

# STORM WATER AND FLOODPLAIN UPDATES



City Council

March 9, 2021

# Purpose

New storm water permit changes  
and floodplain requirements

Presentations to Planning  
Commission and City Council

Overview of what is to come

How will this affect development in  
Sandy City





## Storm Water Permits: UPDES Permits

The Utah Pollutant Discharge Elimination System (UPDES) is the Utah version of the National Pollutant Discharge Elimination System (NPDES), which is the permit system mandated by § 402 of the Clean Water Act to control pollutants in waters of the U.S., including storm water. The Utah Storm Water Program is part of the UPDES Program. The Storm Water Program regulates storm water discharges from three potential sources:

**Municipal Separate Storm Sewer  
Systems (MS4s)**

**Construction Activities**

**Industrial Activities**

# Storm Water Updates

**STATE OF UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION OF WATER QUALITY**

Authorization to Discharge Municipal Storm Water Under the  
Utah Pollutant Discharge Elimination System (UPDES)

UPDES PERMIT NUMBER UTS000001

This Permit is issued in compliance with the provisions of the Utah Water Quality Act, Utah Code Title 19, Chapter 5, (the "Act"), the Federal Water Pollution Control Act (33 U.S.C. §§ 1251 et. seq., as amended to date), and the rules and regulations made pursuant to those statutes, to the

JORDAN VALLEY MUNICIPALITIES, specifically,

SALT LAKE COUNTY, BLUFFDALE CITY, COTTONWOOD HEIGHTS, DRAPER CITY, GREATER SALT LAKE MUNICIPAL SERVICE DISTRICT, HERRIMAN CITY, HOLLADAY CITY, MIDVALE CITY, MILLCREEK, MURRAY CITY, RIVERTON CITY, SANDY CITY, SOUTH JORDAN CITY, SOUTH SALT LAKE CITY, TAYLORSVILLE CITY, WEST JORDAN CITY, AND WEST VALLEY CITY

This Permit shall become effective on **February 26, 2020**.

This Permit and the authorization to discharge shall expire at midnight, **February 25, 2025**, except as described in Part 6.3 of this Permit.

Signed this 26<sup>th</sup> day of February, 2020.

