

# International Boundary and Water Commission

United States and Mexico

United States Section

4191 N. Mesa, El Paso, TX 79902



## Requirements for Projects On the Rio Grande and Colorado River Floodplains

### USIBWC Directive SD.II.01031-M-1 Appendix H

#### Table of Contents

1. General Conditions for all Projects. ....	1
2. Reports. ....	2
3. Drawings. ....	3
4. Conditions. ....	3
5. USIBWC Resources and Information. ....	4

The purpose of this document is to present additional criteria and guidelines for the application, review, approval, and inspection of construction activities not performed by or for the United States Section, International Boundary and Water Commission (USIBWC) which is located within the floodplain of any international reach of the Rio Grande or Colorado River. See "*Appendix A-Design and Construction Requirements for All Projects*" for general requirements covering all projects including those affecting floodplains.

Most of the land affected by this document is not owned or controlled by USIBWC but is instead owned privately.

#### 1. General Conditions for all Projects.

- A. The "1970 Treaty to Resolve Pending Boundary Difference and Maintain the Rio Grande and Colorado River as the International Boundary" (23 UST 371 and implemented by 22 YSC §277d-34) requires that both the United States and Mexico protect the other country against adverse hydraulic impacts (Article IV).
- B. In river reaches without levees, threshold limits for maximum water surface elevation (WSE) increases are a maximum of 3 inches in urban areas and 6 inches in rural areas. WSE increase is the difference between the proposed and existing condition WSE. The WSE increases are determined for the IBWC design flood. In locations where the IBWC design flood is not defined, the 100-year WSE is used.
- C. In river reaches with levees, there shall be no increase in the WSE values in the proposed condition.
- D. Hydraulic modeling on the Rio Grande shall be based upon these design flows:

Caballo Dam to Trujillo Canyon (32°50'35"N 107°17'48"W)	5,000 cfs
Trujillo Canyon to Montoya Arroyo (32°49'39"N 107°18'18"W)	12,700 cfs
Montoya Arroyo to Green Canyon/Tierra Blanca Creek (32°48'15"N 107°18'15"W)	15,900 cfs

Green Canyon to Sibley Canyon (32°47'10"N 107°18'14"W)	15,800 cfs
Sibley Canyon to Jaralosa Arroyo (32°46'14"N 107°17'26"W)	24,300 cfs
Jaralosa Arroyo to Arroyo Cuervo (32°43'26"N 107°16'07"W)	25,200 cfs
Arroyo Cuervo to Placitas Arroyo (32°40'42"N 107°09'50"W)	24,300 cfs
Placitas Arroyo to Angostura Arroyo (32°39'20"N 107°05'46"W)	21,300 cfs
Angostura Arroyo to Rincon Arroyo (32°39'15"N 107°04'16"W)	19,500 cfs
Rincon Arroyo to Broad Canyon (32°32'11"N 106°59'08"W)	24,300 cfs
Broad Canyon to Faulkner Canyon (32°30'04"N 106°56'33"W)	20,800 cfs
Faulkner Canyon to Leasburg Dam	19,300 cfs
Leasburg Dam to Shalem Colony Bridge	19,200 cfs
Shalem Colony Bridge to Mesilla Dam	18,400 cfs
Mesilla Dam to Vinton Bridge	17,400 cfs
Vinton Bridge to Canutillo Bridge	14,600 cfs
Canutillo Bridge to Borderland Bridge	14,200 cfs
Borderland Bridge to Courchesne Bridge	13,400 cfs
Courchesne Bridge to American Dam	12,800 cfs
American Dam to Ft Quitman, TX	11,000 cfs
Ft Quitman, TX to above Rio Conchos	8,750 cfs
Rio Grande below Rio Conchos	82,500 cfs
Rio Grande at Johnson Ranch near Castolon, TX and Santa Elena, Chihuahua	82,900 cfs
Rio Grande at Foster Ranch near Langtry, TX and Rancho Santa Rosa, Coahuila	192,000 cfs
Rio Grande below Amistad Reservoir near Del Rio, TX and Cd. Acuna, Coahuila	81,500 cfs
Rio Grande at Del Rio, TX and Cd. Acuna, Coahuila	122,900 cfs
Rio Grande near Jimenez, Coahuila and Quemado, TX	139,000 cfs
Rio Grande at Eagle Pass, TX and Piedras Negras, Coahuila	280,000 cfs
Rio Grande at Laredo, TX and Nuevo Laredo, Tamaulipas	181,227 cfs
Rio Grande below Falcon Dam near Falcon, TX	113,000 cfs
Rio Grande at Rio Grande City, TX	250,000 cfs
Anzalduas Dam to Retamal Dam	130,000 cfs
Retamal Dam to the Gulf of Mexico	20,000 cfs

E. Hydraulic modeling on the Colorado shall be based upon the following design flow:

Colorado River at Morelos Dam, Yuma, AZ	140,000 cfs
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## 2. Reports.

