

May, 2016

**Gowanus Canal Stormwater Restoration Plan (FINAL)**

**Benson Metal Corporation Natural Resource Damages Settlement**

**Introduction**

During the period of April 2008 to October 2010, over 100 instances were observed of scrap metal falling or being dumped into the Gowanus Canal (“Canal”) in Brooklyn NY. These incidents took place while personnel of the Benson Metal Corporation d/b/a Benson Scrap Metal (“Benson”) loaded scrap metal from its canal-side facility onto barges, for export out of NY harbor. The New York State Department of Environmental Conservation (NYSDEC) was initially alerted to this dumping by citizen complaints and together with the Office of the New York State Attorney General, conducted a surveillance operation. In November 2009, following surveillance, NYSDEC investigators met with Benson to alert them to the illegality of their actions. This warning was not heeded and dumping regularly continued until a civil complaint was served by the Commissioner of the NYSDEC.

In the complaint the NYSDEC charged violations of several statutes of the Environmental Conservation Law, including: discharge of pollutants from a point source or sources without a SPDES permit (ECL § 17-0105), use and operation of a point source without a SPDES permit (ECL § 17-0501 and 17-0701), pollution causing contravention of water quality standards (ECL § 17-0501), pollution of the waters of the marine district (ECL § 17-0503), and unpermitted placement of fill in the navigable waters of the state (ECL § 15-0505). The complaint was later amended to include a charge of public nuisance and a demand for natural resource damages “for harm to the waters of the State attributable to the illegal discharge or dumping of scrap metal into the Gowanus Canal.” The parties entered into a stipulation to resolve the matter, which was incorporated into a court order on November 29<sup>th</sup>, 2012. As a result of the order Benson was required to pay \$85,000 in total, \$27,000 of which was paid to the NYSDEC as Natural Resources Trustee in this matter.

Following the intent of federal regulations providing guidance for NRD Assessment and Restoration, the goal of a Natural Resources Damage (NRD) assessment is to restore, replace or acquire the equivalent of the injured natural resource or ecosystem services that were lost as a result of the illegal action. As the environmental damage in this case was primarily to water quality, it is appropriate that these monies will be used in a project to control stormwater, specifically in an effort to reduce pollution associated with Combined Sewer Overflow (CSO) into the Gowanus Canal.

**Resource and Injury Description**

The Gowanus was turned from a brackish creek into a canal in the 1860’s to support the growing industrialization of the Brooklyn waterfront. In just 40 years the water quality was so degraded from both raw sewage and industrial pollution that the Canal had an unnatural odor and color. The next

century brought a change from raw sewage disposal to combined sewage overflow, however, the canal continued to be a dumping ground for solid and chemical waste. In March 2012, the United States Environmental Protection Agency (EPA) designated the Gowanus Canal a Superfund Site calling it “one of the nation’s most extensively contaminated water bodies” (EPA 2016).



The discharge of scrap metal by Benson continued the practice of treating the Canal as a dumping ground. The scrap metal was released into the water mostly by falling from the grapple of the crane that lifted it from the yard to the barges both because of the way the equipment was handled and because protective measures were missing that could have prevented inadvertently dropped material from entering the waterbody. At times, pieces of scrap would roll off the shoreline because the storage piles were too steep and high. Sometimes barges were overloaded so that material that had been deposited on the barge spilled over the edge of the barge into the water. Additionally, Benson

employees were also seen cleaning their bulkhead and adjacent docked barge by kicking or pushing metal pieces directly into the Canal (Complaint).

There are many potential environmental effects from releases like this. Benthic habitat can be destroyed or damaged, and toxic sediments that have settled out of the water column can be re-suspended. Though this environment is degraded, recent improvements in water flushing have brought new habitat value and wildlife to the Canal. The Canal is now frequented by waterbirds, fish, crabs and shellfish, animals that can be adversely affected by loss of benthic habitat and re-suspension of toxic chemicals. Further, some scrap metals including items transported through Benson, such as automotive parts and appliances, often contain pollutants that can further affect water quality. Such pollutants include heavy metals such as mercury, corrosive acids, PCBs, oils and greases, and organic solvents. Both PCB's and mercury are particularly toxic because of their tendency to bioaccumulate as they move up the food chain. As more animals use the Canal as habitat, the spatial influence of the toxicity broadens.

