

Section 2: Long-Term Storm Water Management Plan

1. What is the total area of the site? (acres)

2. What are the proposed business operations for this project upon completion?

3. What are the expected pollutants that will be generated after project completion due to business and maintenance operations that will need to be planned for and mitigated? Check all that apply.

Sediments - Erosion or soils that are not stabilized.

Nutrients - Animal waste, plant debris, sediment, fertilizers, etc.

Hydrocarbons- Oils, gasoline, diesel fuel, antifreeze, etc.

Heavy Metals - Manufacturing, industrial wastes, vehicles, etc.

Toxic Chemicals - industrial chemicals, pesticides, etc.

Trash, debris, solids

Pathogens - Bacteria, viruses, animal/human waste, etc.

Salt - Salt piles, car washing, snow removal, etc.

Temperature - Thermal pollution, industrial waste, etc.

Other - Please describe:

4. List how each of the individual expected pollutants from question 3 will be mitigated through your site design and/or Standard Operating Procedures.

A guidance document for Low Impact Development (LID) can be found on the Utah Division of Water Quality website at the link provided. Pages 43-45 of the link contain flow charts to help determine appropriate BMPs. Non-structural BMPs should be utilized wherever possible before reliance on structural BMPs. Examples: minimize or break up impervious surfaces and preserve native soils/vegetation.

5. Because storm water is considered a resource and not a waste product, what LID systems and/or practices have been evaluated and implemented into this project? Why those LIDs?

6. What is the technical basis that supports the performance claims of the selected LID and BMPs?

7. If using LID systems and/or practices are found to be technically infeasible, you must provide a rationale as to why they are infeasible and what systems and/or practices were considered including alternatives.

8. The City of Orem requires run-off from roof areas and dumpster pad areas to drain to vegetation as a basis to mitigate specific expected pollutants (Orem Code 23-4-8(7)). Please refer to the document [Roof Drain Education/Requirements](#) at stormwater.orem.org for more information. If this requirement cannot be met for your site due to technical infeasibility, please describe how you will mitigate the specific expected pollutants based on your roof materials.

9. Who will ultimately be responsible for the inspection and maintenance on the storm drain system after completion of the project? (Individual, Company, HOA, etc.)

10. Please provide the frequency at which long-term storm water controls need to be inspected and/or maintained if the storm water control is not included in the [City of Orem LTSWMP Stormwater System SOP](#):

BMP Name/Number	Type of BMP	Inspection Frequency	Indicator for Maintenance
EX: Hydrodynamic Separator	Pretreatment Device	Semiannually	Visual evidence of pollutants or....refer to manufacturers specifications attached...etc.

All storm water controls are listed in Orem's Stormwater System SOP

The property owner is required to comply with and incorporate into their Long Term Storm Water Management Plan (LTSWMP) all of the City of Orem LTSWMP Standard Operation Procedures (SOP's), as the city may amend from time to time. A current copy of these can be located at <https://orem.org/stormwater/>

11. In addition to the City of Orem SOPs, are there any site specific SOPs that need to be included in this LTSWMP? If so, please list them below. Provide and attach any relevant maintenance documentation.

Yes

No

12. Does your site include the use of any Underground Injection Control (UIC) Class V injection wells (dry wells, underground injection chambers, sumps, etc.) to address storm drainage discharge? If so, you must register them with the state UIC Program at <https://deq.utah.gov/water-quality/utah-underground-injection-control-uic-program>. The UIC Facility ID can be found in your authorized-by-rule from the state.

Yes

No

Please provide your UIC Facility ID here:

13. If your site is industrial, have you applied for coverage under the state's General Multi-Sector Industrial Storm Water Permit at <https://deq.utah.gov/water-quality/general-multi-sector-industrial-storm-waterpermit-updes-permits?>

Yes

No

Please provide your permit number here:

14. Do you plan on harvesting rainwater for reuse as irrigation water? If you are harvesting more than 100 gallons, you are required to register with the State of Utah Division of Water Rights at <https://waterrights.utah.gov/forms/rainwater.asp>

Yes

No

Please provide your permit number here:

15. Please provide all the parcel numbers for the parcels that this project will effect. Parcel numbers can be found at the [Utah County Parcel Map](#).

16. Attach a Long Term Storm Water Best Management Practice (BMP) Site Map to this questionnaire. This is a required document. See below to view an example map.

This map will need to show all of the permanent storm water BMPs with each BMP labeled with a specific name, for example: Sump #1, Pretreatment Catch Basin #1, Inlet #1, Inlet #2, etc. Abbreviations may be used to name each BMP, for example: SMP #1, SMP #2, PCB #1, PCB #2, etc. If abbreviations are used in naming the BMPs a key will need to be provided on the sheet.

All storm water related BMPs will need to be shown such as: Curb Cuts, Detention Ponds, Inlets, Pipes, Pretreatment Catch Basins, Rain Gardens, Retention Ponds, Roof Drains, Standard Catch Basins, Sumps, Swales, Underground Storage, etc. (See Orem Code 23-4-8(8)(B)(1))

Example Long Term Storm Water BMP Site Map:

