

Questions from the Community

Huntington Levee

(Updated 07/03/2014)



Community Meeting: Hydraulic Modeling of Cameron Run (June 25, 2014)

Hydraulic Modeling and Levee Elevation

1. How does the top of the levee compare to past storms?

The height of the levee is designed to protect against the 100-year (1-percent annual chance of occurring in any given year) storm and is higher than the water surface elevations produced by Hurricane Agnes, Tropical Storm Lee, and the June 2006 storm event. The levee height is based on the 100-year storm water surface elevation plus an additional three feet of freeboard.

2. Did you model the 2011 storm?

The 100-year storm event (event with a 1-percent annual chance of occurring in any given year) was modeled and the storm events that previously flooded community (including Tropical Storm Lee in 2011) were confirmed to be below the 100-year storm event.

3. Is the elevation of the levee (top of wall elevation) constant along the entire length of the levee?

The levee is comprised of a four foot I-wall and an earthen berm. The levee will be built to the required elevation (measured from sea-level) to protect the community from a 100 year storm event (event with a 1-percent chance of occurring in any given year) plus the additional "freeboard" height required for accreditation by FEMA as determined in the Cameron Run hydraulic modeling study. For this project these corresponding elevations are approximately 19.7 feet at the upstream (western) terminus and 17.0 feet at the downstream (eastern) terminus.

4. Has there been any additional siltation?

A survey was performed on the grades within Cameron Run in 2006. The survey was once again performed in 2013 in the exact same locations to determine if there was an increase in siltation. The results of the survey indicated that there was no increase in the siltation levels between 2006 and 2013, and an actual decrease occurred in some areas.

5. How do you factor in global warming when determining the height of the levee?

FEMA recently conducted a climate change study that predicted a 4-foot rise in the sea level by the year 2100. When this information was factored into the hydraulic model, the 100-year water surface elevation only increased by 0.2 feet at the upstream end of the levee and 0.4 feet at the downstream end of the levee.

6. Does the flooding at the George Washington Bridge impact Cameron Run?

As shown in the effective Flood Insurance Study for Fairfax County, Virginia and Incorporated Areas, dated September 17, 2010, the George Washington Bridge causes backwater flooding for the lower frequency floods along Cameron Run. For the higher frequency events (greater than a 100-year flood) the roadway is overtopped so flooding is controlled by the Potomac River backwater.

Levee Design and Construction Considerations

1. How is the park area being impacted by the levee?

The analysis of the interior drainage is the next step in the design. The full impacts will be known after the model is completed; however, it is expected that the park area will need to be lowered to add storage space for interior drainage. Due to the height of the groundwater in the park area, the maximum excavated depth is estimated to be no greater than 2 feet.

2. Do you anticipate that the park area will be inaccessible during construction? What about any other project phase?

During construction, there will be no access to the park area to protect the public from the large construction activities and

equipment. During design, there may be some additional investigations that need to occur, but the impact should be minimal.

3. Can you add information on the Huntington Levee website on how the park area will be impacted due to construction?

Information will be added to the website once the interior drainage model is complete and the impacts to the park are defined.

4. Can you excavate the park area enough to avoid water ponding on Arlington Terrace?

The flooding is based on the elevations. Per the Corp report, the goal is to limit the water level to 8.0 ft during a 100-year storm, which will still allow for some street flooding in Fenwick Drive and Arlington Terrace, but no structural flooding will occur. The lowest point of entry of any structures in the community is 9.1 feet. The groundwater elevations limit the depth that can be created for water storage in the park area. The final elevations will protect the homes from the interior drainage, but, there would still be ponding on Arlington Terrace.

5. Are steps being taken to maintain/protect trees?

The base dimension of the levee is 45 to 65 feet. In addition, 25 feet is required on both sides of the levee to be free of trees. There are trees that fall within this footprint that will need to be removed. We will, however, meet the code requirements including the Tree Ordinance for tree protection and tree cover and will include tree protection and erosion and Sediment controls in the construction documents.

6. At the January 2014 meeting the I-Wall was selected for the levee design. How is the wall maintained and is it less effective over time than a full earthen levee?

The I-wall is actually easier to maintain than the full earthen levee and has an expected life of 50 years. The I-wall minimizes the earthen levee, which requires mowing and inspections for animal burrows, rutting, erosion and tree growth. Since the I-wall is not a loaded wall, there is very little maintenance. Typical maintenance items include sealing and re-caulking any expansion joints and cracks that may occur.

7. Where is the soil coming from? Can you use soil within Cameron Run?

At this time, the location of the soil to construct the levee has not been identified. The soil does have to meet the soil property requirements and not all soil would qualify. In order to use soil within Cameron Run, the soil would need to meet the soil property requirements. Initial analysis of the soil indicates that it is not acceptable.

8. What are the key items that are required to be completed in order to get the project finished?

There are a number of steps that are required to be completed before the project can move into construction; many of them cannot be done concurrently. For example, the design must be substantially completed before it can be submitted for permit. The construction document must be 100 percent complete before bidding the project to a general contractor. The design must be far enough along in order to determine the properties impacted and the land required for acquisition and easements.

We have phased a number of the design areas to allow them to proceed and also been proactive in the land acquisition we know will be needed. The critical path for the project has also been identified and areas to address those tasks initiated. The goal throughout the process is to make quick, but informed and correct decisions having the full information with its impacts.

The community has been helpful in moving the project forward, as indicated with the decisions from the January 2014 community meeting.

9. In a best case scenario, when do you anticipate that the design will be complete?

The project schedule currently indicates the construction documents will be ready to bid in fall of 2016. There are multiple submittals and reviews in the design process. The first submittal is Schematic Design, which is scheduled for September 2014.

10. Is there a detailed schedule for the project and who is tracking the activities?

The project does have a very detailed project schedule using Microsoft Project that includes details on the design, permitting, utilities, bidding, and construction. A greater level of detail on the schedule will be provided on the website.

11. What land acquisitions are required?

Obtaining private property will be required as part of the levee project. At this stage of the design process we know of several lots at the end of Fenwick Drive that need to be acquired to tie the levee into high ground and Fairfax County has begun the process to acquire them. The majority of the property needed for the levee is owned by the Park Authority or Fairfax Water.

As the design of the levee is refined, we will better understand the need for any temporary construction easements that

may be required along Fenwick Drive to raise the roadway and any additional permanent easements that will be required for levee maintenance. No property is anticipated to be needed from the properties that front the park area.

Flood Protection

1. Is the flooding at Lake Barcroft an indicator that Cameron Run is going to flood?

Lake Barcroft is a state-regulated facility requiring the lake to have an operation and maintenance permit. One of the conditions of the permit requires the lake to maintain a constant water level and, therefore, rules out the use of the lake for detention. The lake is basically a pass through. The water levels coming through Lake Barcroft provide a gauge of the possible flooding and possibly a warning at Huntington, but is not any type of regulating system.

2. There have been a number of construction projects in the area including the Woodrow Wilson Bridge, Metrorail parking garage, and condo developments. That has caused an increase in stream siltation. What is Fairfax County going to do to minimize the amount of silt build-up? Is there a way to place a moratorium on construction until the levee is done?

There will not be a construction moratorium and there are no plans to dredge Cameron Run. Construction regulations have changed and are becoming more restrictive on the requirements for Erosion & Sediment controls, stormwater quality, and stormwater quantity. Studies have shown that the siltation in Cameron Run in the area of the levee have actually decreased; not increased. The sedimentation from construction sites is not going to create a new problem.

3. It is a long time between now and 2019, when the project is to be completed and we may have another significant event before the levee is installed. How is Fairfax County going to help us during this time?

Fairfax County monitors rainfall amounts and stream water levels using remote electronic gauges located in the Cameron Run Watershed. The county uses this information to provide projected flood warning updates to various websites at www.fairfaxcounty.gov/emergency/stay-informed.htm.

Materials are being prepared to help residents in the community to better understand the tools available for flood prediction, the limitations of those tools, and the county's existing flood response plan for Huntington. In accordance with the flood response plan, which was last updated in June 2014, the county will continue to provide flood warnings and assist with response actions such as the removal of vehicles from low lying areas and evacuating residents to safe locations.