  
Erica Brown Gaddis, PhD  
Director

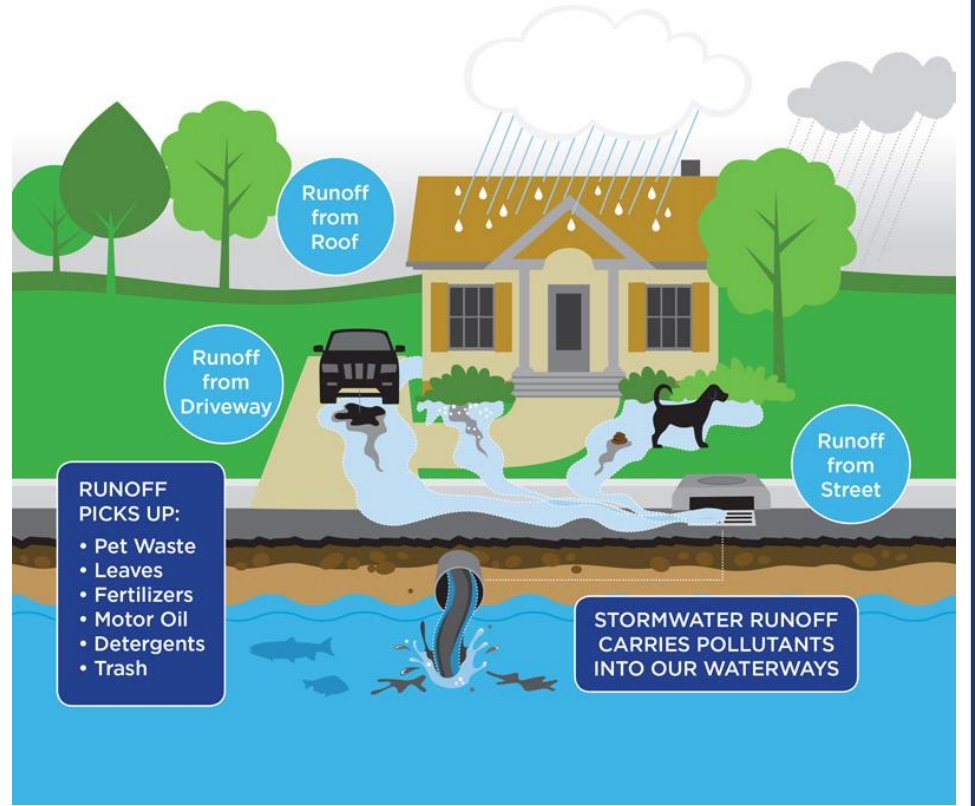
DWQ-2020-001244



**We All Live Downstream**  
stormwatercoalition.org

During a storm,  
the water must  
go somewhere

# LID





Poor water  
quality

# LID







# Floodplain Updates



Photo by [Phillip Flores](#) on [Unsplash](#)

# Purpose

## Sec. 21-16-17. - Development Standards Within the Flood Plain Overlay Zone.

In addition to the general development standards found elsewhere in this title and all areas of special flood hazards, the following standards shall be required:

- (1) *Anchoring.*
  - a. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure and be capable of resisting the hydrostatic and hydrodynamic loads.
  - b. All manufactured homes must be elevated and anchored to resist flotation, collapse, or lateral movement and be capable of resisting the hydrostatic and hydrodynamic loads. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable State and local anchoring requirements for resisting wind forces. Specific requirements may include:

Update City  
floodplain ordinance



Photo by [Scott Graham](#) on [Unsplash](#)

## Permit for Floodplain Development

**A permit is required before construction or development begins within any Special Flood Hazard Area (SFHA).** If FEMA has not defined the SFHA within a community, the community shall require permits for all proposed construction or other development in the community including the placement of manufactured homes, so that it may determine whether such construction or other development is proposed within flood-prone areas. Permits are required to ensure that proposed development projects meet the requirements of the NFIP and the community's floodplain management ordinance.

A community must also review all proposed developments to assure that all necessary permits have been received from those governmental agencies from which approval is required by federal or state law.

### **National Flood Insurance Program Requirements**

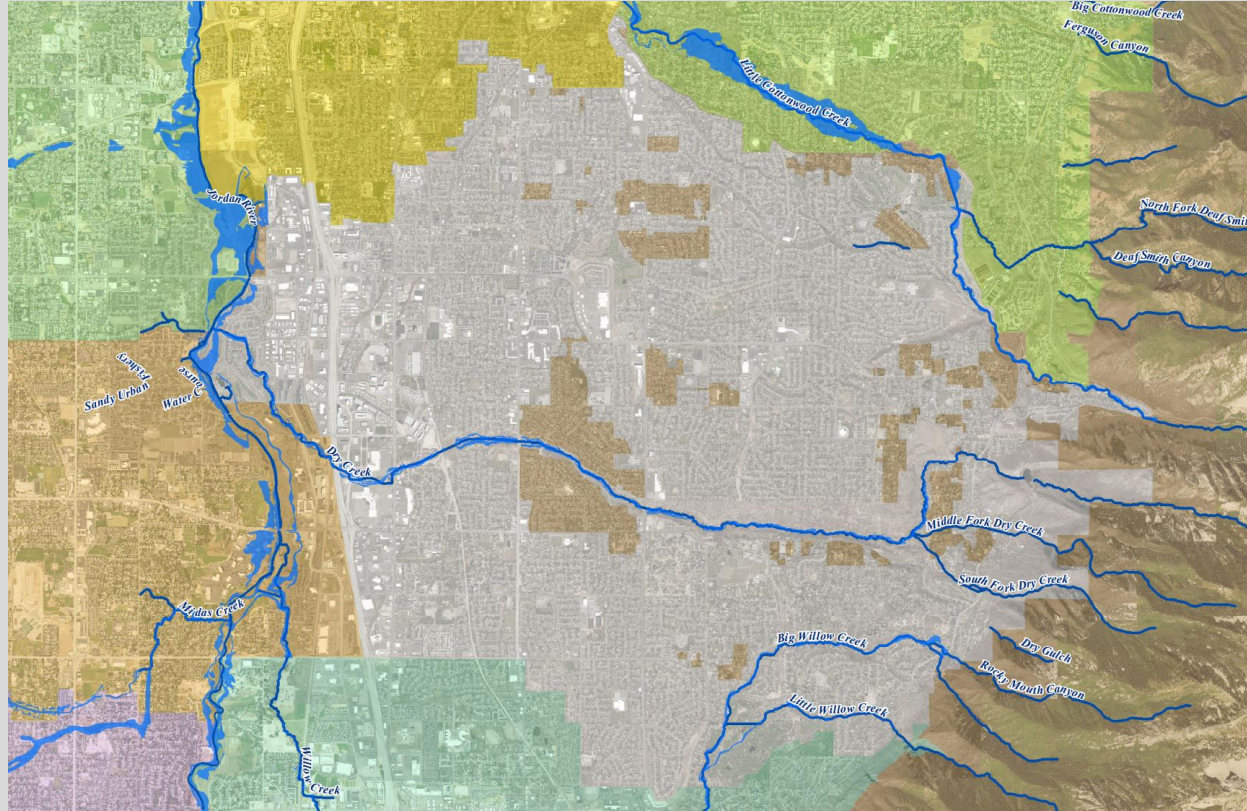
- 60.3 - Flood plain management criteria for flood-prone areas
  - (a) (1) - Require permits for all proposed construction
  - (a) (3) - Reasonably Safe from Flooding

