



# **Burleigh County Water Resource District**

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## **Fox Island Flood Control Project Public Hearing Summary – September 7, 2016 General Questions, Responses and Additional Information**

- 1) Can you still opt out of the project?

No the project assessments have been certified and the votes are based on the ballots provided. There is the ability to protest their individual assessments at a second public hearing that occurs only after the project is approved.

- 2) Is this the assessment of \$3,000+ an annual assessment or is this over a period of time?

These are **one-time assessments of \$3,790.33 for construction or \$943.40 for those assessed only the operation and maintenance fund amount.** These costs will be paid back over a 20-year period on your tax statements. The actual annual assessment amount will vary depending on bond interest rates and final project costs.

The BCWRD has the ability to assess for future project operation and maintenance, however the initial O&M fund should cover those costs for a considerable period unless a major flood events occurs. The maximum O&M assessment is limited by the ND Century Code to a value equivalent to around \$45/annually for a \$250,000 residence. This is not anticipated to be necessary for some time based on the O&M assessment.

- 3) Does this project raise Larson Road?

No, Larson Road will not be raised and is not part of the project. It is already above the designated flood control elevation, which is the 20-foot stage.

- 4) When will results be tallied and when will people be notified?

The final votes will be tallied on October 11<sup>th</sup> and the residents will be notified after the Board meets October 14<sup>th</sup>. If the project passes you will be notified of the results and the next public hearing regarding your ability to protest individual assessments.

- 5) If you are not raising Larson Road, how will the project create a “closed” loop?

The flood control closures are based on a connection to high ground at the intersection of Tavis Road and Far West Drive and high ground located west of the south side of the Whispering Bay Bridge embankment. This is part of the Burleigh County Flood Control Plan, which is a collaboration of the City of Bismarck’s Riverwood Drive and Mills Avenue grade raises and the joint Burleigh County/City of Bismarck Tavis Road Grade raise and pump system.

- 6) What was the height of the trap bags during the flood?

The trap bags were approximately 4-5 feet in height with sandbags, but varied in top elevation depending on their location on the roadway. Generally, the top of trap bags was at around 3 to 4 feet above the 2011 flood event.

- 7) What is the elevation of the roadway at England Street & Burleigh Avenue?

The street elevation in this location is approximately 1636.8 (NAVD88 Datum), though this will be behind the flood protective measures being constructed. The 2011 flood event at this location was around 1635.7.

- 8) How much higher will the roadways be after this project?

This increase varies by location, but the general grade raise varies from nothing to around 2.3 feet. The earthen levee elevations range from 0 feet to a high of 7.5 feet.

- 9) Explain the Tavis pump system, the storage area to the east, and how it works during a Missouri River flood event and subsequent rainfall event?

This is a separate project completed by the City of Bismarck in cooperation with Burleigh County. During high water Missouri River events, the gates at Tavis Road will be closed to prevent backwaters from the river from entering the South Bismarck storm water channel. During this closure, no water will enter from the river, however storage of rainfall runoff from the City of Bismarck will occur upstream from the gate.

A 60 cubic feet per second stormwater removal pump system was included in this project. The use of the South Bismarck drainage channel, low areas in the oxbow and Riverwood Golf Course for storage from a rainfall runoff event will prevent flooding from occurring east of Tavis Road based on the designated design criteria. The pump system is sized to remove a 100-year rainfall event over a designated period of time. Available storage is around 500 acre-feet and we understand the 100-year event can be fully contained without adverse impacts to the residential structures behind the roadway. The waters can be removed to the level of the weir at Tavis Roadway or approximately elevation 1625.2.

10) What are the impacts to the residences east and west of Tavis Road during this pumping?

The upstream areas to the east will be protected by the ability to remove stormwater runoff associated with rainfalls and runoff from the City. The areas to the east of Tavis Road will not be impacted as the discharges from the pump systems can be easily accommodated by the oxbow channel with no adverse impacts.

