



**West Fork Corridor Resident Meeting (6/29/11)
General Questions and Answers**

Streambank Stabilization/Erosion Issues

1. Where can I find help in deciding what action to take on my parcel? What is the Village engineering assistance cost-share program?

The Village is offering a one-time, cost-sharing program, approved through the end of 2011, to provide Glenview residents the services of a Professional Civil Engineer to evaluate specific drainage and erosion issues on their property. This inspection should provide homeowners with a better understanding of the work, costs and steps involved in protecting their homes. Through this cost-sharing initiative, the Village and the homeowner will each pay 50 percent of the \$800 cost of this inspection (that means that the Village will pay \$400). In addition, the Village will waive up to \$200 in permit fees should the homeowner undertake the recommended improvements. Below is a link to additional information.

<http://www2.glenview.il.us/development/inspectional/Reports/drainageinspectioninfo.pdf>

Online Application: <https://dev.bwcsi.com/MAFS/public/Glenview/DrainageInspection.aspx>

2. How much does streambank stabilization typically cost?

This depends on several factors, such as the type of stabilization practice chosen, the complexity and size of the job, etc. Typically, a completed project -- including engineering design, permitting and construction -- can range from \$150 to \$400 per linear foot. Some examples of common streambank stabilization practices are discussed in the link below (Please note: much of the information contained in the link is generally applicable, however some is specific to Indiana):

<http://www.hamiltonswcd.org/id22.html>

Also useful are a series of fact sheets about protecting and restoring streambank and shoreline property from the Tennessee Valley Authority:

<http://www.tva.gov/river/landandshore/stabilization/index.htm>

and a brochure about streambank stabilization from DuPage County, Ill.:

http://www.oak-brook.org/dep_vservices/pdf_docs/Streambank%20Brochure%20-%20Final.pdf

Other useful links:

http://www.dupageco.org/EDP/Stormwater_Management/1163/

<http://www.lakecountyiil.gov/Stormwater/Publications/Pages/BestManagementPractices.aspx>

Consult a professional engineer to determine appropriate practices for your property and to obtain cost estimates. One way to get started is through the engineering cost-share program described above. Also note that the Village has applied for funding to develop a cost-share program that will support homeowners who are stabilizing their streambanks. Should this grant be awarded, qualifying projects will be partially reimbursed.

3. Which firms do streambank stabilization?

The Village cannot recommend firms to work on private property. Please discuss your project with several firms to help you decide who to work with. To get started, DuPage County offers a list of environmental consulting firms.

[Environmental Consulting Firms](#)

4. Can I encourage my neighbors to join me in creating a continuous stabilization project?

Neighbors working together to stabilize contiguous properties would be an ideal approach to streambank stabilization projects. It would likely result in a more successful and less expensive project than if the neighbors acted individually. If you and your neighbors agree to cooperate on a project, discuss the advantages with the engineering and construction firms you interview.

5. How can I manage my invasive shrubs?

The most common invasive shrubs along the West Fork are buckthorn and honeysuckle. Non-native or invasive plants can threaten natural ecosystem functions by monopolizing resources like light, water and space to the detriment of other species. They often dominate the areas they invade, upsetting the natural balance prior to their introduction. The first step to controlling invasive plants is understanding what invasive species are in your area and what to look for.

The Chicago Botanic Gardens has a list of invasive plants to the Chicago area:

<http://www.chicagobotanic.org/research/conservation/invasive/chicago/index.php>

The following links discuss control methods for particular invasive species:

http://dnr.wi.gov/invasives/fact/buckthorn_com.htm

<http://www.ipaw.org/invaders/buckthorn/index.aspx>

http://www.ipaw.org/invaders/garlic_mustard/index.aspx

<http://www.ipaw.org/invaders/honeysuckle/index.aspx>

Once you know what invasive species are on your property, you can control them in various ways. Mechanical methods include hand pulling, digging and pruning to prevent seed production. Chemical methods include the application of various herbicides to kill or limit the spread of the plants. Buckthorn is best controlled by cutting it flush and painting herbicide directly on the cut stumps. You can also landscape with native or noninvasive ornamental shrubs to take the place of the invasive shrubs and provide benefits such as erosion control, screening and wildlife habitat. Willow and dogwood shrubs often provide the dense screening that some residents prefer.

For more information on recommended plants visit: <http://www.bestplants.org/>

6. What can I do for very little money (leaning towards vegetation-only management or do-it-yourself streambank stabilization)?

Consult with a professional engineer to determine if vegetation-only practices are suitable and will help alleviate erosion on your property. Some options for vegetative stabilization include:

- **Willow stakes:** Cut a willow sapling with a diameter of at least 3/8 of an inch into segments. The segments should be straight and 18 to 24 inches long. At the bottom (root) end of the willow segment, cut at an angle so it forms a point. Drive the bottom end of the newly-created willow stakes into the streambank with a rubber mallet. Leave 3 to 5 inches above the ground. (For more information on willow stakes go to <http://www.kingcounty.gov/environment/stewardship/nw-yard-and-garden/live-stake-plantings.aspx>)
- **Living Wall:** (<http://www.pcei.org/water/project.htm?pid=35>)
- Remove invasive plants from the streambank and replace with native plants with deep, extensive roots that absorb more water and prevent erosion. (Refer to questions 5 and 16 for tips on native plants)
- Install a rain garden to reduce runoff into the storm sewer system. The Village offers a cost-sharing program to residents who install rain gardens. For more information, see <http://www2.glenview.il.us/development/SitePages/Rain%20Garden%20Program.aspx> And for a detailed discussion of rain garden benefits and installation, see this manual published by the Wisconsin Department of Natural Resources: <http://www.dnr.state.wi.us/org/water/wm/dsfm/shore/documents/rgmanual.pdf>