Glossary Section  
NFIP - National Flood Insurance Program

Implement a  
Floodplain  
Development  
Permit



Photo by [Daniel McCullough](#) on [Unsplash](#)



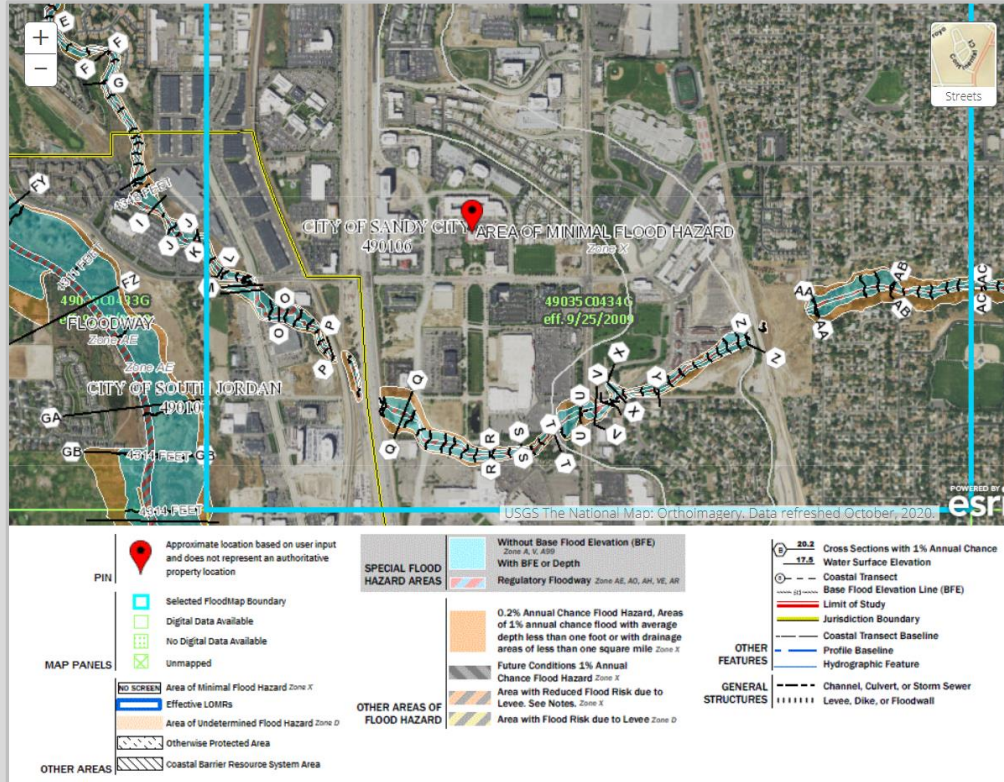
Development in  
the floodplain is  
regulated by  
FEMA using the  
NFIP



## National Flood Insurance Program (NFIP)

Provides maps and regulations for local program management.

Sandy City needs to update ordinances. We are currently out of compliance.



## How do we come back into compliance?

Sandy City has developed a Floodplain Development Permit for all development in floodplains within the City.