Residents are encouraged to register to receive Fairfax Alerts at www.fairfaxcounty.gov/alerts/ and should specifically choose the option to receive the Fairfax County RiverWatch alerts for Belleview, New Alexandria and Huntington. Residents are encouraged to prepare for emergencies and have plans and supplies in place to withstand the first three days after an emergency. Emergency preparedness information is available at www.fairfaxcounty.gov/emergency/prepare/ or residents may call the Office of Emergency Management at 571-350-1000, TTY 711.

4. Can a siren/alarm system be used to notify the community of a possible flooding event? If the power goes out, I can not receive the warning messages?

A siren/alarm system is currently being evaluated. Sirens, when they work properly, can help situations, but they do have challenges with becoming a disturbance. Products are being investigated to find the best product that can provide the necessary alerts and warning. A link can be added to the Huntington Levee website to provide the status of the siren/alarm.

Community Meeting: Conceptual Design Alternatives (Jan. 17, 2014)

Design Alternative: Collection Drain (recommended) vs. Cut-off Wall

1. If maintenance is an issue for the collection drain option, what other alternatives could there be? How will the county ensure the drain is maintained?

While maintenance is a consideration with the recommended collection drain option, a standard annualized maintenance program would take care of the need for this design element. The program, yet to be designed, would include an annual check of the drain and, in addition, regular inspections following rain events. In the event a clog is discovered, it is simply a matter of flushing it out.

2. Please explain how the use of a cut-off wall would endanger basement flooding.

A cutoff wall is a solid, underground structure that penetrates beyond the gravel layer beneath the levee to stop the free flow of water under the levee. The concern with this is that installing a cut-off wall would cause the flow pattern of ground water to change to the point where it could potentially cause basement flooding in homes on the protected side of the levee. A

collection drain would re-channel that water to the pumping station where it would be pumped into Cameron Run.

Design Alternative: Pumping Station Location (recommended on the east side of the levee)

1. Were more than one pump / pumping stations considered for this project?

While the project team has always planned on just one pump station facility, the facility does house multiple pumps to move water from the protected side of the levee into Cameron Run during high water conditions when water cannot flow by its normal means.

2. Would protection be enhanced if we cut down more trees behind the homes and increase the ponding area?

The level of protection is determined by the height of the levee as it relates to Cameron Run. The size of the ponding area that is needed will be identified as part of the interior hydraulic modeling that will take place during the next phase of the project.

Design Alternative: Box Culvert (recommended) vs. Paved or Grass Drainage Ditch for Stormwater Diversion

1. What are the “bars” you refer to when talking about the Box Culvert?

The bars are a security measure to prevent people/children and large debris from entering the box culvert at either end.

2. Could you explain the difference between the completely underground and exposed box culvert options?

The box culvert is an underground concrete structure that runs parallel to the levee on the protected side in order to convey stormwater to the pumping station. The culvert can be completely underground with grass overtop so that it will be entirely masked from view. The alternative is to have the concrete roof exposed—essentially serving as another walking path at the base of the levee. The exposed option could also provide benefits in the way of maintenance access.

Design Alternative: Earthen Levee vs. Levee/I-Wall Combination (recommended)

1. How deep does the I-Wall go? Does it affect the groundwater similar to the cutoff wall condition?

The I-wall is about twice as deep as its height above the ground. In this case, it would be four feet tall and extend approximately eight feet into the ground from the top of the earthen levee. It would not penetrate as deep as the cut-off wall option and, therefore, would not impact the flow of groundwater

2. If you have a rain event that overtops the levee does the I-wall or Earthen Levee option provide better protection?

Either option will have the same level of protection (called armoring) against an overtopping event. Armoring protects the earth from eroding if the levee is overtopped. While the detailed design for this project is not yet completed, armoring generally is placed along the top of the levee and roughly 4 feet down the slope on either side. Armoring can be an underground design element and will be covered with earth, grass and the walking/bike path.

3. To what level of rain event will each design be able to protect the community?

Either option will be designed to meet the same height requirements for FEMA accreditation (the level of a 100 year storm plus three additional feet).

