

# Chapter 1 – Need for Proposed Action and Background

## 1.1 Introduction

Summit Water Distribution Company (SWDC) has asked the Bureau of Reclamation (Reclamation) to approve its proposal to implement what is called Option 5, the East Canyon Pipeline, as analyzed and presented in the *Park City and Snyderville Basin Water Supply Study Special Report* (Reclamation 2006).

In March 2006, the Bureau of Reclamation, Provo Area Office distributed to the interested public, a report analyzing water supply options that might provide for future municipal and industrial water supplies for the Park City and Snyderville Basin area of Summit County, Utah. This report was completed as directed and authorized by the U.S. Congress; Reclamation was the primary author in preparing this report, with the Utah Division of Water Resources contributing to the study effort. In this report, Option 5 (East Canyon Pipeline) and Option 7 (Lost Creek Canyon Pipeline) were identified as preferred water supply options recommended for implementation.

Weber Basin Water Conservancy District (WBWCD) requested and Reclamation completed an environmental assessment which analyzed the impacts related to the development of Option 7, as analyzed in the water supply study. This option, providing for delivery of up to 7,500 acre-feet per year from Rockport Reservoir to the Signal Hill Water Treatment Plant via the Lost Creek Canyon pipeline, was authorized in February 2008 and is now in operation.

Through the WBWCD, SWDC asked Reclamation to undertake additional engineering and environmental analyses related to implementation of Option 5, the East Canyon pipeline. Some components of this option have already been planned and built by SWDC. A plan to divert up to 12,500 acre-feet per year of water from East Canyon Reservoir into facilities already built or under construction requires Reclamation authorization. This proposed action includes a water intake structure, a pump station, a booster station, 23.6 miles of powerline and transformers/substation, and 7.7 miles of 30-inch diameter pipeline. The pipeline would convey water from East Canyon Reservoir to an existing 30-inch pipeline built by SWDC at the Morgan/Summit County line on the East Canyon Road, and from there to Summit's East Canyon Water Treatment Plant in the Jeremy Ranch area of Summit County, Utah.

