

CITY OF MILES CITY APPEAL ISSUE	FEMA RESPONSE	CITY OF MILES CITY COMMENT ON RESPONSE
<p><b>Coding of City of Miles City's Issues / Basis of Appeal</b></p> <p>A. December 23, 2008 Appeal Letter</p> <p>B. February 3, 2009 Clarification of Appeal Letter</p> <p>C. March 9, 2009 Supplemental Issues</p> <p>## Page number . Paragraph number (starting at top of page)</p> <p>A.3.2 12-23-08 letter, page 3, paragraph 2 (example)</p>	<p><b>Coding of FEMA's response to Issues</b></p> <p>1 Numerical Section Heading</p> <p>1.1 Section number . Paragraph number ("RESPONSE" text only)</p>	

1 Discrepancies in BFEs for Split-flow Areas and Along the Yellowstone River		
<p>A.2.4 The Preliminary DFIRMs provide base flood elevations (BFEs) that were determined by analyzing several possible breaches of the levees along the Tongue River. Each breach source is identified as a "split" and each split is given a unique label (1, 2A, 2B, 2C, 3A, 3B, 3C).</p> <p>A.2.5 Each split contains unique BFEs that are, in several instances, significantly different from the BFEs figured for adjacent splits.</p> <p>A.2.6 ... it is not physically possible for adjacent areas of similar topography that are not separated by physical barriers to experience vastly different flood levels under the same conditions.</p>	<p>1.1 <b>PARTIALLY ACCEPTED:</b> FEMA concurs with the Miles City analysis for the areas between Splits 2B and 2C and between Splits 3B and 3C, and has...thus revising BFES and eliminating large BFE discrepancies along gutter line</p>	<p>The City is pleased to see that the revision resulted in reductions of the SFHA in downtown and in the southeast region.</p> <p>However, it is felt that additional analysis and revisions are needed along Split 3A and 3B as they extend east too far. Flood water from the Tongue River will be inclined to flow to the north (down slope to the TR Slough and the Yellowstone River basin. The profile base lines of Split 3A and 3B warrant further review by FEMA and its consultants to determine if additional modification or relocation of the projected "split" base lines in a manner similar to the Splits 2B and 2C.</p> <p>In addition, the City of Miles City is requesting to be provided with the Geographic Information System and any other data pertaining to FEMA's computation of the DFIRM and FIS, and information detailing FEMA's data collection and modeling method. This request is made in accordance with 44 CFR Sec. 66.5(f) and Section 2(2)(b) of Section 76-5-201 MCA pertaining to the obligation of DNRC to notify local officials of information concerning data obtained and methods employed during the development of the flood insurance study, and the progress of surveys, studies, investigations and of proposed findings.</p>
<p>B.1.3 ...along certain portions of the Yellowstone River dikes where the differences between BFEs on the river side versus the land side of the dike on the as high as nine feet. This leads to a situation where a builder would be required to elevate a structure higher on the land side of the dike (the "protected" side) than the river side. (modified from 12/23/08 letter)</p>	<p>1.2 <b>REJECTED:</b> The differences in BFEs between the land side and river side of the Yellowstone River levee are valid and consistent with FEMA's Guidelines.</p>	<p>The City remains skeptical of the analysis in this area and does not agree that BFEs on the river side of the levee with the levee extant can be lower than BFEs on the land side of the levee in a scenario where the levees have been breached. Further explanation and documentation of FEMA's analysis and modeling leading up to this conclusion is requested.</p>

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2	<b>Floodway Along the Yellowstone River</b>		
A.4.2	the DFIRM floodway boundaries reflect the results of a theoretical model rather than real-world boundaries posed by actual geographic features.	2.1 <b>REJECTED:</b> <i>As defined in the NFIP regulations (44 CFR 59.1), the regulatory floodway ""means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water-surface elevation more than a designated height." (continues on...) Thus the regulatory floodway delineated along the Yellowstone River was modeled and mapped correctly and in accordance with FEMA's Guidelines ... and prescribed professional standards.</i>	The channel locally known as the Tongue River Slough is the natural channel of the Tongue River and would appear to meet the definition of an "other water course" per 44 CFR 59.1. This channel conveys water and is the lowest land surface within the area protected by the existing levee system. In the event of a 100-year flood, floodwater will drain from the identified floodway area into the Tongue River Slough, which will then carry it to the Yellowstone River channel. Floodwater will not be conveyed over the higher land located between the Slough and the Yellowstone River channel. Photographic evidence of the 1944 flood provides historic support of this phenomena. Further scientific and technical support of this conclusion is provided by FEMA's HAZUS analysis entitled "Miles City, MT, Estimated Water Depth Inside Structures, Preliminary DFIRM". The City continues to maintain that the theoretical approach to defining the Floodway, as performed by FEMA and its consultants, resulted in an artificial designation of the floodway area that does not accurately reflect actual conditions. Floodway designation carries with it significant real-world regulations and restrictions which impact land value and could lead to costly legal challenges. Therefore, the floodway boundaries as promulgated by FEMA need to be revised to more accurately reflect the actual (rather than theoretical) area that will be inundated by and convey floodwater during a 1% flood event.
A.4.3	The area along the Yellowstone River is relatively high in elevation and does not exhibit the greatest risk of flooding. This area has historically been called the Island because of its elevation is higher than the Yellowstone basin on one side and the Tongue River slough that separates it from downtown Miles City. This body of comparatively high land is within the designated "floodway" on the preliminary DFIRM, yet the majority of the lower slough areas that have functioned as flood channels during floods and serve as part of Miles City's stormwater drainage system are located outside the designated floodway boundary.	2.2 <b>REJECTED:</b> <i>The floodplain boundaries and BFEs for the historical Tongue River channel known as the "Tongue River Slough" were computed as part of the TR Split Flow 1 hydraulic model... which was created to model the "without levee" levee scenario.... Adding a floodway to TR Split 1 would produce a floodway that does not meet the definition of a floodway under State Statutes and Federal Regulations. Thus...approved FEMA Guidelines and prescribed professional standards.</i>	The City is considering the development of a provision within the new floodplain management ordinance that would create a variance process to allow property owners on the "Island" to build in compliance with Federal Standards rather than the more restrictive state standards. However, cost of administering and regulating "Island" properties on a case-by-case basis will be excessive for both the individual citizens and the City. By exempting itself from performing an economic impact analysis under the provisions of 5 U.S.C. 605(b), FEMA has failed to recognize the significant economic impact associated with property values on the Island (which will have a direct financial impact on City, County and School District, all of which meet the definition of "small entity" under the Federal Code), and the significant administrative costs that will be borne primarily by the City of Miles City.  The City requests that FEMA recognize that due to the severe repercussions of not participating in the NFIP, the City has no choice but to adopt the DFIRM promulgated by FEMA and incur the costs described in the above comments, which will have a significant impact on the City. Therefore, the rational that an economic impact analysis is not required is in error, and one should be performed prior to any further processing of the DFIRM and FIS.
A.4.4	The fact that much of the area designated as "floodway" on the DFIRM is actually at low risk of flooding is supported by two readily available bodies of evidence. - Aerial photographs of the 1944 flood clearly show that most of the Island is high and dry, while the winding low area locally referred to as the Tongue River slough is under water, and - The HAZUS-MH risk analysis performed by FEMA indicates relatively low water depths on the Island during a 1% flood event, whereas the anticipated depths in the slough areas are significantly deeper.	<b>not addressed</b>	The City is of the opinion that under FEMA's stated mission for the NFIP program and the specific definition of "Floodway" provided in 44 CFR 59.1, FEMA has a basic health, safety and welfare obligation to address the fact that land adjacent to the Tongue River Slough is at equal or greater risk than the majority of property on the "Island". The relative risk associated with structures in these two areas is well illustrated by FEMA's HAZUS study (Miles City, MT, Estimated Water Depth Inside Structures, Preliminary DFIRM). Strictly regulating "floodway" areas that exhibit a lower risk than adjacent "Slough" areas, while subsequently allowing development on the higher risk areas could expose the City to legal vulnerabilities from two different angles (i.e.; unreasonable taking of development rights at one end, failure to regulate/notify for a known danger at the other).  FEMA's response has left the City alone to conduct the hydrologic and engineering work necessary to properly identify the boundaries of the Tongue River Slough "floodway", which constitutes an expense that the City, as a small entity, does not have the financial capacity to fund. By exempting itself from performing an economic impact analysis under the provisions of 5 U.S.C. 605(b), FEMA has failed to recognize the significant economic impact associated with these issues.  The City requests that FEMA recognize that due to the severe repercussions of not participating in the NFIP, the City has no choice but to adopt the DFIRM promulgated by FEMA. Therefore, the rational that an economic impact analysis is not required is in error, and one should be performed prior to any further processing of the DFIRM and FIS.