4. Does a wider levee (i.e. the earthen levee option) provide greater protection from erosion?

During a rain event, the water rises slowly and does not present a strong threat of erosion. The issue to be concerned with is a breach, or overtopping, the levee. With this consideration, both levee designs provide equal protection.

5. Why do the height measurements at various points along the levee differ?

The different height measurements for the levee are due to the ups and downs of the existing topography along the build site. In areas where the existing ground is higher, the levee will be shorter to meet the required height; and conversely, in areas where the existing ground is lower, the levee will need to be built higher to meet the required height.

6. Will there still be a bank on the waterside of the levee? With an I-wall will there be access to the bank?

There will be a bank on the water side of the levee. With the I-wall option, you would have to access the bank from either

end of the levee. There will be access gates, but these gates will only be for maintenance personnel. The placement of these gates would not impact the level of protection provided by the levee.

7. Will the bike path be included with both design options? Will it be narrower with the I-wall design?

Either option will include the same eight foot wide bike trail atop the levee.

8. Can you tell us about the maintenance plan for the I-wall design?

A maintenance plan will be completed and fine tuned as the detailed design is completed.

**Note: Based on community feedback, there were no objections to the county's recommended conceptual design alternatives: the drainage ditch, placement of the pumping station on the east side of the levee, a box culvert and the earthen levee/I-wall combination.*

Project Schedule Update

1. Can you tell us what "Winter 2017" means?

Winter is defined as January, February, March. We now anticipate the construction phase (Phase III) to begin in Winter 2017.

2. Aren't there people who can do the design and construction faster?

The design team has been selected and is under contract. Time would be lost to repeat the process with a new team. The team is comprised of experts in the field of levee design and construction and time would not be reduced with another team. The procurement of a design and construction contract must follow state and county procurement requirements.

3. What is meant by "bidding" in Phase II?

Bidding is the process by which a construction contractor is hired. Once the designs and specifications of the levee are complete, we prepare a bid package that conveys this information to would-be contractors. They then take this information and prepare a "bid" that would indicate the price they would charge for building the levee. The project is awarded to the lowest bidder.

Permits

1. Does the schedule include needed time to obtain required permits?

Yes. The various Federal, State and Local permits required and their processes for review are a contributing factor to the length of our current project time table.

2. Are there permits required from the City of Alexandria?

No permits are required from the City of Alexandria. We continue to coordinate with them on the design of the levee. Their chief concern is any backwater effect the levee may cause.

Accreditation

1. Will the levee be accredited?

The levee will be designed and constructed to meet FEMA accreditation standards. The county currently plans to coordinate with FEMA and submit the necessary accreditation application upon completion.

2. If sediment were to build up in Cameron Run and cause the loss of the accredited status, will the county work to get the levee re-accredited?

As with any infrastructure, there are any number of circumstances that may require future investment in order to fulfill the purpose for which it is built. If any such circumstance were to affect the levee, staff would present the maintenance need to the Board of Supervisors in order to approve the necessary investment as part of the county's Capital Improvements Plan.

Dredging & Other Alternatives

1. Should we dredge between now and 2019 when the levee construction is completed? Are there any other short-term fixes?

The recent data indicates that, at this time, there has been no increase in sediment in the area adjacent to the proposed levee over the past several years. There is no plan to dredge at present. Three key issues associated with dredging include cost, the sanitary sewer that runs under Cameron Run, and bridge abatements. The levee will be the long-term solution to

the flooding issues in the Huntington community. All effort and approved funding has been allocated for this project. There is currently no short-term fix identified.

2. Is dredging required to make the levee work properly?

Dredging at the levee outfall points may be necessary. The amount of dredging necessary will be determined once more detailed design documents are complete.

3. Can the methods used at 4 Mile Run be used on this levee design?

The purpose of the wall at 4 Mile Run is different than the purpose of our current project. The 4 Mile Run project was to convey surface water. This is a different situation altogether.

4. In general, why would a wall, similar to the retaining wall on the parking lot to the east of th site, not work in this case?

That particular wall would not be accredited by the Army Corps of Engineers for flood control. The system is subject to hydrodynamic forces both onto and beneath the structure that need to be managed to adequately protect the land behind the levee.

