



## *City of Ferndale, Washington* **STORM DRAINAGE**



Most of the water that falls in Ferndale eventually ends up in one of our many streams and the Nooksack River. Knowledge of this fact is key to realizing the responsibilities we have related to protecting the environment. Anyone who has seen the rainbow-colored sheen of gasoline floating down the gutter or in parking lot puddles

realizes that many harmful chemicals are transported by storm water.

Years ago cities could (and did) allow sewage to go untreated. Cities are now required to collect, detain, and treat storm water. As you can imagine, the construction and operation of a system of stormwater treatment is a big undertaking. Given the positive benefits to the environment however, the cost of doing nothing is greater. As a result, Ferndale has begun the process of dealing with storm water in a responsible manner.

The City has a requirement to prevent stormwater from discharging into our streams and into the Nooksack River untreated. In the coming years, the City will be required to construct facilities that have the ability to detain stormwater (so sediment can settle out) and to treat stormwater (to remove the gas, oil, and other contaminants). To accomplish this work, the City has estimated that it will cost in excess of 8 million dollars. So where are we going to get this money?



Probably from you. We wish there was a better answer but the truth is that while the City is mandated to install stormwater treatment facilities, no funding will be forthcoming from the State or the Feds. The proper treatment of the City's *sewer* is the responsibility of our citizens – the same is true for *stormwater*.

It should also be noted that while new development in the City has been required to construct their own stormwater ponds, this is not true for much of the rest of the City.

Just as everyone needs water and sewer services, the logic behind the City's stormwater fee is that it is a service to the community and is the collective responsibility of our citizens. Everybody drives on our streets and the gas and oil that is washed down the gutters needs to be



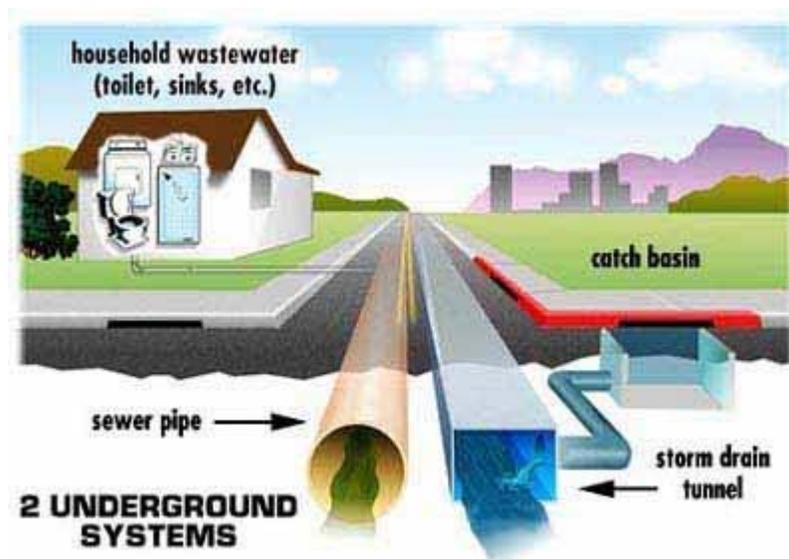
treated. In addition, rain falls evenly throughout the City and when it eventually reaches the river, it should be as clean as possible.

New development will continue to pay for impacting stormwater and will have the potential to connect regional ponds once they are constructed.

How much money do we need to address this problem and how will the money be used? The answers to these questions were included in the Stormwater Comprehensive Plan completed by the City in 2005.

This Plan identified two categories of costs – on-going maintenance and long-term capital improvements. Just as anyone who owns a home can attest, you have to maintain your home annually before you can consider new improvements. The same holds true for our stormwater system.

To illustrate the extent of the problem, consider the following. When you see gutter grates in the street, realize that below the grate is a catch basin. Just as the name implies, catch basins are basically concrete pits designed to catch sediment and debris so this material does not flow down the drainage pipes. We have over 2,000 catch basins in the City. The City has to continually clean the catch basins so they don't become so full that they can no longer collect the sediment.



The Stormwater Comprehensive Plan stated that the first action the City should take is to clean out all of our catch basins, which we have been doing through a consultant for the past couple of years.

In order to clean the catch basins, we need a vactor truck, which houses a giant vacuum cleaner truck that sucks out the sediment. The

City is currently in the process of purchasing a new vactor truck. The truck costs approximately \$350,000 and will be paid for out of the stormwater, water and sewer funds because it is a critical piece of equipment for all of the utilities systems. The City is utilizing a \$50,000 “Phase II Municipal Stormwater Pass-Through Grant” from the Department of Ecology to pay for a portion of the truck. Owning a quality vactor truck will enable the City to clean its own catch basins instead of contracting out the work.

Cleaning the catch basins is an ongoing job. From time to time, we also need catch basin replacement or repair (some will be determined to be undersized and will need to be replaced while others will undoubtedly be damaged and need repair). There are also many isolated drainage problems throughout the City that require money for replacement and/or repair from City stormwater funds.

This brings us to the long-term capital improvement portion of the program. While the maintenance program deals with taking care of what we already have, the capital improvement portion deals with new projects that will ensure that the stormwater is as clean as possible.



Just as was the case for maintenance, the Stormwater Comprehensive Plan also details our long-term capital improvement needs. The Plan sets out the following needed capital improvements: five (5) regional stormwater detention ponds and replacement of undersized Pipes

The majority of the capital improvement costs are centered in the construction of five regional stormwater detention ponds. These ponds are similar to the stormwater ponds you see in the newer subdivisions but these will be much bigger – in the range of 1 to 10 acres each. The purpose is the same however; they will take all of the flow from the city streets, allow sediment to settle out, separate the oils and other contaminants, and then allow the clean stormwater to flow eventually into the river.



The City's first priority regional pond is the South West Ferndale Regional Stormwater Facility (west of Imhoff Road, south of Douglas), followed by the Schell Marsh Enhancement Regional Facility (south of City Hall). Both of these ponds are in the feasibility analysis stage. These ponds and the other capital improvement costs will most likely be financed with bonds whose annual debt service would need to be included in the stormwater fees through utility billing and development permits.