bluegill) collected
MICSAL	Number of Micropterus salmoides (Largemouth Bass) collected
MORCHR	Number of Morone chrysops (White Bass) collected
MORSAX	Number of Morone saxatilis (Striped Bass) collected
No Fish Caught	Indicator for presence of fish in collected sample; 1 = No fish Caught, 0 = Fish Caught
PIMPRO	Number of Pimephales promelas (Fathead Minnow) collected
PLAGRA	Number of Platygobio gracilis (Flathead Chub) collected
POMANN	Number of Pomoxis annularis (White Crappie) collected
PYLOLI	Number of Pylodictis olivaris (Flathead Catfish) collected

Field	Description
RHICAT	Number of Rhinichthys cataractae (Longnose Dace) collected
SANVIT	Number of Sander vitreus (Walleye) collected
TotalCountAllSpecies	Number of unique fish species collected in the sample
UnmarkedAgeZeroHybama	Count of unmarked age 0 HYBAMA collected in the sample; Age 0 was defined for the following pairs of (standard length (mm), reporting month): (<=15, >=3), (<= 20, >=5), (<=30, >=6), (<=40, >=7), (<=50, >=8), (<=55, >=9), (<=60, >=10)
UnmarkedAgeOneHybama	Count of unmarked age 1 HYBAMA collected in the sample; Age 1 was defined for the following pairs of (standard length (mm), reporting month): (15.01-60, <=4), (20.01-65, =5), (30.01-65, =6), (40.01-65, =7), (50.01-70, =8), (55.01-70, =9), (60.01-70, =10)
UnmarkedAgeTwoHybama	Count of unmarked age 2 HYBAMA collected in the sample; Age 2 was defined for the following pairs of (standard length (mm), reporting month): (>60, <=4), (>65, <=7), (>70, <=8)
UnmarkedNoAgeHybama	Count of unmarked unaged HYBAMA collected in the sample; Unaged was defined as outside the range of age 0, 1, or 2
VIEPresent	Indicator for presence of VIE in HYBAMA collected in the sample
SamplingEffort	Area of sampling effort (m2)
Length	Length of sampling effort (m)

Field Descriptions
Rio Grande Silvery Minnow Mark Recapture
Data for the Rio Grande Silvery Minnow Mark Recapture project.

Format similar to the "By Station" dataset described above, a summary of fish collection data for each sampling event on each sampling occasion. Unique rows are identified by a combination of "SiteID" and "DateSampled".

Field	Description
FieldNumber	Field data identification composed of person/site, year, number
SamplesPK	Numerical sample identification to link to sample-level field data
ProjectName	Standardized name of research project
Subproject	Research site type; Valid values include "Additional", "Replacement", or "Standard"
DateSampled	Date of sample collection
ReportingYear	Report year for the data
ReportingMonth	Report month for the data; may differ from actual month sampled for balance in monthly sampling effort
SiteID	Unique identification number created for each site based on date/time when site was first sampled (i.e. higher numbers equal recently added sites);
Drainage	Drainage of site location
State	State of site location
County	County of site location
Reach	River reach of site location
Quad	USGS topographic quadrangle map where site is located
RMStart	RMStart of site location
RMStop	RMStop of site location
Locality	Locality of site location
Datum	Datum for UTM of site location
Zone	Zone For UTM of site location
UTMEastingStart	Verified UTM Easting at the start of sampling
UTMEastingStop	Verified UTM Easting at the start of sampling
UTMNorthingStart	Verified UTM Northing at the start of sampling
UTMNorthingStop	Verified UTM Northing at the start of sampling
AirTemperatureMax	Maximum air temperature in degrees C during sampling; -999 indicates missing data
WaterTemperatureMax	Maximum water temperature in degrees C during sampling; -999 indicates missing data
Collectors	Identity of field collector(s)
TimeFrom	Start time of collection
TimeTo	Stop time of collection
NotSampled	Reason sites were not sampled, if applicable; Valid values include "Not Feasible" [e.g. fire danger], "Not Safe" [e.g. dangerous

Field	Description
	flooding], or "Site Dry" [verified by walking the length of the site]; -999 indicates a sampled site
CombinedSample	Indicator for the combination of collected fish across habitats for the sample (i.e. fish-level data not separated by haul); TRUE = Yes, FALSE = No
FishPresent	Indicator for the presence of collected fish; 1 = Yes, -999 = No
HYBAMA	Number of Hybognathus amarus (Rio Grande Silvery Minnow) collected
ICTPUN	Number of Ictalurus punctatus (Channel Catfish) collected
No Fish Caught	Indicator for presence of fish in collected sample; 1 = No fish Caught, 0 = Fish Caught
TotalCountAllSpecies	Number of unique fish species collected in the sample
UnmarkedAgeZeroHybama	Count of unmarked age 0 HYBAMA collected in the sample; Age 0 was defined for the following pairs of (standard length (mm), reporting month): (<=15, >=3), (<= 20, >=5), (<=30, >=6), (<=40, >=7), (<=50, >=8), (<=55, >=9), (<=60, >=10)
UnmarkedAgeOneHybama	Count of unmarked age 1 HYBAMA collected in the sample; Age 1 was defined for the following pairs of (standard length (mm), reporting month): (15.01-60, <=4), (20.01-65, =5), (30.01-65, =6), (40.01-65, =7), (50.01-70, =8), (55.01-70, =9), (60.01-70, =10)
UnmarkedAgeTwoHybama	Count of unmarked age 2 HYBAMA collected in the sample; Age 2 was defined for the following pairs of (standard length (mm), reporting month): (>60, <=4), (>65, <=7), (>70, <=8)
UnmarkedNoAgeHybama	Count of unmarked unaged HYBAMA collected in the sample; Unaged was defined as outside the range of age 0, 1, or 2
VIEPresent	Indicator for presence of VIE in HYBAMA collected in the sample
green;left dorsal	Count of HYBAMA with VIE marking color, side and location
yellow;left dorsal	Count of HYBAMA with VIE marking color, side and location
VIETotal	Total count of HYBAMA with VIE collected in the sample

Field Descriptions
Rio Grande Silvery Minnow Reproductive Monitoring
Data for the Rio Grande Silvery Minnow Reproductive Monitoring project.

