New Mexico Environment Department Surface Water Quality Bureau

LEVEL 1 Hydrology Determination Field Sheet

Date:	Time:	Evaluators:
Stream Name:	Site Description:	
WQS as found under NMAC (20.6.4):	Assessment Unit:	
Starting Latitude:	Ending Latitude:	
Starting Longitude:	Ending Longitude:	
Starting Elevation:	Ending Elevation:	
TOTAL POINTS*: **See Hydrology Protocol for determination*		

WEATHER CONDITIONS	DROUGHT CONDITIONS:	Nearest weather station:	PAST 48 HOURS**:	CURRENTLY**:
	12-mo. SPI Value: 12-mo. SPEI Value: Drought Condition: Obtained from: Date Obtained:	Precipitation past 48 hours:	___ storm (heavy rain) ___ rain (steady rain) ___ intermittant rain ___ % cloud cover ___ clear/sunny	___ storm (heavy rain) ___ rain (steady rain) ___ intermittant rain ___ % cloud cover ___ clear/sunny
	**Field evaluations should be performed at least 48 hours after the last major rainfall event.			

SITE OBSERVATIONS ALONG ENTIRE REACH	Nearest Stream Modification (description and proximity):
	Nearest Diversion (description and proximity):
	Nearest Discharge (description and proximity):
	Include any and all modifications/discharges and diversions regardless of perceived impact to hydrologic regime along with any field observations

CALCULATIONS FOR DETERMINING FLOODPLAIN AND CHANNEL DIMENSIONS (Use for 1.8 on Field Survey)	Thalwag Height (#1)	Bankfull Height (#2)	Change in Height (#1 - #2)	Change in Height x 2 (#3)	Flood-prone Area Height (#1-#3)
				Flood-prone width:	
				Bankfull Width:	
				Flood-prone Width to Bankfull Width Ratio:	
	Alternative Methods used (describe)?				

PHOTO DOCUMENTATION (include additional photographs as attachment)	Time	Photo #	Description	Identifiable References	Photographer

OTHER SITE CHARACTERISTIC NOTES/ SCHEMATICS

RECEIVED Cody Barnes Digitally signed by Cody Barnes Date: 2020.06.26 13:35:46 -06'00'

By Water Quality Control Commission at 1:35 pm, Jun 26, 2020

LEVEL 1 INDICATORS	Stream Condition (identify all that apply then choose most prominent score)			
	Strong	Moderate	Weak	Poor
1.1 Water In Channel	☐ Flow is evident throughout reach ☐ Flow is observed in riffles ☐ Flow may not be evident in runs	☐ Wet Channel ☐ Flow is barely discernable ☐ Floating object needed to observe flow	☐ Dry Channel with standing pools ☐ Saturated or moist sediment under rocks/debris ☐ Evidence of base flows	☐ Dry Channel ☐ Dry under rocks/debris ☐ No evidence of base flows
	6	**4**	**2**	**0**
	Notes/Comments:			
1.2 Fish in Channel	☐ Found easily ☐ Found consistently throughout reach	☐ Found with little difficulty ☐ Not consistent throughout reach	☐ Found with difficulty (10 or more minutes of searching)	☐ Not present (after 10 or more minutes of searching)
	3	**2**	**1**	**0**
	Species Observed and Notes/Comments:			
1.3 Benthic Macroinvertebrates in Channel	☐ Found easily ☐ Found consistently throughout reach	☐ Found with little difficulty ☐ Not consistent throughout reach	☐ Found with difficulty (10 or more minutes of searching)	☐ Not present (after 10 or more minutes of searching)
	3	**2**	**1**	**0**
	Species Observed and Notes/Comments:			
1.4 Filamentous Algae/Periphyton in Channel	☐ Found easily ☐ Found consistently throughout reach	☐ Found with little difficulty ☐ Not consistent throughout reach	☐ Found with difficulty (10 or more minutes of searching)	☐ Not present (after 10 or more minutes of searching)
	3	**2**	**1**	**0**
	Notes/Comments:			
1.5 Vegetation along cooridor (within floodplain)	☐ Dramatic compositional species difference between upland and riparian corridor ☐ Distinct riparian corridor exists along entire reach ☐ Riparian, aquatic or wetland species dominate entire reach	☐ Distinct riparian corridor exists but not along entire reach ☐ Compositional species difference between upland and riparian corridor ☐ Riparian species interspersed with upland species	☐ Minimal compositional species difference between upland and riparian corridor ☐ Vegetation growing along the riparian area occurs in greater density or grows more vigorously than in the adjacent uplands	☐ No compositional species difference between upland and riparian corridor ☐ Vegetation growing along the riparian cooridor does not occur in greater density or grow more vigorously than in the adjacent uplands
	3	**2**	**1**	**0**
	Species Observed and Notes/Comments:			
1.6 Rooted Upland Plants in Channel	☐ Rooted upland plants are absent within the streambed/thalweg	☐ There are a few rooted upland plants within the streambed/thalweg	☐ Rooted upland plants are consistently dispersed throughout the streambed/thalweg	☐ Rooted upland plants are prevalent within the streambed/thalweg
	3	**2**	**1**	**0**
	Species Observed and Notes/Comments:			
			SUBTOTAL (1.1-1.6)	