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3	<b>Floodplain Boundaries</b>		
A.5.5	The area at the southern end of South Strevell Avenue (between Tongue River split 3C and Interstate 94) is designated Zone B on current FIRM Panel No. 3000014 0005 C (ca. 1983), but it is not included in the SFHA on the preliminary DFIRM panel 0664. This area was excavated for fill material during construction of Interstate 94 and therefore has a lower surface elevation than surrounding areas that are depicted in the SFHA. In addition, an underpass connects this area to land on the other side of Interstate 94 that is also shown as being within the SFHA. Areas at same or higher elevation to the excavation pit should either be removed from the SFHA or the excavated area should be added in.	3.3 <b>REJECTED:</b> Both FEMA and USACE have reviewed the area at the southern end of S. Strevell in detail and determined that it was mapped appropriately.....	The City has looked very closely at this issue and again affirms that if the BFE in the area south of I-94 exceeds the surface level of Cemetery Road, as shown on the DFIRM, then the water will definitely flow downslope through the underpass and flood the gravel pit area on the north side of I-94. The City has also located a 24-inch drainage culvert beneath I-94 that connects the two areas. In addition to the culvert, there is a drainage ditch that runs parallel to I-94 from the Tongue River channel to this basin that was placed to the specific purpose of draining this basin when flooded.  Coming from the direction of the Tongue River, the City has not been able to locate a rise in the land between the old Tongue River channel and the gravel pit that would appear to be significant enough to prevent inflow of floodwater from that source. The City is reasserting its notification to FEMA that the analysis in this area conducted to date is flawed and needs to be re-evaluated.
A.5.6	FEMA [has identified] small areas, or “isles”, within special flood hazard areas that have elevations slightly above the BFEs determined for those areas. The great majority of these isles are so small that they affect only a portion of the property or properties. ... The City therefore recommends that FEMA review each isle to determine if any properties are wholly removed from the SFHA. If there are such properties, the isle should remain. If the isle does not result in the removal of at least one entire property from the SFHA, then the isle should be removed from the map and be designated as part of the SFHA, consistent with actual practices under the NFIP program.	3.1 <b>REJECTED:</b> The delineation of floodplain boundaries must be based on the computed water surface elevation and associated topographic data. ....	The City accepts that FEMA must comply with its standard in this area, but remains convinced that delineating the "isles" on the DFIRM panels creates a significant risk of misinforming the public regarding whether or not specific properties are within the SFHA as determined under the controlling flood profiles contained in the FIS.  Conflict between the two documents creates an opportunity for confusion and erroneous conclusions because properties shown as being "out" of the SFHA on the DFIRM can be determined to be "in" when BFEs are calculated using the flood profiles in the FIS (which are the controlling regulatory document). In addition, the prevailing practice among financial firms is to consider a property "in" the SFHA if any portion of the property is within the boundaries of the 1% flood event as mapped on the DFIRM.  In recognition of these factors, continuing to show the "isles" on the DFIRM seems counterproductive to informing property owners of the potential flood risk to their property and encouraging them to take proper steps to accurately determine whether their property is located within a SFHA.
A.6.2	should FEMA’s review of the BFEs (as previously requested in the “appeal” section of this letter) result in a reduction of projected flood elevations for any of the splits, then the flood fringe boundaries will need to be amended accordingly.	<b>SOME IMPACT:</b> The 1% floodplain boundaries have changed slightly such that the following areas are now out of the proposed SFHA: see maps - most of the downtown area, including the fire site, City Hall, the Courthouse, the Depot, and the Cattle-Ac restaurant - a strip of land approximately 1 block wide running parallel to South Strevell from Batchelor to Wilson St.	The BFEs on the splits east of the Main Street underpass are ~4 feet greater in elevation than the BFE west of the Main Street underpass. As such, any flow of water on the east side would logically end its migration of northeasterly flow at that point and seek its own level by flowing to the lower BFEs on the west side of the Main street underpass. The underpass presents a major water conveyance that apparently was overlooked. The City maintains that the underpass effectively reduces the impact of that a 1% flood event would have on the section of town further north and east. In addition, the band of higher ground that extends between Merriam and Stacy Avenues from Stower to Leighton Streets would act as a natural barricade to water flowing from the Tongue River, thus providing additional protection to areas located to the northeast of this area. Thus, the City maintains that the Tongue River Split 3A as originally depicted on the Preliminary DFIRM continues to extend further northeast than it should, and therefore the analysis in this area of the city is flawed and needs to be re-evaluated.  The City's comment pertaining to FEMA Response 1.1 also applies to this issue.