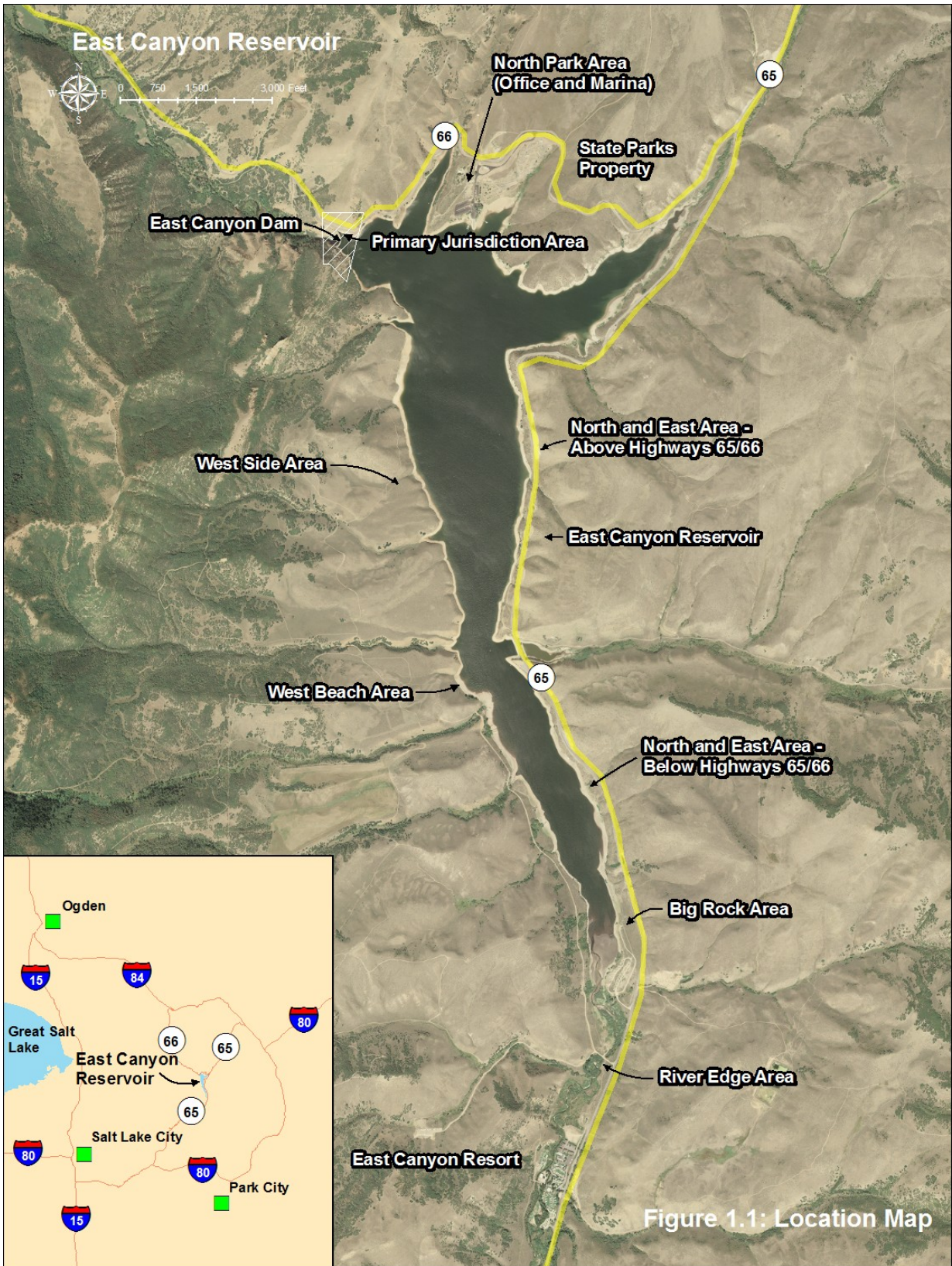
In order to analyze this proposed action, Reclamation has prepared this EA as required by the National Environmental Policy Act (NEPA), the Council on Environmental Quality, and U.S. Department of the Interior regulations implementing NEPA. This EA analyzes the potential impacts of Reclamation approving SWCD's proposal. As required by the NEPA implementing regulations, if potentially significant impacts to the human environment are identified, an environmental impact statement (EIS) will be prepared. If no significant impacts are identified, Reclamation will issue a Finding of No Significant Impact.

## **1.2 Background**

East Canyon Reservoir, located in Morgan County, is on East Canyon Creek, a tributary of the Weber River in northern Utah, 9 miles south of the City of Morgan and 15 miles northeast of Salt Lake City (Figure 1.1). The reservoir rests at the 5,705 foot elevation and has a 681-acre surface area, with a 3.5-mile reach, and a width of about 2,000 feet. On the eastern side of the Wasatch Mountains, the climate in the vicinity of the reservoir is semiarid with dry summers and cold, snowy winters.

The original dam on East Canyon Creek was completed in 1899 by the Davis and Weber Counties Canal Company (DWCCC), to provide downstream irrigation water during the latter part of the growing season. In 1900 and 1902, the canal company raised the dam 25 and 17 feet, respectively, to a total dam height of 145 feet above bedrock. In 1916, an arched reinforced-concrete dam was completed just below the original dam, to further increase the reservoir's storage capacity. This dam served the area until 1964, when deterioration of the concrete necessitated the need for a new dam.

The current East Canyon Dam, completed in 1966 by Reclamation, is the fifth dam construction project in the East Canyon Creek Reservoir area. This dam was constructed as part of the Weber Basin Project, authorized by Congress on August 29, 1949 (63 Stat. 677), for the purposes of supplying irrigation water to lands, both new and presently irrigated; supplying municipal, industrial, and domestic water; controlling floods; and generating and selling electric energy and for other beneficial purposes (including, but without limitation, the control and catchment of silt, improvement of the general quality of the water, the preservation and propagation of fish and wildlife, and the provision and improvement of recreation facilities). The Secretary of the Interior authorized reimbursement of costs for constructing, operating, and maintaining (including reasonable provision for replacement) for irrigation, power, municipal, and other water supply purposes but flood control, recreation, and fish and wildlife purposes are nonreimbursable and nonreturnable.