5. What of the anti-backup device in the sewer?

The back-up devices would not solve the flooding problem. The flood water enters the system through flooded basements.. Preventing the flooding from getting into the basement should solve the problem.

Project Marking/Modeling

1. Now that there is general consensus on key design elements on the levee, is there any way that the county could mark locations of the levee and pumping station on the field?

As the detailed design proceeds, staff will investigate how the levee location can be identified on the field. It would not be the entire length, but perhaps marking a smaller segment of the levee would be possible.

2. Can you provide a model that would depict the proposed levee’s performance during the 2011 flood event?

Yes. Now that major elements of the levee have been defined, we are proceeding to run hydraulic models that will be used in the final, detailed design of the levee. This information was reviewed at the June community meeting.

3. Will the hydraulic models account for the “damming” effect of the G.W. Parkway bridge? The two new culverts recently constructed?

Yes, the models will accurately reflect the downstream flow conditions. Survey data was gathered to account for the existing conditions along Cameron Run.

Other General Questions

1. Can you build an access road off of Hunting Creek Road with the townhouses there? Are there any easements left from when the townhouses were built?

Survey data indicates that it is possible to construct an access road from the end of Hunting Creek Road to the proposed pumping station. Final alignment of the road will be determined as part of the next phase of design. The area between Huntington Creek Road and the proposed pumping station is owned by the Fairfax County Park Authority. As we investigate this option further, we will confirm the existence of any easements still in effect.

2. How will the levee protect the homes?

The levee is being designed to prevent the rising waters from Cameron Run (up to a 100 year storm event) from flooding the homes in the Huntington Community. Stormwater runoff from the land side of the levee will be collected and pumped out into Cameron Run. While there could be some street flooding along Fenwick Drive, the levee will protect the homes against flooding.

3. Would Fenwick Drive be affected?

The elevation at the end of Fenwick Drive may need to be raised. More detail is being obtained for the final design. No elevation changes would be made to the homes.

4. How far back would the levee be from the homes?

The levee would be roughly 200 to 300 feet from the boundaries of the adjacent properties.

5. Will trees be preserved during construction?

While trees will need to be cleared in the construction of the levee, the project team's goal is to minimize any loss of existing trees. No trees may be located within 15 feet from the base of the levee.

6. If all of the most expensive design alternatives are selected, can we afford that with the allotted funding?

Without obtaining a detailed cost from the contractors, our best estimates are that the budget would be extremely tight.

7. How are you coming up with the estimated water levels for the 100-year storm event?

The 100-year storm event is defined as a storm that has a 1% probability of occurring in any given year. We are currently conducting extensive research through over 55 years worth of stream gage data to capture all recorded storm events. Based on the flood discharge rates of numerous past events, an estimated 100-year storm event can be calculated. The levee will be designed to a height that includes an additional three feet of space above the corresponding 100-year water surface elevation, as calculated in the hydraulic model for Cameron Run.

Community Meeting: Project Background and Overview (Aug. 1, 2013)

Project Timeline

1. What is the proposed timeline for designing and building the levee?

Based on the initial concept provided by the U.S. Army Corps of Engineers (CORPS), it is anticipated that it will take three to five years to design the levee with an additional two years for construction. The design of a levee and pump station is a complicated process that involves significant information gathering, detailed engineering design, complex hydraulic model analysis, utility relocation, federal, state and local permitting, coordination with various community stakeholders - both inside and outside of the Huntington neighborhood – and land acquisition from public and private land owners. Fairfax County understands the urgency of the project and has designated it as a high priority.

2. Can the county negotiate incentives for deliverables that are completed ahead of schedule?

County staff will evaluate the feasibility of creating a construction contract to provide incentives for early completion dates.

Levee Accreditation

1. Can the county guarantee that the levee will meet FEMA accreditation standards?

The levee will be designed to meet existing FEMA accreditation standards. The levee and pump station project will provide the homes in the Huntington neighborhood protection from the 100-year storm regardless of accreditation status.

Once the levee is accredited, the cost to maintain accreditation standards may necessitate additional investments in the levee. Any need for additional investment would be considered by the Fairfax County Board of Supervisors at the time these circumstances may arise. At this point, the county is unable to offer a guarantee as to what a future board may or may not support.