Storm/Flooding Issues

(see also the Stormwater Management Task Force page):

<http://www2.glenview.il.us/capital/swtaskforce/SitePages/index.aspx>

7. What can the Village do for me regarding flooding?

The Village continues to complete capital improvements of the storm sewer system. Information about planned and recently completed stormwater-related projects in the Village can be found by

visiting the link below. In addition, the Village fully supports the MWRD's proposed expansion of Techny Basin 32A in Northbrook, a proposed regional floodwater storage project.

http://glenview.il.us/about/village_maps.shtml

8. Why hasn't Lake Glenview improved flooding in Glenview?

Lake Glenview was built to provide stormwater detention, meeting standards set by the Village and Metropolitan Water Reclamation District of Greater Chicago for all new commercial, industrial and multifamily developments. These requirements are designed to ensure that the release of stormwater from a developed site will not exceed the rate at which water would have flowed off of the property in an undeveloped condition. As such, Lake Glenview was not designed to alleviate flooding issues in Glenview, just ensure that The Glen redevelopment did not impact downstream property.

9. What is the MWRD and what does it do?

The Metropolitan Water Reclamation District of Greater Chicago is a state agency responsible for managing water supply and wastewater issues. Since 2005 MWRD has been responsible for stormwater management for all of Cook County. MWRD also clears debris and blockages from the river channel but does not remove the debris from adjacent property. More information can be found at:

<http://www.mwrdd.org/irj/portal/anonymous/Home>

10. What entity manages and operates Techny Basin?

The Village of Glenview owns the Techny Basin property and maintains its native landscaping. The stormwater management function of the Techny Basin is managed by MWRD. The basin fills by gravity when the West Fork overflows onto a spillway. It is emptied using pumps managed and operated by MWRD.

11. Regarding the MWRD Project WF-06 (expansion of Techny Reservoir 32A):

- a. When will this be completed?

MWRD preliminarily has provided a timeframe of 4 years to implement the project.

- b. How does the capacity compare to that of Techny Basin 32C in Glenview?

Techny Basin 32C in Glenview has a floodwater storage capacity of up to 1,000 acre-feet, or 325 million gallons. The proposed expansion of Techny Basin 32A in Northbrook would create approximately 1,100 acre-feet of floodwater storage. This would result in lowered river elevations during the 100-year event by as much as 2 feet in areas of Glenview along the West Fork.

For additional information: <http://www.mwrd.org/irj/portal/anonymous/stormwateroverview>

12. What is considered a 100-year flood? Why do we have so many 100-year floods?

This term is commonly used as a benchmark for a severe flooding event and is intended to describe a rainfall event or inundation area that has a 1 percent chance of being equaled or exceeded in any given year. It is possible that events of this magnitude may occur more often than every 100 years. The September 2008 storm event was the first recorded 100-year flood experienced in Glenview since 1997.

Other River-Related Questions

13. What is the water quality in the West Fork? Should I be concerned about the quality of water in my yard during a flood?

The water that overflows from the river into yards is untreated stormwater carrying contaminants from many sources – motor oil, road salt, pesticides and fertilizers, pet waste and other pollutants – that are picked up by stormwater as it drains to the river. Therefore, the water is not considered safe for human contact, and thorough hand washing or a shower is advisable if contact occurs.

14. Are dead trees along the river related to water quality issues?

Trees along the river are subject to numerous stresses. They tend to be fast-growing, short-lived floodplain species such as ash, elm, silver maple and cottonwood. Some of these are subject to specific diseases, such as Dutch Elm Disease, or infestation of pests, such as the Emerald Ash Borer. Some are subject to powerful erosive forces due to their location along the West Fork. Most experience extreme moisture levels, with frequent inundation often followed by periods of drought. These factors or a combination of them, possibly including poor water quality, should be among the considerations when trees along the river die.

15. Do rain gardens attract mosquitoes?

No. A common misconception of any water feature is that it will attract mosquitoes. However, mosquitoes need 7 to 12 days to lay and hatch eggs. A properly installed rain garden should not hold water long enough for mosquito larvae to complete their life cycle. Rain gardens also attract dragonflies, which eat mosquitoes. Mosquitoes are more likely to lay eggs in bird baths, storm

sewers and lawns than in sunny rain gardens. So a rain garden will not make a mosquito problem worse, and could possibly improve it by helping to eliminate standing water.

16. Where can I find a list of native species to plant in my rain garden or property?

The U.S. EPA Region 5 website offers a wealth of information about native landscaping on their "Greenacres" page. A useful native plants brochure, including a link to plant lists, can be found at:

<http://www.epa.gov/greenacres/nativeplants/factsht.html>

17. Where is the source of the West Fork?

The headwaters of the West Fork are in Lincolnshire, Ill.

There are three main tributaries of the North Branch Chicago River, each of them having its own sub-watershed: the West Fork of the North Branch sub-watershed; the Middle Fork of the North Branch sub-watershed; and the Skokie River sub-watershed. The North Branch watershed is also a sub-watershed of the larger Chicago River Watershed that is formed of the North and South Branches of the Chicago River. The Chicago River Watershed is a sub-basin of the larger Illinois River Watershed. Twelve percent of the West Fork watershed is contained in Glenview, while 71 percent of the Village of Glenview's runoff drains into the West Fork. The main source of water pollution in the West Fork is non-point source pollution that enters the river as runoff from streets and impervious surfaces. Pollutants include, but are not limited to, Phosphorous and excessive nutrients from fertilizers, car pollutants, and road salt.