

Chapter 1: Introduction

1.1 History of and Authority for the Proposed Action

1.1.1 History

In July 2009, a landslide occurred along a hillside in the city of Logan in Cache County, Utah. As a result of the landslide, a section of the Logan Northern Canal (LN Canal), a locally managed irrigation canal, broke away. This landslide caused a breach of the canal, which prevented the canal from distributing water and required the indefinite closure of a section of the canal. This closure affects other parts of the local irrigation water delivery system, with the result that the canal is not delivering all water allocated to local water shareholders.

The Utah State Office of the Natural Resources Conservation Service (NRCS) began working with Cache County, the sponsoring local organization (SLO), which coordinates with the Cache Highline Water Association, in the fall of 2009 to develop potential solutions. The Cache Highline Water Association is a partnership between the Logan & Northern Irrigation Company and the Logan, Hyde Park and Smithfield Canal Company. The Cities of Logan, North Logan, Hyde Park, and Smithfield also participate in Cache Highline Water Association meetings as stakeholders. The Logan Northern Canal Reconstruction project described and analyzed in this document is the product of this early coordination.

1.1.2 Authority

Cache County is seeking assistance from NRCS through the Emergency Watershed Protection Program (EWPP) to design and construct a system that will restore irrigation water delivery to LN Canal shareholders (the proposed action).

1.1.2.1 Emergency Watershed Protection Program

Congress established the EWPP to respond to emergencies created by natural disasters. The purpose of the EWPP is to undertake emergency measures to safeguard lives and property from floods, drought, and the products of erosion on any watershed whenever a fire, flood, or any other natural occurrence has caused a sudden impairment of the watershed. The EWPP regulations define a *watershed impairment*

What is the Emergency Watershed Protection Program (EWPP)?

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as a situation in which the ability of a watershed to carry out its natural functions is reduced to a point where it creates an imminent threat to health, life, and property. The impairment can include sediment and debris deposited in upland areas of a watershed (7 Code of Federal Regulations [CFR] 624.4[i]).

The EWPP is administered by NRCS, an agency of the U.S. Department of Agriculture (USDA). Because the EWPP is a Federal program, the proposed action is considered a Federal action.

CFR Title 7 – Agriculture, Part 624 – Emergency Watershed Protection (7 CFR 624), paragraph 624.8(c), authorizes NRCS to enter into a cooperative agreement with sponsors to provide funding assistance in the repair, restoration, and protection of private and public property. The Utah USDA-NRCS State Office is responsible for implementing the EWPP in support of developing a solution to the situation caused by the 2009 landslide and is the Federal lead agency for the proposed action. As the SLO, Cache County is coordinating with the local canal system operators and city representatives as well as NRCS.

The EWPP regulations (7 CFR 624) and manual (Title 390, Part 511) identify specific requirements for program funding. These requirements include but are not limited to the following:

- Sponsors must contribute their share of the project costs. The NRCS contribution cannot exceed 75% of the project cost (7 CFR 624.7[b]).
- If the SLO desires to increase the level of protection that would be provided through the EWPP-funded repair, then the sponsor would be responsible for paying 100% of the costs of the upgrade. NRCS can make an exception to this for modifications to damaged areas where technology advances or construction techniques warrant modifications (7 CFR 624.6[b][4]).
- NRCS can provide assistance only for measures that provide protection from additional flooding or soil erosion; that reduce threats to life or property from a watershed impairment, including sediment and debris removal; that restore the hydraulic capacity to the maximum extent practical; and are economically and environmentally defensible and technically sound (7 CFR 624.6[c]).
- EWPP funds cannot be used to solve watershed or natural problems that existed prior to the natural disaster (Title 390, Part 511.4[v]).
- EWPP funds can be used for structural, enduring, long-life conservation practices including, but not limited to, grassed waterways, terraces, embankment ponds, diversions, and water-conservation systems except where the recovery practices are

What is the sponsoring local organization (SLO)?

The *sponsoring local organization* (SLO) is an agency with legal interest in or responsibility for the values threatened by a watershed emergency; is capable of obtaining the necessary land rights; and is capable of carrying out any operation and maintenance responsibilities that might be required as part of an EWPP action (7 CFR 624.4[g]).

eligible for assistance under the Emergency Conservation Program administered by the Farm Service Agency (7 CFR 624.6[b][3]).

- When planning the recovery practices, NRCS will emphasize measures that are the most economical and are to be accomplished using the least damaging practical construction techniques and equipment that retain as much of the existing characteristics of the landscape and habitat as possible (7 CFR 624.6[e]).
- NRCS may determine that a measure is not eligible for assistance for any reason, including economic and environmental factors or technical feasibility (7 CFR 624.6[f]).

1.1.2.2 National Environmental Policy Act

The National Environmental Policy Act (NEPA) requires Federal agencies to identify and disclose the potential effects associated with Federal actions. Because the disbursement of EWPP funds is a Federal action, NRCS must ensure that a solution offered under the EWPP complies with the requirements of NEPA. This Draft Environmental Impact Statement (EIS) is the first step in the NEPA documentation process and will be followed by a Final EIS and a Record of Decision.

Other Federal agencies that would also be responsible for some types of approval associated with the proposed action are acting as cooperating agencies during the EIS process. The USDA Forest Service (USFS) and the U.S. Army Corps of Engineers (USACE) are participating as cooperating agencies. USFS is cooperating because the proposed action alternatives could cross USFS-administered land in Logan Canyon that is part of the Uinta-Wasatch-Cache National Forest¹; USFS would need to authorize any construction or reconstruction of the canal system on land it administers in the canyon through a special-use permit. If a special-use permit is required, USFS would use this EIS in accordance with 40 CFR 1506.3 to meet its NEPA responsibilities and would issue a Record of Decision that supports its action.

The Logan River and some of the canals in the project region are subject to regulation under Section 404 of the Clean Water Act (CWA). USACE would need to authorize any activity that would discharge fill material to waters of the United States such as the river and canals. If USACE could not authorize this activity under an existing general Nationwide Permit, then

What is a cooperating agency?

A cooperating agency is any Federal agency, other than a lead agency, that has jurisdiction by law or special expertise with respect to any environmental impact associated with the proposed action or an alternative.

¹ The Uinta-Wasatch-Cache National Forest was historically managed as three separate National Forests. USFS has managed the Wasatch and Cache National Forests together as the Wasatch-Cache National Forest for many years; USFS completed the most recent Wasatch-Cache National Forest Plan in 2003. USFS consolidated management of the Wasatch-Cache and Uinta National Forests in Utah in 2007, creating what it calls the Uinta-Wasatch-Cache National Forest. USFS currently manages the consolidated areas using two forest plans: one for the Wasatch-Cache National Forest area and one for the Uinta National Forest area. The proposed action in this EIS would take place in the area included in the 2003 *Revised Forest Plan for the Wasatch-Cache National Forest* (USFS 2003).

USACE would use this EIS to meet its NEPA responsibilities as part of an individual permit process.

NEPA requires Federal agencies to prepare an EIS if a proposed action has the potential to significantly affect the quality of the human environment. NRCS is preparing this EIS in cooperation with USFS and USACE because of the degree of controversy surrounding the proposed action. While the degree of controversy might not cause a significant impact, the NEPA regulations from the Council on Environmental Quality (CEQ) direct Federal agencies to consider the degree to which effects on the quality of the human environment are likely to be highly controversial (40 CFR 1508.27). NRCS uses this EIS to analyze the potential of the proposed action to significantly affect the quality of the human environment.

This document was prepared using NRCS guidance for preparing NEPA documents. This guidance is contained in the NRCS *National Environmental Compliance Handbook* (USDA NRCS 2003), the *Procedures for NRCS-Assisted Programs* (General Manual, Title 190, Part 410, Compliance with NEPA), and the *NRCS Environmental Procedures and Document Preparation Guidelines* (USDA NRCS 2006).

1.2 Organization of This Document

This document is organized into 11 chapters.

- **Chapter 1: Introduction.** This chapter provides basic information on the proposed Logan Northern Canal Reconstruction project, includes a brief history of the proposed action, describes the Federal authority for the proposed action, and provides an outline of the EIS document.
- **Chapter 2: Purpose of and Need for Action.** This chapter includes background information about the canal system, describes why the proposed action is needed, and discusses the purpose of the proposed action. It also identifies other agencies that might be involved in, and lists regulations that might apply to, the proposed action. Finally, it describes the results of the NEPA scoping process.
- **Chapter 3: Alternatives.** This chapter provides a more detailed description of the proposed action and identifies alternatives for achieving the project's purpose. The chapter defines a "no-action" alternative, which must be evaluated under NEPA; discusses options that were considered but not carried forward for further analysis in this EIS; and describes the alternatives that are evaluated in detail in this EIS.
- **Chapter 4: Affected Environment.** This chapter describes the geographic scope of the EIS, the land-use policies and plans that apply to the project study area, and the socioeconomic and natural resource conditions in the study area.
- **Chapter 5: Environmental Consequences.** This chapter describes the land use, socioeconomic, and natural resource effects of implementing the project alternatives, including the No-Action Alternative. It also describes the cumulative impacts and

hazard potential of each alternative; the consistency of each alternative with approved regional water resource management plans; the relationship between short-term uses and long-term productivity for each alternative; and the irreversible and irretrievable commitment of resources for each alternative. Finally, this chapter summarizes adverse impacts that cannot be avoided and lists measures to mitigate impacts.

- **Chapter 6: Consultation and Public Participation.** This chapter describes the agency consultation and public involvement conducted for this EIS.
- **Chapter 7: List of Preparers.** This chapter identifies individuals and organizations that prepared this EIS.
- **Chapter 8: Distribution.** This chapter lists agencies, organizations, and individuals that will receive an electronic copy of the Draft EIS or a notice of EIS availability.
- **Chapter 9: References.** This chapter identifies the documents and other references that were used during the preparation of this EIS.
- **Chapter 10: Acronyms and Abbreviations.** This chapter contains a list of acronyms and abbreviations used in this EIS.
- **Chapter 11: Index.** This chapter contains a keyword index for major topics in this EIS.

The appendices to this document contain supporting information that is referenced throughout the EIS.

- **Appendix A:** Scoping Report
- **Appendix B:** Agency Correspondence
- **Appendix C:** Technical Studies
 - **Appendix C1:** Action Alternative Cost Estimates
 - **Appendix C2:** Alternatives Development Cost Estimates
 - **Appendix C3:** NRCS Economic Analysis Calculations
 - **Appendix C4:** Demographics and Environmental Justice
 - **Appendix C5:** Special-Status Species
 - **Appendix C6:** Compliance with the Standards and Guidelines in the *Revised Forest Plan for the Wasatch-Cache National Forest*
- **Appendix D:** Background Information
 - **Appendix D1:** U.S. Census Bureau Information
 - **Appendix D2:** Sensitive Species Lists

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