For additional information on flood insurance, visit the county's [Flood Insurance Web page](#).

2. Will the county take the siltation of Cameron Run into consideration with regard to the height of the levee for accreditation?

The main concern with regard to maintaining accreditation is the amount of sediment that may build up along the levee over time and reduce the required freeboard. The project team is currently conducting a thorough analysis of the amount of sediment build up over the past several years and, based on that information, the design team will look at ways to minimize loss of required freeboard.

a. Will the county be required to dredge Cameron Run? How will the county use the dredged material?

A small amount of dredging may be necessary. The extent of dredging required will be evaluated during the design process. Materials excavated from the site or removed from the outfalls into Cameron Run may be tested

to see if they are suitable for use in the levee. If these materials are not suitable for use in the levee, and have no hazardous chemicals, then they may be evaluated for use in stream restoration projects countywide. Otherwise the materials must be disposed of appropriately.

3. Would it be easier to simply build the levee higher to maintain accreditation?

The height of the levee is bound by three factors, height of the existing grade at either end of the levee, width of the levee (the higher the levee, the wider it will be) and the budget. All three factors will be considered when evaluating the appropriate size of the levee.

4. Will this change the Resource Protection Area (RPA) and floodplain?

If the levee is accredited, the area will be removed from the Special Flood Hazard Zone, or floodplain, on FEMA maps. This will likely cause the county regulated floodplain area along with the RPA to be removed from the Huntington lots as well. However, the ponding area in the park associated with the internal drainage system (indicated by the orange area on the project map) may still be considered a regulated floodplain and RPA. This final resolution of this issue will take place during the design process.

5. Can the county require developers in nearby areas to provide maintenance funding for the levee as part of a zoning proffer?

Fairfax County and the state have erosion and sediment control regulations in place that is applicable to all development that occurs within the county. Development permits are issued only after developers obtain approval of their erosion and sediment control plans from the Department of Public Works and Environmental Services and demonstrate that the stormwater generated by their development will not have an adverse impact on adjacent or downstream properties. For projects requiring rezoning or special exceptions, review of stormwater impacts occur during the zoning stage and again during Site Plan review. If, during the zoning process, county staff quantitatively determines the development has an impact on the levee, staff will negotiate to obtain the appropriate mitigation measures.

Levee Design

1. Why are there differing heights and widths listed along the levee?

Based on the initial CORPS design, the upstream end of the levee ties into existing grade at elevation 19.4 feet and the downstream end ties in at elevation 17.5 feet. There is a constant slope to the levee from one end to the other and the height depends on the existing topography along the levee. The levee extends out horizontally 2.5 feet on each side for every foot of vertical height; therefore for every additional foot of height, the levee extends out 5 feet in width. The CORPS design measured the levee height between 10 and 15 feet.

2. What will the levee look like? Will there be grass? Trees?

The levee, as designed by the CORPS in the 2009 study, will look like a large grassy hill (approximately the size of a one story house) with an asphalt trail along the top. Landscaping may be planted 15 feet away from the base of the levee to provide screening. No trees can be planted on or within 15 feet of the levee base because the root systems can damage the structural integrity of the levee.

3. Will the flap gates be automated?

The flap gates – mechanisms used to prevent storm sewer backups from Cameron Run during a storm event – will be automated.

4. Is the level of high ground on the levee a limiting effect?

Yes, the levee cannot be built any higher than the existing grade on either side of the levee. Increasing the height of the levee would also increase the length as the levee extends further upstream and downstream to tie into higher ground.

Pump Station Design

1. How big will the pump station be? What will it look like?

The pump station and enclosure are currently under design. Once a conceptual architectural design of the pump station enclosure has been developed, staff will present it to the community for feedback.

2. Will there be a landscape architect involved to incorporate mitigating techniques to protect home values and quality of life? Can members of the community participate?

A landscape architect is part of the design team and will create a planting plan for the area behind the levee. Fairfax County

will reach out to the community for input during Phase II of the design process.

3. What is the power source for the pump station? Will it have a back-up system?

The pump station will run on electricity. The station will have a backup generator with a fuel tank in the event of a power outage.

