

2.0 STUDY AREA

This section discusses the study area and its physical characteristics. Also discussed are pertinent land use and planning criteria.

2.1 STUDY AREA

The study area is comprised of the areas within the City limits, the Urban Growth Boundary (UGB), and additional area outside of these two boundaries where stormwater runoff collects before it drains into the City’s storm system. The City’s UGB (UGB & Urban Reserve) is made up of 9,992 acres of land. Adding outside drainage areas brings the total study area to approximately 27,000 acres. Figure 1 in Appendix A illustrates the City limits, the UGB, and the study area.

2.2 PHYSICAL ENVIRONMENT

The physical environment of the study area includes climate, soil characteristics, and topography.

2.2.1 Climate

Grants Pass lies within the Rogue River Valley, which has a relatively mild climate characterized by cool, wet winters and hot, dry summers. A summary of climate data for Grants Pass is shown in Table 2.1.

Table 2-1: Climatological Data (1893-2015) – Grants Pass, Oregon

	Jan	Feb	Mar	Apr	May	June	July
Precipitation (in)	5.45	4.17	3.27	1.86	1.40	0.75	0.25
Snowfall (in)	2.2	0.9	0.4	0	0	0	0
High Temperature (F)	47.2	54.1	60.4	67.1	74.3	81.3	89.9
	Aug	Sep	Oct	Nov	Dec	Annual Average	
Precipitation (in)	0.28	0.78	2.23	4.58	5.58	30.61	
Snowfall (in)	0	0	0	0.1	0.9	4.5	
High Temperature (F)	89.6	82.9	69.8	53.9	46.5	68.1	

*Source of data: Western Regional Climate Center

2.2.2 Soils

In general, soils within the study area are primarily sandy loam, mixed in with other types of loam. Slopes vary from 0 to 60 percent. Soils data from the area was obtained from the NRCS website. A soils map and listing of soils within the study area can be found in Figure 2 in Appendix A. Soils characteristics pertinent to this study include both slope, depth to groundwater, and runoff infiltration capacities. Sandy loam soils will generally soak up more runoff than high clay soils.

2.2.3 Topography

Grants Pass is divided by the Rogue River, which runs from the east to the west across the study area. The highest elevations are on the far north side and far south side. Surrounding hills are significantly steeper than downtown areas. Ground elevations in the study area range from a low of approximately 860 feet above mean sea level near the Rogue River, to approximately 1790 feet above mean sea level near the northeastern boundary of the study area. The overland slopes in the City typically average 2.6%. The study area topography is shown in Figure 3 in Appendix A.

2.3 STORMWATER BASINS

Stormwater from the study area generally drains into six receiving streams: Jones Creek, Skunk Creek, Gilbert Creek, Fruitdale Creek, Allen Creek, and Sand Creek. All water eventually drains to the Rogue River. The storm systems that drain to each of these receiving streams is delineated in Figure 4 in Appendix A, and the approximate percentages of the study area draining to each are summarized in Table 2.2.

Table 2-2: Percent of Study Area Draining for Each Major Drainage Basin

Jones Creek	Skunk Creek	Gilbert Creek	Fruitdale Creek	Allen Creek	Sand Creek
20%	10%	18%	21%	14%	17%

2.4 LAND USE

The City of Grants Pass includes lands designated as open, commercial, industrial, public right-of-way (e.g. transportation roadways), and residential. Existing land use for the study area is shown in Figure 1 in Appendix A. It is anticipated that future development will not substantially increase stormwater peak runoff rates since the recommended policy within the study area requires post-development runoff rates to be limited to pre-existing conditions.

2.5 UGB STATUS

The City of Grants Pass expanded their UGB in November 2014. A report from the City suggests there could be 60,564 total residents in the existing and expanded UGB by 2050. The figures in Appendix A of this report reflect the new UGB.