### **Restoration Description**

As mentioned previously, one of the major contaminants affecting the water quality of the Gowanus is linked to CSO discharges. Because the stormwater and wastewater sewers are combined in the watershed, rainfall events often put too much pressure on the sewage treatment plants and untreated sewage is released directly into the Canal. The Gowanus Canal has 14 CSO discharge points (NYCDEP 2015). The New York City Department of Environmental Protection (NYCDEP) is tasked by state and federal mandates to reduce CSO discharge by 58-74% by 2030. The restoration action for this project will contribute to this effort through education and the reduction of stormwater from residential sources and local schools.

The Gowanus Canal Conservancy (GCC) has become one of most effective stewardship and advocacy groups for the Canal and its watershed (see [www.gowanuscanalconservancy.org](http://www.gowanuscanalconservancy.org)). The GCC is proposing the Gowanus Blue Initiative, the goal of which is to increase the CSO discharge reduction from the required 58-74% to 100%. The methodology is primarily through both school and community education and assistance. For five local schools, the GCC proposes to host a rainwater harvesting workshop and gift a rain barrel as well as its installation and training. The teachers would then use a curriculum GCC has developed called STEM Gowanus Urban Ecology, to predict the school's rainwater capture, maintain the rain barrel and potentially implement other strategies to capture and reduce stormwater.

On the residential side, the GCC has existing plans and funding to host a rainwater harvesting workshop for 400 Gowanus residents. The organization has proposed to use the NRD settlement money to enhance the impact of this event by offering 25 of the attending residents their own rain barrel, tools and technical support. The NYSDEC supports this use given the strong nexus to water quality, the limited funding available from the settlement, and the opportunity to enhance an existing effort that brings efficiencies to the situation while positively impacting the residents directly affected by the contamination.

The GCC's total budget for using the NRD money is outlined in the following table.

<b>Item</b>	<b>Description</b>	<b>Amount</b>
GCC Executive Director	Program oversight and alignment – 23 hrs. @ \$43/hr.	\$1,000
GCC Education Director	Develop and implement school education programming – 111 hrs. @ \$36/hr.	\$4,000
GCC Maintenance Manager	Develop and implement resident outreach; provide technical assistance for installations – 222 hrs. @ \$36/hr.	\$8,000
Contractor – Illustrator	Develop educational and promotional graphics	\$3,000
Contractor – Analysis	Grey to Green contractor to develop analytical maps and metrics – 200 hrs. @\$25/hr.	\$5,000
Printed Educational Materials	Posters, Flyers	\$1,000
Rain Barrels	30 @ \$100	\$3,000
Signage, etc.		\$2,000
	<b>Total</b>	<b>\$27,000</b>

**Restoration Plan Justification**

Because of the 2012 Superfund designation, the responsibility for the cleanup of the Gowanus Canal lies largely in the hands of the EPA. The agency has yet to come out with a final design for the cleanup action. Because of the Superfund designation and expected comprehensive cleanup of the Gowanus, Benson was not ordered to remove the scrap metal from the canal as a result of the civil proceedings against them. However, NYSDEC is not precluded from bringing new legal action against Benson if the Superfund cleanup does not include dredging of the canal bottom in front of their facility. While the City waits for the EPA cleanup plan, the GCC’s proposal suggests that the community is not rendered immobile in improving the health of the Canal. Though the GCC proposal addresses a different source of contamination than the environmental injury done by the scrap metal dumping, it would enhance the health of the same water body that was impacted by Benson’s violations. Following the EPA cleanup and reduction in CSO discharge, there is no reason to believe that the Gowanus Canal will not continue to provide increasing wildlife habitat and community value.

**Implementation**

NYSDEC is prepared to release the NRD settlement funds to the Gowanus Canal Conservancy through the Grants.gov gateway. The funds may be applied as outlined in the proposed budget. The GCC will engage with the community, will document and provide documentation electronically (pdf and jpeg files, for example) of the events, the expenses and purchases and the procedures for gifting the rain barrels, to the NYSDEC NRD Fund Manager (Albany Office) and Regional 2 staff responsible within 90 days of the events.

### **Public Outreach and Public Comment**

A draft Restoration Plan was prepared for public review and comment in compliance with requirements of NRDA rules and regulations and was published in the NYSDEC Environmental Notice Bulletin on March 30, 2016 with a 30-day comment period. No public comments were received so the restoration plan has not been altered for this final version.

### **References**

Complaint in the matter of NYSDEC v. Benson Metal Corporation and others. Kings County Supreme Court, Index No. 29159/10.

New York City Department of Environmental Protection (NYSDEP). June 2015. Combined Sewer Overflow Long Term Control Plan for the Gowanus Canal.

US Environmental Protection Agency (EPA). Region 2 Superfund website. Gowanus Canal, Brooklyn, NY. Last updated 2/23/2016. <http://www3.epa.gov/region02/superfund/npl/gowanus/>