4. Why is the pump station located in the middle of the levee? Why not at one of the ends?

The station was placed in the middle as part of the initial CORPS design. The final location of the pump station will be evaluated as part of the design process.

General Project Concerns

1. Is the orange area in the park (as indicated on the project map) still going to flood?

The area shown in orange on the CORPS design map illustrates the limits of the storage for the interior drainage. Stormwater runoff from the land side of the levee will pond up in this area during a large storm event and the pump station will pump it out into Cameron Run. The exact extent of this ponding area will be determined as part of the design process.

2. Will the Huntington neighborhood streets still flood?

Based on the CORPS design, parts of Fenwick Drive and Arlington Terrace will still flood part way up the street in a 100-year storm event, but the homes along those streets would not be flooded. The final design will attempt to minimize the amount of flooding along the street during the 100-year storm event.

Any concerns related to the performance of existing stormwater management controls may be reported to the Maintenance and Stormwater Management Division by calling 703-877-2800, TTY 711.

3. Will the design include park enhancements?

The amount of area available for park use will be determined during the design process.

4. Will the levee be obsolete by the time it is completed?

The purpose of the three feet of additional height over the 100 year water surface elevation proposed in the Corps design is to allow for risk and uncertainty and sea level rise.

5. Will the county incorporate protections against the backup of the sanitary sewage system?

Sewage backups have occurred in the past largely because of stormwater flooding the sanitary sewer system. Stormwater entered the sanitary sewer system via flooded basements. Once the levee is constructed and basements are no longer flooded, sewage system backups associated with large storm events should no longer be a problem.

For more information about preventing and reporting sewer backups, visit the county's [Wastewater Trouble and Emergency Response Web page](#).

6. Will the county provide underground utility lines to allow for dump truck access?

Temporary construction access routes will be evaluated as a part of the design process. Potential conflicts between overhead utility lines and construction equipment will be identified as a part of that evaluation and appropriate accommodations made as needed.

7. If there is bond money left over from the project, can any of it be used to do something to address the wetlands?

The bond money approved by the Fairfax County voters can only be used for items directly related to storm drainage improvements to prevent flooding and soil erosion. If the entire \$30 million is not spent on the levee, additional stormwater projects throughout the county may be evaluated.

Information Gathering

1. What data is the county using to predict the impacts of the 100-year flood?

The county is reviewing data used in the 2009 Huntington Flood Damage Reduction Study. These numbers still reflect the highest discharges recorded for Cameron Run to date. In addition, the intent of the design is to provide three feet of freeboard over the 100 year water surface elevation, which will compensate for any future increases in the 100-year discharge value.

2. Will the levee design account for any future rise in the sea level?

There are various estimates on the impacts of sea level rise over the next 100 years. A study sponsored by the Northern Virginia Regional Commission predicted only minor tidal increases in the vicinity of Huntington. In addition, the flows in Cameron Run are dominated by rainfall. As a result, we expect the impacts of sea level rise to be well within the three feet freeboard that the levee design is planned to incorporate.

3. Will the county consider the impact of the backwater effect from the Potomac River?

Backwater, or tides from the Potomac River, does have an impact on Cameron Run flood levels in the area of the Huntington community. These impacts were considered by the CORPS in the preliminary levee design and will again be considered in the final design of the levee.

4. Can Lake Barcroft be used to help prepare for storms by dropping the water level before a storm?

Lake Barcroft is a state-regulated facility requiring the lake to have an operation and maintenance permit. One of the conditions of the permit requires the lake to maintain a constant water level and, therefore, rules out the use of the lake for detention. Also, a rapid drawdown of the lake to provide storage for developing storms will affect the integrity of the dam in a way that could make it less safe for downstream communities.

a. How does Lake Barcroft's operation impact the Huntington Community during a storm?

Studies conducted by the CORPS showed that Lake Barcroft had no impact on the flooding of Huntington during the June 2006 storm.



For more information or to request this fact sheet in an alternate format call 703-324-5800, TTY 711, or email HuntingtonLevee@FairfaxCounty.gov

A Fairfax County, Virginia publication
Jan. 22, 2014