A. A Hydraulic Modeling Report is required indicating that the design flood water surface does not increase beyond the threshold limits and that the maximum deflection of flood flows by the project to either country shall not exceed +5%.

- B. A Design Report may be required to prove that Proponent's work will not negatively affect USIBWC structures (including levees) or property. See "[Appendix E-Design Report Requirements](#)" for guidance on Design Reports.
- C. Work within the floodplain may require concurrence with Mexico. This concurrence may require weeks or months of communications. Design work may continue during this period, but in no instance, shall construction proceed until concurrence is reached with Mexico.
- D. See "[Appendix F-Hydraulic Modeling Methodology](#)" for guidance on Hydraulic Modeling Reports and hydraulic modeling.

### **3. Drawings.**

- A. USIBWC-controlled property boundary shall be clearly shown on Proponent's drawings.
  - (1) USIBWC-controlled property includes all property for which USIBWC holds a property interest including, but limited to, USIBWC property and land for which USIBWC holds an easement for flowage, flood control, or other use.
- B. Project coordinate system, survey units used, datum, and grid to ground conversion shall also be shown.
- C. Drawings shall be of sufficient detail to determine exactly what is proposed, how it is to be constructed, and by whom.
- D. In any operation involving earthwork, such as an excavation, cross sections and a profile of the proposed work must be furnished.
- E. Any drawings showing project or project component interaction with USIBWC structures shall be drawn to scale.
- F. Drawings must be signed and sealed by a professional engineer, duly licensed in the state(s) where the project is to be constructed.

### **4. Conditions.**

- A. Proponent's project shall not hinder or impair USIBWC's ability to perform maintenance or flood operations.
- B. The USIBWC does not assume any responsibility or liability regarding damages that could be caused to the work, property, or persons in the project area as a consequence of river flood flows or the surface conditions of USIBWC-owned property. The USIBWC does not warrant that any of its property is suitable for any type of work or activity and project proponents are responsible for assessing the condition of the land before commencing work.
- C. Any damage caused by the proposed works to either the banks of the river, USIBWC's structures, or USIBWC's property shall be repaired by Proponent, at the Proponent's cost, to the USIBWC's satisfaction.
- D. The USIBWC will not alter its normal or flood operations criteria as a result of the proposed works.

E. Proponent is responsible for keeping their structures free of debris accumulation at all times. Proponent shall dispose of all debris in accordance with all applicable environment laws and regulations. In addition, Proponent is responsible for all costs associated with debris removal.

**5. USIBWC Resources and Information.** Requirements for work, forms, and standard drawings are available on USIBWC's website at [www.ibwc.gov/resources-info/](http://www.ibwc.gov/resources-info/).

A. The following documents are available for download on that site:

- (1) Appendix A - Design and Construction Requirements for All Projects
- (2) Appendix B - Land Boundary Project Requirements
- (3) Appendix C - Requirements for Projects on or Affecting a USIBWC Flood Control Structure
- (4) Appendix D - Minimum Levee Testing Requirements
- (5) Appendix E - Design Report Requirements
- (6) Appendix F - Hydraulic Modeling Methodology
- (7) Appendix G - Reseeding USIBWC Property
- (8) Appendix H - Floodplain Requirements

B. Please contact our Realty Office ([realty@ibwc.gov](mailto:realty@ibwc.gov)) to discuss which requirements apply to your project. Do not wait until you are ready to construct you project. Contact them well in advance so they can discuss our requirements.

**Approved:**

**RAMON MACIAS** Digitally signed by RAMON MACIAS  
Date: 2024.07.15 09:15:19 -06'00'

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Ramon Macias, III, P.E. Engineering  
for  
Dr. Maria-Elena Giner, P.E.  
Commissioner

July 15, 2024

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Date