STORM WATER MANAGEMENT PLAN
NORTH LOGAN CITY
EXECUTIVE SUMMARY

INTRODUCTION

Polluted storm water runoff is transported to municipal separate storm sewer systems (MS4s) and ultimately discharged into local rivers and streams without treatment. EPA's storm water rules establishes an MS4 storm water management program that is intended to improve the Nation's waterways by reducing the quantity of pollutants that are introduced into storm sewer systems during storm events, through spills, or illicit discharges. Common pollutants include oil and grease from roadways, pesticides and fertilizers from lawns, sediment from construction sites, and carelessly discarded trash, such as cigarette butts, paper wrappers, and plastic bottles. When deposited into nearby waterways through MS4 discharges, these pollutants can impair the waterways, discourage use of the resource, contaminate drinking water supplies, and interfere with the habitat for fish, other aquatic organisms, and wildlife.

North Logan City, along with other cities in the Logan City metropolitan area is required to participate in the storm water management program in order to discharge storm water into the Nation's waterways. In the case of North Logan City, that means the Bear River. In 2010 a revised discharge permit necessitated the development of a revised plan to meet the additional requirements of the new permit. This updated SWMP is the plan intended to meet the requirements of the new discharge permit. Public involvement in developing and implementing this plan is more than merely desirable, it is an important, even required, part of the plan. The public is encouraged to review the plan and provide input, not only during the development phases of the plan but throughout the year. The plan is to be posted on the city's website at www.northlogancity.org and a hard copy of the plan is available at the North Logan City Offices at 2076 North 1200 East, North Logan, Utah.

PROGRAM PRIORITIES AND CONCERNS

Although the overarching general goals of the previous storm water management plan are basically no different from the general goals of this plan, the new permit under which the city operates is much more specific in what is required of the permittee. The new permit outlines many more *specific goals* which *must* be included in the plan. It is the intent of the municipality to comply with all aspects of the new permit; but doing so, in some cases, will require the city to prioritize the use of resources in order to achieve the ultimate goals of this plan. Some of the goals in the plan are beyond the immediate control of the municipality as they involve changing the behavior of the public. In many cases it is up to the individual citizen, the developers, business owners, and other land owners to minimize the adverse impact they have on the storm

water environment in the city and how it impacts neighboring waterways. The following priorities and concerns are identified to help focus the city's resources towards achieving the goals in this plan:

- The city staff, elected officials, and citizens in general should increase their understanding of the city's storm water management plan and their responsibilities in that plan. This is done through increased public education and involvement, and increased city employee training.

- Those with direct involvement in implementing this plan need better tools to do so, including:
    - improved ordinances;
    - more useful standard operating procedures;
    - best management practices that work and are understood by those using them;
    - and, better ways to document the implementation of the goals in the plan.

- Resources including money, personnel, and political/public will are essential to implement the goals in this plan and must continue to be provided. The storm water utility and its associated fees were established under a different set of goals and permit requirements and are expected to meet the needs of this SWMP during this fiscal year. However, resources, particularly inspection manpower, might not cover all the needs of this new permit and this SWMP in the future without additional funds. When the level of new construction increases in an improving economy, higher levels of growth will require higher levels of inspections. This will very likely require the municipality to look at implementing new storm water inspection fees for new construction in the very near future.

WATER QUALITY PRIORITIES AND CONCERNS

The water quality within the North Logan City is relatively good. The storm water in North Logan drains to a series of canals where it is eventually transported to the Bear River. For the most part, the existing system has worked well. Continued growth is expected to put some pressure on canal, ditch and swale capacities. In the future it is anticipated that some infrastructure improvements may need to be made to deal with capacity issues. It is likely that these improvements will be made on an "as-needed" basis. There are no flowing streams or lakes within the boundaries of North Logan; however, because the storm water from the city does eventually go to the Bear River, which has been identified as protected under Section 303(d) of the Clean Water Act, North Logan has a responsibility to minimize the adverse impacts it may have on the Bear River. The hope and intent of this Storm Water Management program (SWMP) is to maintain the good quality of the water flowing out of North Logan and possibly even improve the current water quality.

Like most communities in the valley, the biggest water quality concerns involve:

- sediment loads coming from disturbed sites and streets,
- fertilizers and pesticides coming from lawns and farmlands,
- oils and grease coming from the roadways,
- animal waste coming from dairies with runoff and when flushed out.

North Logan's SWMP has been geared toward small city applications, targeting the pollutants mentioned. The focus of this plan is to do what we can within the community, trying to stay in harmony with the rural nature of the community and within the existing budget structure.

CONTACT INFORMATION

The North Logan City Storm Water System falls under the jurisdiction of the City Engineer for the City. The City Engineer can be contacted at the following address and phone number:

Mr. Jeffrey M. Jorgensen, P.E.
2076 North 1200 East
North Logan, Utah 84341
(435) 752-1310 ext 14

NORTH LOGAN CITY STORM WATER - AT A GLANCE

Population: Estimated 8,500 ---- July 2009

Size: 6.97 sq. miles

Geographic Description: Located on the East side of Cache Valley on the North border of Logan City, with elevations varying between 4500 ft. to 4900 ft. This community lies just 2 miles north of Logan at the mouth of Green Canyon.

Receiving Waters: The storm water in North Logan currently drains into the Logan & Northern Canal; the Hyde Park Irrigation Canal; the Logan, Hyde Park, Smithfield Canal; and the Logan North Field Canal. All of these canals ultimately drain into the Bear River which is considered the receiving water for North Logan's storm water system.