Format similar to the "By Station" dataset described above, a summary of collection data for each sampling event on each sampling occasion using the Moore Egg Collector. Unique rows are identified by a combination of "SiteID" and "DateSampled".

Field	Description
FieldNumber	Field data identification composed of person/site, year, number
SamplesPK	Numerical sample identification to link to sample-level field data
ProjectName	Standardized name of research project
Subproject	Research site type; Valid values include "Additional", "Replacement", or "Standard"
DateSampled	Date of sample collection
ReportingYear	Report year for the data
ReportingMonth	Report month for the data; may differ from actual month sampled for balance in monthly sampling effort
SiteID	Unique identification number created for each site based on date/time when site was first sampled (i.e. higher numbers equal recently added sites);
Drainage	Drainage of site location
State	State of site location
County	County of site location
Reach	River reach of site location
Quad	USGS topographic quadrangle map where site is located
RMStart	RMStart of site location
RMStop	RMStop of site location
Locality	Locality of site location
Datum	Datum for UTM of site location
Zone	Zone For UTM of site location
UTMEastingStart	Verified UTM Easting at the start of sampling
UTMEastingStop	Verified UTM Easting at the start of sampling
UTMNorthingStart	Verified UTM Northing at the start of sampling
UTMNorthingStop	Verified UTM Northing at the start of sampling
AirTemperatureMax	Maximum air temperature in degrees C during sampling; -999 indicates missing data
WaterTemperatureMax	Maximum water temperature in degrees C during sampling; -999 indicates missing data
SecchiDepth	Secchi disk measurement of water transparency (cm)
DO	Dissolved oxygen of water (milligrams per liter: mg/L); Extremely low or high values should be interpreted cautiously; -999 indicates missing data
Salinity	Salinity of water (parts per thousand; ppt); Extremely low or high values should be interpreted cautiously; -999 indicates missing data
Collectors	Identity of field collector(s)
TimeFrom	Start time of collection
TimeTo	Stop time of collection

Field	Description
NotSampled	Reason sites were not sampled, if applicable; Valid values include "Not Feasible" [e.g. fire danger], "Not Safe" [e.g. dangerous flooding], or "Site Dry" [verified by walking the length of the site]; -999 indicates a sampled site
CombinedSample	Indicator for the combination of collected fish across habitats for the sample (i.e. fish-level data not separated by haul); TRUE = Yes, FALSE = No
StartFlowmeter	Start value of flowmeter for sample (General Oceanics, Inc. mechanical flowmeter)
StopFlowmeter	Stop value of flowmeter for sample (General Oceanics, Inc. mechanical flowmeter)
FlowmeterEstimated	Was the flowmeter value estimated (1=Yes, [blank]=No); If TRUE effort was estimated based on other MECs during the same/similar period
FlowmeterMalfunction	Did the flowmeter malfunction during sample? (1=Yes, [blank]=No); If TRUE effort was estimated based on other MECs during the same/similar period
VIEColor	VIE color marking
CARCAR	Number of Carpiodes carpio (River Carpsucker) adult and eggs collected
CATCOM	Number of Catostomus commersonii (White Sucker) adults and eggs collected
CYPCAR	Number of Cyprinus carpio (Common Carp) adults and eggs collected
CYPLUT	Number of Cyprinella lutrensis (Red Shiner) adults and eggs collected
DORCEP	Number of Dorosoma cepedianum (Gizzard Shad) adults and eggs collected
GAMAFF	Number of Gambusia affinis (Western Mosquitofish) adults and eggs collected
HYBAMA	Number of Hybognathus amarus (Rio Grande Silvery Minnow) adults and eggs collected
ICTBUB	Number of Ictiobus bubalus (Smallmouth Buffalo) adults and eggs collected
ICTPUN	Number of Ictalurus punctatus (Channel Catfish) adults and eggs collected
MICSAL	Number of Micropterus salmoides (Largemouth Bass) adults and eggs collected
No Fish Caught	Indicator for presence of eggs or fish in collected sample; 1 = No fish Caught, 0 = Fish Caught
PERFLA	Number of Perca flavescens (Yellow Perch) adults and eggs collected
PIMPRO	Number of Pimephales promelas (Fathead Minnow) adults and eggs collected
PLAGRA	Number of Platygobio gracilis (Flathead Chub) adults and eggs collected
POMANN	Number of Pomoxis annularis (White Crappie) adults and eggs collected
RHICAT	Number of Rhinichthys cataractae (Longnose Dace) adults and eggs collected
SANVIT	Number of Sander vitreus (Walleye) adults and eggs collected
TotalCountAllSpecies	Number of unique fish collected in the sample
VIEPresent	Indicator for presence of VIE in HYBAMA collected in the sample
SamplingEffort	Sampling effort in Moore Egg Collector (1/16 in. mesh [12 in. by 16 in. sampling area])