What is Stream Corridor Restoration?

Stream Corridor Restoration is the process of improving conditions in and around a stream.

Stream corridor restoration includes improving floodplains, water quality, drainage, soils, native vegetation, and banks. A stable stream responds better to outside disturbances resulting in better water quality downstream. Stream corridor restoration can include: rebuilding and reinforcing eroded stream banks; removing invasive and non-native plants; planting deep-rooted native plants, trees and shrubs to hold soils; and improving habitat for wildlife and people.

Disturbances in stream corridors are the result of human and natural events such as flooding, pollution and the introduction of invasive species. All these disturbances impact water quality, flows and stream function.

Before...

Non-native invasive plants are taking over our native ecosystems at an alarming rate and causing millions of dollars in damage. Invasive plants take advantage of disturbed conditions and can quickly undermine a healthy stream. Seeds from invasive plants can travel on clothing, shoes or on animal fur. Please help keep invasives out of high quality areas. Do not compost invasive plants but burn or otherwise dispose of the seedbank.

Buckthorn A small tree that can reach an excess of 20 feet. It has invaded our rare oak woodlands, stream corridors and many other areas. The plant spreads by berries. To control, cut every buckthorn possible before the berries drop, then remove or herbicide stumps. If huge stands are present, cut the buckthorn with berries first as they're next years' seedlings and birds spread them far and wide.

Garlic mustard This biennial herb can quickly dominate areas around woodlands. To control, hand pull flowering plants in spring. CAREFUL herbiciding of first year plants can be done but AVOID damaging nearby good plant populations. Bag and burn pulled plants when possible. Do not allow this plant to set seed, it can produce 200+ seeds per plant. Average control requires 3 to 5 years.

Phragmites or Common reed grass. This very tall grass grows in wet areas and can often grow 6-12 feet, the tops can be purple or brown in color. It spreads by root systems and can expand quickly and degrade well functioning marshes. Hire contractors to use water safe herbicides in autumn and kill the population.

Purple loosestrife This purple flowering invader (growing 3-7 feet) is destroying our wetlands and stream corridors. Cut plants before they finish flowering, burn removed material or dig out small populations early. Do not let this plant flower and reseed as it can produce up to 200,000 seeds per plant!

Reed canary grass This perennial plant of wet areas is destroying our wetland diversity. This plant is the first wetland grass to grow in spring. Prescribed burning by experts can help control it. Seed heads can be removed in small populations. In late fall or early spring hire licensed contractors to cautiously herbicide the reed canary grass around water and other native plants.

Native plants need enough light to grow. Their deep roots help stabilize stream corridors. The vegetation acts as a two-sided cushion: it helps to calm down storm waters while filtering out pollutants carried by rainwater and runoff. Many native plants are good for stabilizing stream banks. A short list follows:

Shady upland stream corridors	
Bottlebrush Grass	*Hystrix patula*
Canada Wild Rye	*Elymus canadensis*
Common Oak Sedge	*Carex pennsylvanica*
Wild Bergamot	*Monarda fistulosa*
Wild Geranium	*Geranium maculatum*
Shady floodplains	
Common Wood Reed	*Cinna arundinacea*
Foul Manna Grass	*Glyceria striata*
Golden Alexander	*Zizia aurea*
Riverbank Wild Rye	*Elymus riparius*
Virginia Wild Rye	*Elymus virginicus*
Sunny floodplains	
Blue Flag Iris	*Iris shrevei virginica*
Blue Vervain	*Verbena hastata*
Cardinal Flower	*Lobelia cardinalis*
Common Fox Sedge	*Carex stipata*
Dark Green Rush	*Scirpus atrovirens*
Prairie Cordgrass	*Spartina pectinata*
Red Swamp Milkweed	*Asclepias incarnata*

www.indiancreekwp.org/Plants-for-Lake-County-Watersheds.pdf

The Recovery Process...

Paying for Stream Corridor Restoration

The Indian Creek watershed is located primarily in Lincolnshire, Vernon Hills, Mundelein, Long Grove, Hawthorn Woods, Kildeer, Indian Creek, Lake Zurich, Libertyville, and the Buffalo Grove area. Many entities within the watershed are actively working to improve our streams, lakes and wetlands. Since 1999, villages, townships and neighborhoods have been working together, budgeting money and volunteering time for a wide range of stream restoration projects. Some Indian Creek projects are listed on SMC's website under "Planning." Check it out, there may be a project underway near you!

Most of the restoration efforts have been funded with federal, state and local grants. Many projects also incorporate volunteer and community support into the grant for added educational benefits. There are many types of grants for which people can apply and there are many different types of restoration projects. For a list of grants visit, www.co.lake.il.us/smc/planning/indiancreek/

We encourage your community to learn about area stream projects that are currently underway. Perhaps you can work collectively with other neighborhoods, your local government or other organizations on a stream restoration project. Please help us improve Indian Creek's water quality. Get educated and involved to help **your** watershed.