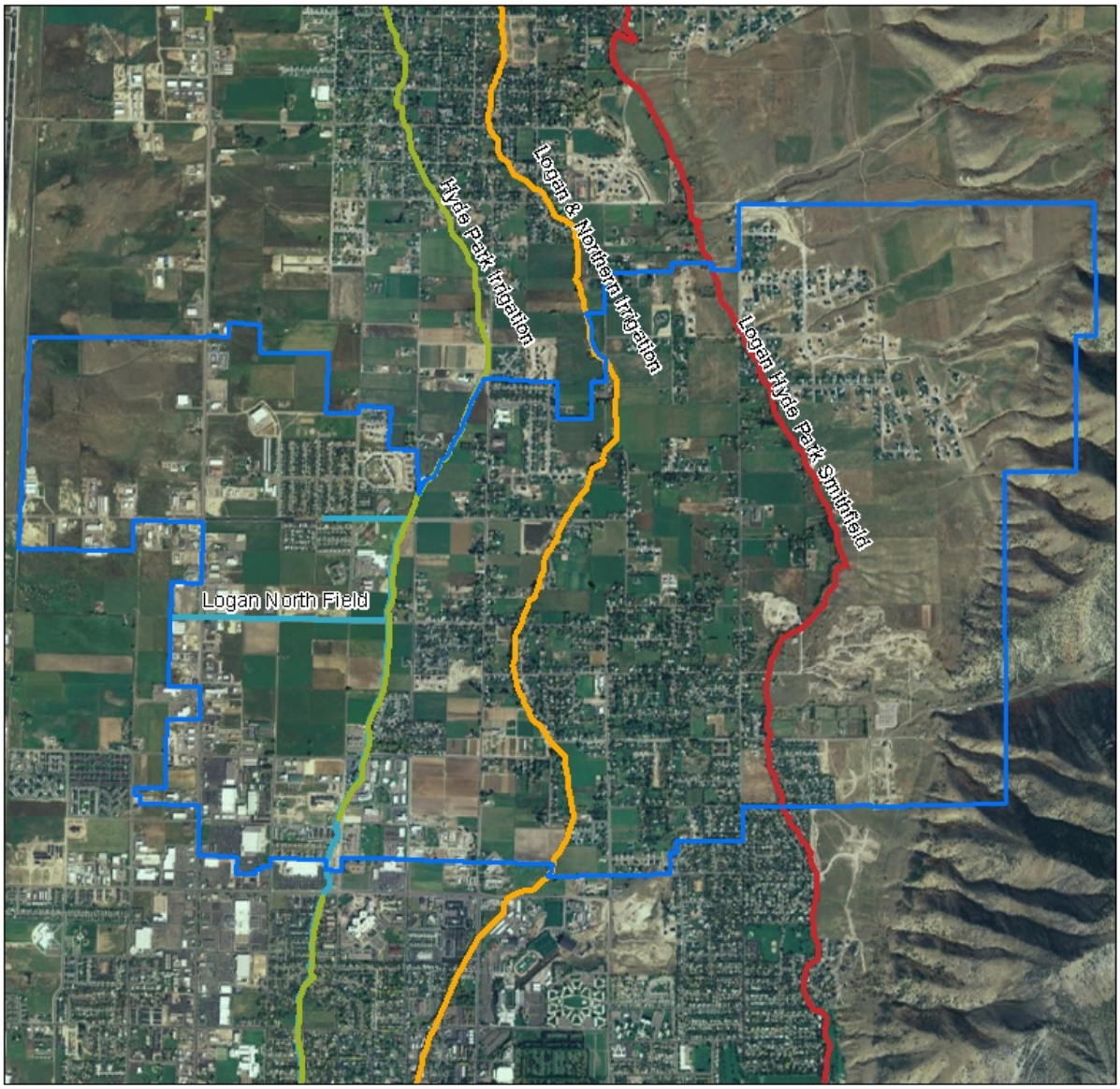
Annual Precipitation: 17.36 inches per year

Type of Community: A small rural city with moderate rates of residential growth that are expected to continue for many years.

Latitude: 41.77° N

Longitude: 111.83° W

Storm Drain System The North Logan storm water system consists of curb and gutters, culverts, a few typical piped sections, swales and canals. The majority of the storm water facilities continue to drain into one of two irrigation canals. These two canals are the Logan & Northern Canal which flows north through Smithfield and eventually drains into the Bear River, and the Hyde Park Irrigation Canal which flows north to the northern end of Hyde Park and then west out to the Bear River. The other two canals (the Logan, Hyde Park, Smithfield Canal; and the Logan North Field Canal) receive some storm water but not as much as the first two. The canals have served as the recipient for storm water flows since the city's establishment. Very few controls exist within the system. Most of the streets use drainage swales and ditches with the remaining ones using curb and gutter to collect storm water runoff.



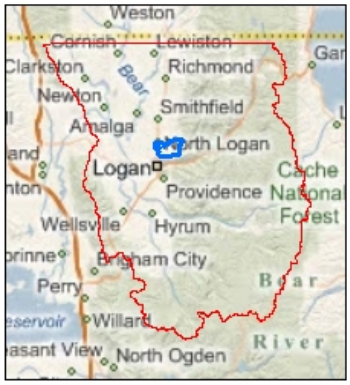
Legend

- North Logan City
- Cache County

Canals

Owner

- Hyde Park Irrigation
- Logan & Northern Irrigation
- Logan Hyde Park Smithfield
- Logan North Field



North Logan City MS4