

## Team Has Eagle Eye On Floodplain Project

By JoAnne Castagna, Ed.D.

A group of people are wading slowly through high grass under a hot summer sun as they begin a guided walking tour of the Walton Floodplain in Delaware County, New York.

Suddenly there's excitement in the air as an eagle perches on a nearby branch hanging over the West Branch Delaware River. The group swiftly changes its focus, and cameras, from the tour to this majestic bird.

It seems the group is no longer interested in what their guide has to say. On the contrary, this group is an inter-agency team that is looking over the land because they're starting a reclamation project that will improve the floodplain's environment for that eagle, reduce flooding for the local community and protect New York City's drinking water.



*The team at the water's edge of the West Branch Delaware River (Credit: JoAnne Castagna, Public Affairs, U.S. Army Corps of Engineers, New York District)*

The Walton Floodplain Reclamation Project is part of the U.S. Army Corps of Engineers' New York City Watershed Environmental Assistance Program.

"The program funds projects that are protecting the water quality of New York State's watersheds that provide drinking water to millions of New York City residents and businesses," said Rifat Salim, project manager, U.S. Army Corps of Engineers, New York District.

On this project, the Army Corps is working in collaboration with the Delaware County Soil and Watershed Conservation District, New York State Department of Environmental Conservation, New York City Department of Environmental Protection, Village of Walton, and the Town of Walton.

A floodplain is the land bordering a river. Over the years the 13-acre Walton Floodplain that borders the West Branch Delaware River has been filled with gravel that has raised and hardened the floodplain and degraded the natural vegetation.

Graydon Dutcher, stream program coordinator with the Delaware County Soil and Water Conservation District who was the team's guide on the floodplain tour said, "The floodplain has been filled through the year's one dump truck at a time as a place of easy disposal of materials."

As a result, when the river floods the water that would naturally be absorbed, filtered, and transported by the floodplain is unable to. So floodwater backs up because of the over filled floodplain and stays trapped on the streets of the Village of Walton, flooding businesses and homes, especially Delaware Street and the ironically named Water Street.

When this high volume of stormwater runoff floods the streets, it sweeps up contaminants and carries them to the West Branch Delaware River that feeds into the Cannonsville Reservoir. The reservoir supplies 97 billion gallons of water to New York City's drinking water supply.

This project will return the floodplain to its natural state and as a result it will reduce flooding and improve water quality.

Dutcher said, "We are going to remove the gravel creating a more natural floodplain elevation." This work will include removing and relocating a New York State Electric & Gas line to a deeper elevation and recycling the gravel and moving it outside of the floodplain.

During the walking tour, Dutcher pointed to a McDonald's golden arches sign several yards away. He said, "We are at the same height as the golden arches. This is how high the floodplain has grown over the years!"



*A view of the McDonald's golden arches sign from the Walton Floodplain shows that the sign is at the same level as the team standing on the floodplain. This demonstrates how much gravel has built up on the floodplain over the years. (Credit: JoAnne Castagna, Public Affairs, U.S. Army Corps of Engineers, New York District)*

Dutcher took the group through a long muddy path surrounded by high shrubbery leading to the West Branch Delaware River. The team stood along the river's edge and continued to take photos of the resting eagle perched above the moving river.

The project includes restoring the floodplain's vegetation. The invasive plant species that the group has been walking through is going to be removed and grass is going to be planted. He said where the team is standing along the river, a riparian buffer or hardwood forest is going to be created that will include a mix of native Maples, Ash, and a mix of shrubs.

"Flood waters will drain from the town's streets, building rooftops, and parking lots and filter through the restored vegetation and the riparian buffer before entering the river," said Dutcher. The riparian buffer traps sediment and pollutants like harmful phosphorus and nitrogen particles from entering the river. This improves the quality of the water, maintains the river's temperature, and fosters the creation of fish and aquatic habitats. The project will treat 2.8 acres of stormwater runoff.

Dutcher said, "This project is a big thing in Walton. It benefits the community in several ways."

The project will lessen the damages of flooding. When completed, the project will provide flood reductions for a 100-year storm event. This is a flood whose strength and water height is predicted to occur, on average, about once in 100 years. In addition, it will also be useful for lesser, 10-year storm events that occur on average once every decade. This project will also connect and drain the newly built green space in the center of Walton's Main Street.

Dutcher added that this project, which is expected to be completed by 2018, will also potentially give the land back to the community for other uses like athletic fields and park land.

That eagle never left the branch the entire time the team was walking the floodplain and it seemed to be keeping a steady eye on them. Some in the group saw it as nature's way of reminding them to keep focused on this project that has multiple benefits for locals, city dwellers, and eagles who just happen to make Walton their home.



*Walton's resident Eagle is perched above the West Branch Delaware River that feeds into the Cannonsville Reservoir. (Credit: JoAnne Castagna, Public Affairs, U.S. Army Corps of Engineers, New York District.)*

*Dr. JoAnne Castagna is a public affairs specialist and writer for the U.S. Army Corps of Engineers, New York District. She can be reached at [joanne.castagna@usace.army.mil](mailto:joanne.castagna@usace.army.mil). Follow her on Twitter at <http://twitter.com/writer4usacenyc>*