Permit  
required  
for:

Construction of new structures

Modifications or improvements to existing structures

Excavation

Filling

Paving

Grading

Land clearing

Permanent storage of materials and/or equipment

## Experts



Storm water design criteria standards & LID Toolbox



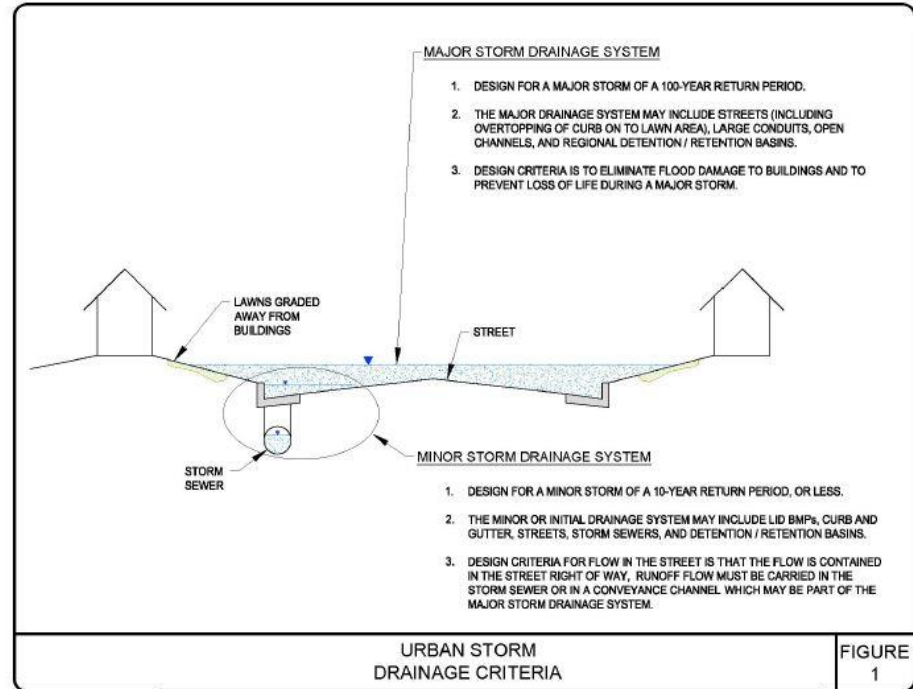
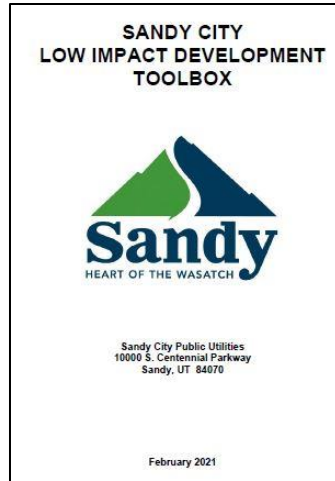
CRS ENGINEERS  
Answers to Infrastructure®

Prepared updates to the Floodplain Overlay Zone ordinance and developed the Floodplain Development Permit

# Updates

## Storm Water Specification Updates

- Part 7.0 A – Development Standards and Requirements
- Part 7.0 B – Storm Water Design Criteria



# Updates

## Ordinance Updates

- Ch. 1-1 – Definitions and Rules of Construction
- Ch. 9-1 – Storm Water Quality and Enforcement
- Ch. 10-1 – Excavation Permit
- Ch. 21 – Land Development Code
  - 21-15 – Sensitive Overlay Zone
  - 21-16 – Floodplain Overlay Zone
  - 21-17 – Drinking Water Source Protection Overlay Zone
  - 21-20 – Residential Development Standards
  - 21-21 – Subdivision Design Standards
  - 21-22 – Manufactured Home Parks
  - 21-23 – Commercial, Office Industrial, and Transit Corridor Development Standards
  - 21-24 – Parking, Access and Circulation Requirements
  - 21-25 – Landscaping Standards
  - 21-27 – Grading and Excavation
  - 21-30 – Subdivision Review
  - 21-32 – Site Plan Review
  - 21-37 - Definitions

- LID
- Definitions
- Consistency & clarification
- Reflect new storm water design criteria and construction requirements
- Floodplain requirements



## Conclusion

Any questions?