11) Explain the internal drainage easement proposal and how that process will work?

There are natural drainage patterns within the Fox Island area. It is critical to maintain this drainage. The BCWRD will work with private landowners to secure easements in order to maintain a functional surface drainage system throughout the protected area. If the easements are not provided the BCWRD would need to consider other options.

12) Do we have to repay the Lincoln Township?

It is the BCWRD's understanding, at this time, that the funds provided by the Burleigh County Commission through Lincoln Township as part of the roadway grade raise project do not need to be repaid by the township.

13) Where is the actual construction going to occur?

Please see page 12 of 86, Figure 3 of the Preliminary Engineering Report  
[http://www.bcwrld.org/image/cache/Fox\\_Island\\_Preliminary\\_Engineering\\_Report8-8-16.pdf](http://www.bcwrld.org/image/cache/Fox_Island_Preliminary_Engineering_Report8-8-16.pdf)

14) What kind of storm event can the storage to the east of Tavis hold?

We understand that the containment is greater than the 100-year upstream rainfall event, which would be removed in a predetermined time frame.

15) People within the Operation and Maintenance assessment area – What benefit are they gaining from this project being built? Are they being protected from a flood event with this project being built?

Lots within the O&M district without the project would flood with a 2011 flood event, even with the existing Tavis Road and Mills Avenue gate closures in place. The proposed project would prevent surface waters from either a 2009 ice jam or 2011 flood from reaching these, as well as the other protected properties.

16) Total cost share - is this the highest cost share that has ever been seen?

The 73% state and combined 97% cost share is well above normal levels. The current cost shares through the State of North Dakota varies by location. Standard State Water Commission policy for flood control projects is 60%, but higher contributions have authorized through legislative action. Not unlike the funds provided for this project.

17) Begin & Completion Dates? Duration of Construction?

Pending approval of the applicable permits, the project would start in the Spring of 2017, with substantial completion by late fall of 2017. The actual completion timeline would be dependent on a number of factors, including the contractor, weather, start date and other factors related to the design that at this date remain unknown.

18) Is this project being built to FEMA Standards?

While the design will be in general compliance with FEMA standards, it does not provide the required three feet of freeboard above the 100-year (Base Flood Elevation). Therefore, flood insurance for residences located within the projected area is still required even after project implementation. The City of Bismarck is currently looking into participating in FEMA's Community Rating System. Completing this project would improve the City's flood protection rating and ability to reduce flood insurance premiums for these properties.

19) What will the parking, residential access and detours be like during construction?

These are issues that will be evaluated during final design. The Burleigh County Highway Department will have input on this process as it is their ROW. In addition, the BCWRD will work with landowners to coordinate the construction activities. Neighborhood meetings are being discussed as a means to mitigate or limit, to the degree practical, construction inconveniences.

20) Will this roadway look similar to Mills Avenue?

Yes, the physical appearance of the Mills Avenue grade raise is a good representation as to what the roadway will look like after project completion.

21) Explain the gate closure agreement with Southport?

This agreement is between the Southport Homeowners associations, Burleigh County and the City of Bismarck. This agreement and the operation of these gates is unrelated to the Fox Island Flood Control Project.

22) Can the levee be moved to the north of Gallatin and be placed along lot lines? Will this save the project money?

This question was raised prior to the meeting and then was reviewed to be able to adequately respond to this question. The estimated cost to relocate the levee to the proposed earthen alignment would add approximately \$425,000 to the project costs. As such it would also raise the assessment cost for those within the protected area who are paying for construction by around \$7,800. Therefore, this is not a viable alternative. It should be noted that the cost share funds for this project are fixed amounts, therefore any increase in costs will be borne by the special assessment district.

23) Are home prices going to be lower after this?

Many case studies have proven that there is a reasonable stabilization if not a measurable increase in residential home values after implementing flood protection. The reason is related not only to the protection provided, but the removal of uncertainties regarding future flood damages.

