

Numerous areas of poor drainage are documented in this report. These areas of poor drainage can exhibit ponded water during heavy precipitation. These areas are localized and typically occur due to obstruction of drywells or catch basins. An inventory of drywells, identified by the City as exhibiting failure characteristics, is presented in Table 3.2. These drywells may not be performing adequately due to high groundwater, slow infiltration rates, or large contributing drainage basins. Excessive overland flow is generally very limited due to the high permeability and water capacity of the native soils.

Table 3.2 Drywells/UICs Observed to Exhibit Failure Characteristics

Drywell ID #	Location	Condition
No ID	N Baker St and N Alder St	Slow Draining
B-8	NW 9th Ave. and N Ash St.	Slow Draining
B-11	NW 9th Ave. and N Cedar St	Slow Draining
D-61	NE 12th Ave	Slow Draining
A-5	SW 13th Ave and S Cedar	Slow Draining
D-63	NW 10th and N. Pine St	Slow Draining, Standing Water
D-26	NE 12th Pl and N Pine St	Slow Draining, Potential for Standing Water
D-28	NE 11th Pl and N Pine St	Potential for Standing Water
D-23	NE 13th Ave and N Pine St	Slow Draining, Standing water
D-31	NE 10th Ave and N Oak St	Slow Draining, Standing water
D-35	N Maple St at Maple St City Park	Slow Draining, Potential for Standing Water
F-7	N Birch St and NW Territorial Rd	Slow Draining, Potential for Standing Water

Due to the relatively short duration of the impacts of flooding and the minimal risk to property, a low intensity storm is used as the design standard for future stormwater infrastructure sizing. The City of Canby's Public Works design standards require conveyance systems to be designed to pass the 10-year storm event without surcharge, and the 25-year event with surcharge while maintaining the hydraulic grade lines below the manhole lids. The 10-year return frequency design storm is used as the standard for calculating runoff rates and volumes, which is, in turn, used for sizing all conveyance system improvements. The cost escalates dramatically with the selection of a less frequent storm event, as a result of requiring larger size conveyance systems.

Recent flooding events described by the City are generally of localized areas flooding during larger rainfall events and consist of street and intersection flooding. The areas that flood are most commonly associated either with a relatively large drainage basin contributing to a single drywell, or with a drywell that has been identified as having wet feet or being slow draining. In some cases, lack of maintenance of adjacent privately-owned stormwater systems was identified as contributing to flooding. Specific characteristics of areas that flood are described as part of the relevant CIP in Section 6. Flooding generally subsides within approximately six hours, but can last for two or three days and impairs access.