1.7 Sinuosity of Segment (for length no less than two meanders)	☐ Calculated ratio > 1.4 ☐ Numerous closely spaced bends ☐ Few straight sections	☐ Calculated ratio 1.4 <> 1.2 ☐ Mostly bends ☐ Some straight sections	☐ Calculated ratio 1.2 <> 1.0 ☐ Few bends ☐ Mostly straight sections	☐ Calculated ratio = 1.0 ☐ Completely straight
	3	2	1	0
	☐ Calculated ☐ Observed	Notes/Comments:		
1.8 Floodplain and Channel Dimensions	☐ Calculated ratio > 2.5 ☐ Minimally confined ☐ Wide, active floodplain	☐ Calculated ratio 2.5 <> 1.2 ☐ Moderately confined ☐ Floodplain active during larger events	☐ Calculated ratio < 1.2 ☐ Incised/confined channel ☐ Flooplain absent or narrow ☐ Floodplain not connected	
	3	1.5	0	
	☐ Calculated ☐ Observed	Notes/Comments:		
1.9 In-Channel Structure: Riffle-Pool Sequence	☐ Frequent number of riffle and pools observed throughout reach ☐ Obvious transition between riffles and pools	☐ Less frequent number of riffle and pools ☐ Transition between riffles and pools difficult to distinguish	☐ Mostly has areas of pools or of riffles	☐ No riffles or pools observed
	3	2	1	0
	Notes/Comments:			
			SUBTOTAL (1.1-1.9)	
1.10 Particle Size or Stream Substrate Sorting	☐ Particle sizes in the channel are noticeably different from particle sizes outside the channel in the flood-prone area. ☐ Clear distribution of various sized substrates in the stream channel.	☐ Particle sizes in the channel are moderately similar to particle sizes outside the channel in the flood-prone area. ☐ Various sized substrates are present in the stream channel. ☐ Higher ratio of larger particles (gravel/cobble)	☐ Particle sizes in the channel are similar or comparable to particle sizes outside the channel in the flood-prone area. ☐ Substrate sorting is not readily observed in the stream channel.	
	3	1.5	0	
	☐ Calculated ☐ Observed	Notes/Comments:		
1.11 Hydric Soils Within Flood-Prone Area	☐ Hydric soils were observed in reach	☐ Hydric soils were not observed in reach		
	3	0		
	Notes/Comments:			
1.12 Sediment on Plants and Debris	☐ Sediment found readily on plants and debris in: ☐ channel ☐ streambank ☐ floodplain	☐ Sediment found but not prevalent on plants and debris. ☐ Sediment mostly accumlated on plants and debris in pools	☐ Sediment on plants and debris is isolated in small amounts along the sample reach.	☐ No sediment is present on plants or debris.
	1.5	1	0.5	0
	Notes/Comments:			
1.13 Seeps and Springs	☐ Seeps and/or springs present in reach	☐ Seeps and/or springs not present in reach		
	1.5	0		
	Notes/Comments:			
1.14 Iron Oxidizing Bacteria/Fungi	☐ Iron-oxizing bacteria/fungi present in reach	☐ Iron-oxizing bacteria/fungi not pressent in reach		
	1.5	0		
	Notes/Comments:			
			TOTAL POINTS (1.1-1.14)	

Total <9, the stream is determined to be EPHEMERAL.
Total ≤9 and <12, the stream is determined to be INTERMITTENT until further analysis indicates otherwise
Total ≥ 12.0 and ≤ 19.0, the stream is determined to be INTERMITTENT
Total > 19.0 and ≤ 22.0, the stream is determined to be PERENNIAL until further analysis indicates otherwise
Total > 22.0, the stream is determined to be PERENNIAL.

EXHIBIT D