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4	<b>Changes to Names or Locations of Manmade Features</b>		
	Various changes noted on attachment to 12/23/08 appeal letter	4.1 FEMA will revise the DFIRM panels as appropriate.	The City recommends removing the label "Yellowstone Boulevard" from the Yellowstone levee. The road on the levee, referred to locally as "the dike road," is gravel and is not maintained by the City as a dedicated street. Correcting the map will also prevent confusion with Yellowstone Avenue which runs parallel to the BNSF tracks and Atlantic Avenue on the Southwest side of the City.

5	<b>Discrepancies in BFEs Along the Tongue River</b>		
B.1.4.1	the Tongue River from the I-94 bridge to the Pacific Street Bridge - 1) What factor(s) caused the BFEs increase so significantly near the Tongue River?	<b>ANSWERED</b> 5.1 Improved mapping techniques 5.2 updated topographic data, hydrologic computations, and hydraulic analysis.	The elevations used in the DFIRM and FIS need to be correlated with known elevations. Therefore, the City is requesting to be provided with the GIS and any other data pertaining to FEMA's computation of the DFIRM and FIS, and information detailing FEMA's data collection and modeling method. This request is made in accordance with 44 CFR Sec. 66.5(f) and Section 2(2)(b) of Section 76-5-201 MCA pertaining to the obligation of DNRC to notify local officials of information concerning data obtained and methods employed during the development of the flood insurance study, and the progress of surveys, studies, investigations and of proposed findings.
B.1.4.2	the Tongue River from the I-94 bridge to the Pacific Street Bridge - 2) Since those factors do not result in similar increases throughout the floodplain, are they legitimately included in defining a 1% chance flood event?	<b>not addressed</b>	

6	<b>Discrepancies in BFEs and Flow of Floodwater</b>		
C.2.3	(1) Panel 0663 includes two closed basins west of the Tongue River - flood water as modeled in this area appears to run perpendicular rather than parallel to the flood source consistent with the natural slope of the ground	<b>REJECTED:</b> All cross sections were placed perpendicular to the direction of flow during the base flood event. The BFEs computed by the hydraulic model were plotted on the map panels to be parallel with the cross sections in the model. Therefore, the BFE orientations on the DFIRM are consistent with FEMA's Guidelines. 6.1	The flood source for those areas west of the Tongue River (except south of I-94) and the anticipated direction of flood water flow needs to be identified.  The City's comment pertaining to FEMA Response 1.1 also applies here.
C.2.4	(2) Panel 0664 includes an area south of Interstate 94 - flood water as modeled in this area appears to run perpendicular rather than parallel to the flood source consistent with the natural slope of the ground	<b>REJECTED:</b> All cross sections were placed perpendicular to the direction of flow during the base flood event. The BFEs computed by the hydraulic model were plotted on the map panels to be parallel with the cross sections in the model. Therefore, the BFE orientations on the DFIRM are consistent with FEMA's Guidelines. 6.2	The flood source for those areas west of the Tongue River (except south of I-94) and the anticipated direction of flood water flow needs to be identified.  There is a significant chance that the direction of flood drainage as currently analyzed by FEMA is in error due to the Cemetery Road underpass, a 24-inch drainage culvert, and a drainage ditch that runs parallel to I-94 from the Tongue River channel to this basin that was excavated for the specific purpose of draining this basin when flooded. The DFIRM does not reflect the existence or effects of any of these three features. (Refer also to comments under FEMA Response 3.3)  The City's comment pertaining to FEMA Response 1.1 also applies here.

