Storm Water Considerations related to proposed high density developments in the north end of Heber Valley.

The proposed high-density developments in the north end of the Heber Valley will increase impervious area and will increase the volume of stormwater runoff. The impervious surfaces associated with high density will reduce the pervious area and will potentially change the volume and quality of water entering the Heber Valley aquifer.

Storm water runoff from paved streets and parking lots has been found to contain pollutants including the following.

- Oils, antifreeze and metals
- o Salts
- Increased water temperature

The Heber Valley Aquifer in the North Fields area has been classified as a Class 1A Aquifer and is referred to as Pristine Ground Water (see attached map). <u>Aquifer Classification: Utah Ground Water</u> <u>Quality Protection Program - Utah Department of Environmental Quality</u> The portion of the Heber Valley Groundwater Classification Map which includes the north end of North Fields is reproduced in Figure 1. The Class 1A Aquifer is shown mapped with green shading on Figure 1. There are several wells in the area which rely on the excellent water quality of the aquifer. The red dots on Figure 1 show wells inventoried in 1991. The subsoils in the area are very cobbly and have high permeability but low ability to adsorb and treat pollutants.



Figure 1 - Portion of Ground Water Classification Map for Heber Valley

Pollutants from developments entering a Class 1A Aquifer are restricted. <u>Classes: Utah Ground Water</u> <u>Quality Protection Program - Utah Department of Environmental Quality</u> Utah Administrative Code Rule R317-6 Ground Water Quality Protection.

Storm water drainage systems which infiltrate water into the subsurface are classified as UIC Class V injection wells. Owners/operators of UIC Class V facilities are required to submit an inventory of the facilities to the Utah Division of Water Quality (<u>Storm Water Drainage Wells: Utah Underground</u> <u>Injection Control (UIC) Program - Utah Department of Environmental Quality</u>). If the facility is found to be harming the aquifer, the owner/operator could be required to remove the facility and remediate the impact to the quality of the aquifer.