Water released from East Canyon Dam is returned back to East Canyon Creek, where it flows to the Weber River and is diverted for domestic and irrigation uses. The present dam nearly doubled the East Canyon Reservoir water storage capacity from 28,800 acre-feet to 51,200 acre-feet. The DWCCC, through an agreement with Reclamation and the WBWCD, operates and maintains East Canyon Dam.

East Canyon reservoir is unique in that it stores both private and Federal water rights. By contract DWCCC stores and uses the first 28,000 acre-feet of storage per year under their private water rights in East Canyon Reservoir. Reclamation can store and use up to 23,200 acre-feet of storage per year depending on Federal water right priority dates and hydrologic yield of the reservoir (see table 3.3).

### **1.3 Purpose and Need and Scope of Analysis**

The purpose of the proposed action is to authorize SWDC to build and operate facilities to deliver water to the Park City/Snyderville Basin area (Figure 1.2). The need for the proposed action is a growing demand for water in the Park City/Snyderville Basin area due to population growth and increased development of recreation facilities and vacation homes.

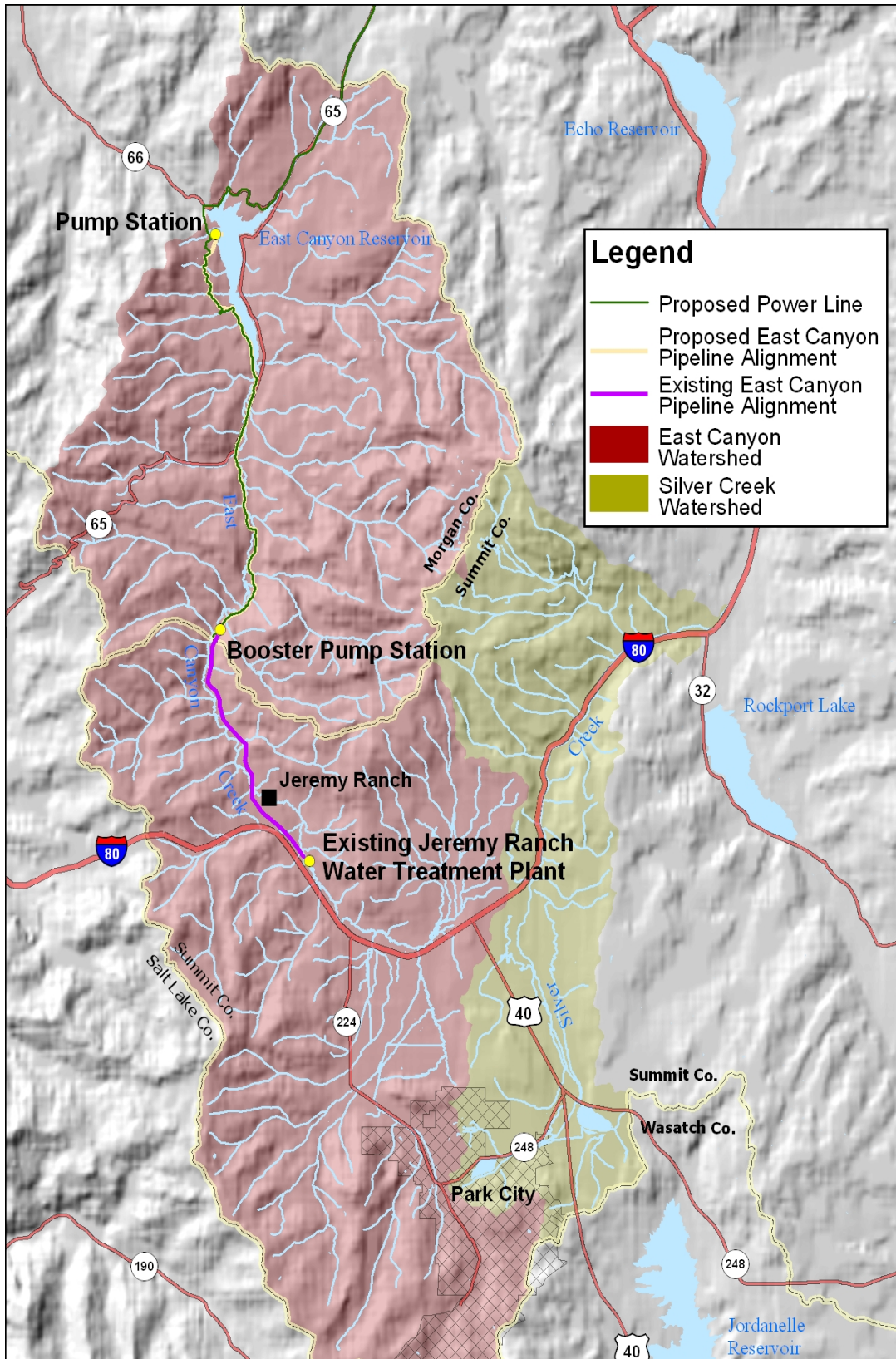
The scope of analysis in this EA is limited to consideration of whether or not Reclamation should authorize SWDC to proceed with their proposed new intake structure and pipeline and appurtenant facilities on Reclamation property. A number of studies over the years, most recently the February 2006 Special Report, published by Reclamation, have discussed and analyzed how to meet the growing demand for water in this area over the next 50 years. There are a number of possibilities for providing new sources of water for the Park City/Snyderville Basin area, which might involve Federal, state, or local government entities, or which could be developed by the private sector. These alternative water sources are also available to meet the need and growth trends if Reclamation did not grant SWDC permission.