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7	<b>Conflicts Between the FIS Report and DFIRM</b>		
C.2.6	(3) The Flood Insurance Study (FIS) 21P, near Cross Section E and upriver, does not appear to coincide with the DFIRM as there appears to be discrepancies in the BFE's with BFE's in the Yellowstone River channel proper being of up to 8 feet lower in elevation than adjacent land BFE's.	7.1 <b>REJECTED:</b> <i>Because of rules for plotting BFEs in the FEMA's Guidelines, the BFEs on a FIRM may not always correspond exactly with the elevations shown on the flood profiles in the FIS report.</i>	The City is required to adopt both the DFIRM and the FIS. These two documents were developed using varying data sets of topographic information. The City remains concerned that utilizing two documents that are not consistent with each other as the basis for will result in difficult and potentially inconsistent administration of the ordinance. In short, it will be difficult to consistently and uniformly execute "good public policy" based on these documents.  At best the City would like to see greater consistency between the two documents. At the least, the City requests that FEMA identify and remove the inconsistent features from the documents? (e.g., remove BFEs from the DFIRM)
C3.1	(4) The FIS tables do not indicate the presence of the small "isles" that are completely within the 1% flood plain yet are represented on the preliminary DFIRM as having a surface elevation above the BFE. The DFIRM is therefore inconsistent with the FIS.	7.2 <b>REJECTED:</b> <i>The floodway widths in the Floodway Data Tables in the preliminary FIS report are in a agreement with the floodway widths shown on the DFIRM. The small mapped areas that are above the BFEs do not affect these floodway values.</i>	See comments pertaining to FEMA Responses 2.1 and 2.2

NONE Economic Impact Analysis			
C.4.3	It is clear to us at the local level that FEMA's determination that the proposed BFE determinations have no economic impact is in error.	<b>not addressed</b>	
A.4.6	the theoretical floodway depicted on the map contains an existing densely populated neighborhood along with several undeveloped lots. Therefore, a heavy demand for variances to the floodway regulations can be anticipated. Since the designated floodway does not actually function as a floodway, the administrative demands and financial costs associated with processing the expected variance requests reflects an expensive and largely unnecessary burden that the City will be forced to carry for many years.	<b>not addressed</b>	(The following is excerpted from the Federal Register announcement of the 90-day comment period): <i>Pursuant to the provisions of 5 U.S.C. 605(b), the Director for Mitigation, to whom authority has been delegated by the Director of FEMA, hereby certifies that the proposed BFE determinations, if promulgated, will not have a significant economic impact on a substantial number of small entities.... Thus, this action, only forms the basis for future local actions. It imposes no new requirement; by itself, it has no economic impact."</i>
A.5.2	it would not be prudent for the City (as well as State and Federal agencies) to ignore the probability that area property owners will legally challenge the restrictive regulations. Many citizens have already complained that there is no viable reason for imposing more restrictive development regulations on the Island than for other similar areas of Miles City. Their complaints are underscored by the fact that the floodway as depicted on the preliminary DFIRM excludes areas that exhibit greater risks of flooding, thereby subjecting those areas to less stringent regulations. Miles City is concerned that a legal challenge would very likely prove to be both costly to litigate and difficult to defend for the reasons outlined above.	<b>not addressed</b>	The City requests that FEMA recognize that due to the severe repercussions of not participating in the NFIP, the City has no choice but to adopt the DFIRM promulgated by FEMA. Even as revised, the preliminary DFIRM results in nearly two-thirds of the City's incorporated area being designated as SFHA, including approximately 1,800 homes. The annual cost of obtaining flood insurance could result in an outflow of an estimated \$1.7 million from the City's local economy. In addition, 8% of the City lies within the proposed floodway which, under State of Montana floodplain management statutes, is prohibited from development. The City maintains that when these issues as well as others are rightfully considered, the rationale put forth by FEMA that an economic impact analysis is not required is in error. The City maintains that prior to any further processing of the DFIRM and FIS, FEMA must perform an economic impact analysis in accordance with the federal law.