

# Chapter 1 – Introduction

## 1.1 Background

In recent years, the Park City and Snyderville Basin (Basin) area has experienced some of the fastest growth in Utah. This growth has included commercial, institutional, and residential development. The expansion of the ski resorts prior to and following the 2002 Winter Olympics has attracted not only seasonal resort developments, but also year-round residential communities. The entire area is experiencing an accelerated change from a regional ski resort destination to a diversified year-round vacation and living community, as well as a bedroom community for the Salt Lake Metropolitan area.

Historically, the municipal and industrial (M&I) water supply to the Snyderville Basin has been provided by a number of entities. Park City Municipal Corporation has provided water to city residents since the city was incorporated. As development began to spread into the unincorporated areas of the Snyderville Basin, a number of organizations were created to provide water. Most were formed by developers needing to provide a water system for their associated land development projects. Over the years, many of those systems evolved into private water companies, private mutually-owned companies, or special service districts formed by Summit County. There are also some developments that still rely on individual wells to provide residential water.

Most of these systems have relied on wells as the primary source of M&I water. Park City has developed a large portion of its water supply from tunnels formerly used for mineral extraction. A few small springs have been developed to supplement the wells. The Snyderville Basin has a unique groundwater system. The area is divided into a number of compartmentalized basins composed mostly of bedrock formation aquifers that are segregated from each other. Studies have shown that these aquifers are limited in storage capacity and are recharged primarily through precipitation, with relatively short recharge periods.

Because of the limited groundwater resource, there is a concern that there may be limited potential for additional development of the groundwater as a reliable long-term water source for the Snyderville Basin. The drought that has occurred in the past 5 to 6 years (1999-2004) has raised concerns about the amount and reliability of further groundwater development within the Basin. These concerns have been compounded by the rapid growth in the Basin.

Three water entities servicing the Basin have developed surface water sources and constructed treatment plants. Community Water Company operates the oldest surface water source using Willow Creek water located near The Canyons Resort. Summit Water Distribution Company (SWDC) and Mountain Regional Water Special Service District (MRWSSD), have each developed surface water treatment plants. The SWDC Plant treats water diverted from East Canyon Creek while the MRWSSD Plant in the Promontory Development recently began importing and treating water from the Weber River area just upstream of Rockport Reservoir.

With continued growth of residences and business interests in the Basin there is a great interest in determining the long-range water needs of the Basin and identifying feasible alternatives to provide additional water to meet future demand. Over the past several years, Government agencies and several private entities have explored various options to develop an additional water supply. Frequently, there has been competing views on water supply, infrastructure, and service areas. Several of these entities have proposed options for importing additional water into the Basin to meet their individual needs.

A number of investigations have been conducted since the early 1990's by various organizations, including the Weber Basin Water Conservancy District (WBWCD), Park City Municipal Corporation, MRWSSD, Summit County, SWDC, and the U.S. Army Corps of Engineers (COE). These studies are compiled and summarized as part of this study. An extensive literature search was conducted and a reference summary is included at the end of this report.

In 2001, the COE was funded and directed by Congress to conduct a feasibility study for Park City on water supply options, titled the "Park City Water Supply Infrastructure Study". The COE completed significant work prior to Reclamation's involvement. Page 120 of the FY 2004 Energy and Water Appropriations Conference report states: "The conference agreement includes \$500,000 for the Bureau of Reclamation to continue a feasibility study of water supply infrastructure improvements in Park City, Utah. Reclamation received additional funding in FY 2005 and FY 2006. This study is being conducted pursuant to the authority and with the funding provided in these appropriations.

Park City and the Snyderville Basin lie within the boundaries of WBWCD. WBWCD has extended offers to water providers in the Basin to purchase unsubscribed-for M&I water to augment their supplies. WBWCD, Park City, Summit County, and MRWSSD (then known as Atkinson Special Service District), entered into a Memorandum of Understanding and Agreement dated November 18, 1996 (1996 MOU). The 1996 MOU set forth a framework for the development of a project to deliver water made available from WBWCD's sources to the service areas of Park City and MRWSSD, with possible future expansion into other areas of Summit County. That agreement expired in early 2004, and in May 2004, a new MOU was negotiated.

SWDC has entered into an agreement with the Davis and Weber Counties Canal Company (D&WCCC) to purchase 5,000 acre-feet of water in East Canyon Reservoir and pump it to its treatment plant in the Snyderville Basin to supply its customers. They have also offered to participate with WBWCD in any importation project from East Canyon Reservoir.

The purpose of this study is to evaluate the water needs within the rapidly growing Park City and Snyderville Basin area, quantify those needs, and develop and evaluate options or alternatives, that could be pursued to provide for the M&I water demands expected through 2050.

## **1.2 General Description of Study Area**

The boundaries of the Snyderville Basin for the purposes of this study were determined by Reclamation with input from the State of Utah Division of Water Resources (UDWR) and water

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providers in the Basin. This study area encompasses the area from near the western Summit County boundary at mile marker 140 on Interstate 80 (I-80), east to I-80 mile marker 150, and north and south of I-80 to the enclosing mountain ridgelines on or near the Summit County boundaries. An illustration of the study area is provided in Figure 1-1.

The study area generally consists of higher elevation mountain valleys and resort developments on the slopes of the surrounding mountains.

**FIGURE 1-1  
VICINITY MAP**

**SNYDERVILLE BASIN WATER SUPPLY STUDY**