24) What water surface impacts will there be to the homes that are not protected if this project is built and there is another 2011 flood?

Preliminary modeling indicates the approximate increase in water surface profiles on the Missouri River from project implementation is around 0.04 feet or 0.48 inches. The North Dakota State Engineer policy states that the maximum amount that the water surface can increase is up to 0.1 feet or 1.2 inches, before easements will be required from affected properties.

25) What water surface impacts will there be to the homes that are not protected if this project is built and there is another ice jam?

There are numerous variabilities associated with ice jams, therefore it is difficult to predict/model what any individual ice jam may do. Earlier reviews considering a complete and full closure of the river estimated a value, however in context this is an unrealistic value as it would not occur.

26) Why did the project go on south Gallatin, instead of on north Gallatin?

The goal of the Burleigh County Flood Mitigation Plan was to provide and protect as many properties as practical, including providing improved access during flood events.

27) HEI/BCWRD seem to be upset at the landowners who petitioned out of the project, so they chose to place it on Gallatin instead to get back at them. True?

This is not true. The BCWRD looked at a number of alternatives prior to the 2011 event, then afterward evaluated alternatives that included the properties that have petitioned out of the project including those in the Harbor Drive area, along the north side of the oxbow and some along the Missouri River. When the landowners petitioned out of the project the BCWRD simply stepped back to review various alternatives outlined in the *Fox Island Feasibility Study, February 2012*. After further consideration of the protected area and costs the BCWRD selected a preferred alternative based on the Burleigh County Flood Projection Plan, and then the *Fox Island Preliminary Engineering Report, August 2006* was completed. The current project is in compliance with the state and local cost share funding that will be provided, if the project is implemented.

28) Impacts to the property owners during construction outside of the right of way?

There are any number of encroachments into the existing roadway right of way that will be removed by the project. In terms of impacts outside of the right of way, this will vary by location. There is the possibility that the roadway side slopes may need to blend into the yards, the extents will be determined during final design. Temporary construction easements will have to be granted by the homeowner for such work to take place.

29) “Replace Like and Kind” explanation

When a temporary construction easement is granted, all items disturbed by construction within your property will be replaced to equal or better condition/type.

30) Will any of the clay levee be placed on private property along Gallatin?

Generally, the answer is no, as the majority of the roadway grade raise will be located within the existing platted right of way. Where the levee will impact areas outside the roadway ROW temporary construction easements will be acquired from the respective landowner.

31) Can the BCWRD create private ring dikes for the individual land owners?

No, public projects are not developed nor funded for single individuals or properties.

32) Will I have direct access to my home during construction? Emergency Access?

The availability to provide direct access to residences during construction will vary throughout the project schedule. While the desire or goal may be to provide access at all times, due to the nature of this project, there will be cases where direct access is not possible for certain periods. Emergency access will be provided to all first responders at all times during construction, to the greatest extent practical.

The BCWRD will consider the use of neighborhood meetings, as well as individual meetings, prior to construction to work through the logistics of access.

33) Denial letter by COE to build closure at the river, explain?

The COE has never denied any application to construct the closure at the river on the oxbow. There were, however discussions with the COE a number of years ago and it was determined that the ability to secure a permit for a closure at the river at the end of the Oxbow. It would also be difficult and generally impractical to obtain in any reasonable period of time, and it would likely restrict recreational access to this area. Given those difficulties that option was not considered further.

34) Difference between a levee & a dike?

The definition was reviewed for clarification after the meeting. It is noted that levees protect land that is usually dry, but has a potential high risk for flooding. A dike on the other hand protects land that would naturally be underwater most of the time. This project would be a levee, while as an example a dike are the embankments that protect the City of Devils Lake.

**Note:**

On your ballot please enter the **entire parcel number** as shown on the assessment list.

**Example**      38-138-80-87-01-060