Highline Times

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Copter aids repairs to Miller Creek in Normandy Park

Repairs to Southwest Suburban Sewer District's main trunk line along Miller Creek near Sixth Avenue Southwest got a lot of public attention last week with a giant Sikorsky helicopter hovering overhead.

The Sikorsky helicopter transported machinery and materials to otherwise inaccessible repair sites for several days, prompting complaints from a number of Normandy Park residents.

Sewer district engineers determined that repairs were needed after an annual inspection of the 30-inch main sewer line in the Miller Creek basin found exposed parts of the line.

In addition, the upper five feet of one manhole were fully exposed to high stream flows.

The stream was running over the top of the line in some locations, which could have caused a catastrophic failure by drying up Miller Creek during low flows in summer.

This problem also could have overwhelmed the plant, resulting in the discharge of millions of gallons a day of raw sewage into the stream and ultimately Puget Sound during winter high flows.

The original trunk line was constructed in the mid-1960s, four to six feet below the stream, crossing back and forth underneath the stream bed.

Miller Creek channel erosion, which eventually exposed sections of the sewer line, is generally caused by higher peak storm flows from adjacent urban development.

Over time, the flows have been gradually increasing due to this development.

Local agency storm water regulations have attempted to reduce the severity of the problem. Flows may also be impacted by increased runoff associated with the construction of the Port of Seattle's third runway.

New detention ponds built by the Port and recent major changes by the city of Burien are expected to ease the flashiness of the stream.

Preventing impending winter storms from damaging the sewer line by raising and stabilizing the stream channel provides the needed protection and also replaces washed out fish habitat.

The biggest concern in proceeding with the Miller Creek project was how to gain access to the environmentally sensitive project area to do the work, according to Ken Neilsen, an engineer with Pace, the engineering company in charge of the project.

They determined that using a helicopter and a Sypder Hoe would minimize the area of disturbance, Neilsen said.

That would enable the project be completed in the shortest possible time since they would be working directly on repair and restoration instead of road building.

A 72-foot long Sikorsky helicopter with a 10,000-pound lift capacity airlifted all the materials-pumps, hoses, boulders, large woody debris, rootwads, streambed gravel and anchoring components to the multiple project

sites.

To keep the disturbance to the environment at a minimum a Spyder Hoe was brought in to place all the materials.

The Spyder Hoe is similar to a backhoe, but with legs and wheels that can cross streams with minimum impact and climb steep hills, and it appears to walk to minimize damage to plants.

Rock and gravel was placed in a way that protects the sewer line and creates a fish-friendly stream channel. Adult salmon are expected to return this fall. These repairs should ensure their unimpeded access upstream to their native spawning grounds.

"Consider the alternatives", said Brett Fish, chairman of Citizens Against Sea-Tac Expansion. "This project helps restore Miller Creek, protects it from raw sewage and keeps Miller Creek a historically fish-friendly stream we can continue to enjoy for generations to come."