The proposed action does not require significant changes to the operation of East Canyon Dam. Dam operations would continue within the wide range of historic operations.

## **1.4 Authorizing Actions, Permits, and Licenses**

Implementation of the proposed action could require a number of authorizations or permits from State and Federal agencies. These are summarized below.

- Reclamation authorization needed under Section 10 of the Reclamation Project Act, August 4, 1939, to construct and operate facilities on Reclamation lands (25 year license agreement).
- Private land authorization needed to construct and operate facilities on or across private lands.
- State of Utah (State Engineer) authorization needed to allow DWCCC and Weber Basin Project water rights to be diverted from the new point of rediversion (the State Engineer has already approved the Exchange Application for the proposed action).
- Permit from the U. S. Army Corps of Engineers (USACE) in compliance with Section 404 of the Clean Water Act and section 10 of the Rivers and Harbors Act, as amended, would be obtained by SWDC.
- A Utah Pollutant Elimination System Permit from the State of Utah would be obtained by SWDC.
- A stream alteration permit from the State of Utah, Division of Stream Alteration would be obtained by SWDC.
- Water purchase agreement with or between Park City and SWDC.
- SWDC, if design alignment requires, would obtain the necessary easements or rights-of-way to connect the proposed pump station to the existing 30-inch pipeline.



## 1.5 Relationship to Other Projects

- Park City and Snyderville Basin Water Supply Study Special Report. As discussed in Section 1.3 above, the proposed action analyzed in this EA was discussed as Option 5 in the February 2006 Special Report.
- Change of Water Use in Willard Reservoir Final Environmental Impact Statement (EIS), January, 1989 (conversion over time of 30,000 acre-feet from agriculture water to municipal and industrial water). This EIS not only focused on conversion of water stored primarily in Willard Bay, but described how the WBWCD operates all Weber Basin Project facilities in a coordinated manner to assume that water rights are met and instream flows are maintained where applicable.
- Park City Municipal Corporation & Mountain Regional Water Special Service District Water Pipeline Interconnection & Water Treatment Plant. This project is for construction of a water pipeline designed to deliver raw water from Signal Hill Pond (which receives water from Rockport Reservoir), to Quinn's Junction to a planned water treatment plant for treatment prior to final delivery to Park City. This project is an extension of the Option 7 (Lost Creek Canyon Pipeline), identified as the other preferred option recommended for implementation in Reclamation's "Park City and Snyderville Basin Water Supply Study Special Report, February 2006." In that report, Option 5 (East Canyon Pipeline) and Option 7 (Lost Creek Canyon Pipeline) were identified as preferred options recommended for implementation.