USDA NRCS United States Department of Agriculture Natural Resources Conservation Service

Logan Northern Canal Reconstruction Project

Draft Environmental Impact Statement

Public Meeting

March 31, 2011

5:30 – 7:30 PM

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What is the Emergency Watershed Protection Program?

- The purpose of the Emergency Watershed Protection Program (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 program is designed for implementation of recovery measures
- EWPP Policy and Procedures are available on NRCS website (see *Fact Sheet* for web address)

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Why is NEPA Necessary?

- Any federal action (including funding and permitting) that might result in effects on the natural or built environment is subject to evaluation under the National Environmental Policy Act (NEPA)
- NEPA requires lead agencies to evaluate a reasonable range of alternatives even if they are different from what might have been presented in a previous study
- NEPA requires NRCS to evaluate a "No-Action" alternative

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No-Action Alternative

- NEPA requires NRCS to study a No-Action Alternative
- NRCS would not distribute funding to repair the Logan Northern (LN) Canal
- Would not address the existing landslide area along Canyon Road in Logan
- Would not restore delivery of LN Canal irrigation water to shareholders downstream of about 1200 East (a point called the *Laub Diversion*)

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Purple Alternative (Preferred) - Description

- Modify LHPS point of diversion (POD) structure
- Reconstruct the LHPS Canal as a box culvert from the LHPS Canal POD to Lundstrom Park
- Divert the LN Canal shares from Lundstrom Park into a pipeline under city streets and discharge into the existing LN Canal at about 1500 North
- Put some water in a pressurized pipeline in existing canal maintenance road for delivery to users between about 400 North and 1500 North
- End box culvert at Lundstrom Park; LHPS Canal shares would continue to flow in the existing LHPS Canal
- Construct a 6-inch pipeline in the existing LN Canal to deliver water to LN Canal shareholders between the LN Canal POD and the Laub Diversion
- Remove structures from 14 properties along Canyon Road

Cost: **$20.4 to $22.4 Million**
Miles of Box Culvert: **2.4 in LHPS Canal**
Miles of Pipeline: **3.2 total** **(2.0 miles of LN Canal, 1.2 miles between canals)**

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Purple Alternative (Preferred) - Impacts

- Summary of Long-Term Impacts ***(see Draft EIS for a complete list)***
  - Permanent easements from about 2.6 acres
  - Remove structures from properties and convert from residential to use-restricted undeveloped land; would also reduce risk to life and property from future instability of Logan Bluff
  - Loss of non-authorized recreational use of 2.4 miles of the LHPS Canal
  - Permanent loss of 0.3 acre of irrigated farmland
  - Permanent loss of riparian vegetation at LHPS Canal POD
  - Removing and/or modifying canal structures would affect resources that might be eligible for listing on the National Register of Historic Places (NRHP)
  - Potential improvement of irrigation water quality due to separating stormwater from irrigation water in 0.8 mile of the LHPS Canal and about 2 miles of the LN Canal
  - Increase LN Canal stormwater capacity between the POD and the Laub Diversion and between 400 North and 1500 North
  - 7,400 acre-feet of irrigation water would no longer be lost to seepage, resulting in a reduction in annual groundwater recharge; 7,400 acre-feet of water conserved as a result
- Summary of Construction Impacts ***(see Draft EIS for a complete list)***
  - 151 construction easements needed
  - Short-term construction-related effects: noise, dust, and traffic disruptions
  - Short-term benefit to local economy during construction
  - Could disrupt irrigation to LHPS Canal users between LHPS Canal POD and Lundstrom Park and to LN Canal users between the LN Canal POD and Laub Diversion if construction occurs during irrigation season

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Orange Alternative - Description

- Modify LHPS POD structure
- Reconstruct the LHPS Canal as a box culvert between the POD and either 2900 North or 3100 North in North Logan
- Divert the LN Canal shares from the box culvert in North Logan into a pipeline underground and discharge to the existing LN Canal at 2900 North/3100 North
- End box culvert at 2900 North/3100 North; LHPS Canal shares would continue to flow in the existing LHPS Canal
- Put some water in a pressurized pipeline in existing LN Canal maintenance road for delivery to users between about 400 North and 2900 North/3100 North
- Construct a 6-inch pipeline in the existing LN Canal to deliver water to LN Canal shareholders between the LN Canal POD and the Laub Diversion
- Remove structures from 14 properties along Canyon Road

Cost: **$39.5 to $43.4 Million**
Miles of Box Culvert: **4.9 (to 2900 North) or 5.1 (to 3100 North)**
Miles of Pipeline: **4.6 to 5.1 total** **(4.1 to 4.5 miles of LN Canal, 0.5 to 0.6 mile between canals)**

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Orange Alternative - Impacts

- Summary of Long-Term Impacts ***(see Draft EIS for a complete list)***
  - Permanent easements from about 3.6 acres
  - Remove structures from properties and convert from residential to use-restricted undeveloped land; would also reduce risk to life and property from future instability of Logan Bluff
  - Loss of non-authorized recreational use of 4.9 to 5.1 miles of the LHPS Canal
  - Permanent loss of 0.3 acre of irrigated farmland
  - Permanent loss of riparian vegetation at LHPS Canal POD
  - Removing and/or modifying canal structures would affect resources that might be eligible for listing on the NRHP
  - Potential improvement of irrigation water quality due to separating stormwater from irrigation water in about 3.3 to 3.5 miles of the LHPS Canal and about 4.1 to 4.5 miles of the LN Canal
  - Increase LN Canal stormwater capacity between the POD and the Laub Diversion and between 400 North and either 2900 North or 3100 North
  - 13,000 acre-feet of irrigation water would no longer be lost to seepage, resulting in a reduction in annual groundwater recharge; 13,000 acre-feet of water conserved as a result
- Summary of Construction Impacts ***(see Draft EIS for a complete list)***
  - 354 construction easements needed
  - Short-term construction-related effects: noise, dust, and traffic disruptions
  - Short-term benefit to local economy during construction
  - Could disrupt irrigation to LHPS Canal users between the LHPS Canal POD and 2900 North/3100 North and to LN canal users between the LN Canal POD and Laub Diversion if construction occurs during irrigation season

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Blue Alternative - Description

- Reconstruct the existing LN Canal POD structure
- Reconstruct the LN Canal as a pipeline between the POD and about 400 North
- Discharge water into the LN Canal at 400 North for delivery to downstream users
- Construct a 6-inch pipeline in the existing LN Canal to deliver water to LN Canal shareholders between the LN Canal POD and the Laub Diversion
- Remove structures from 14 properties along Canyon Road

Cost: **$24.1 to $26.5 Million**
Miles of Box Culvert: **None**
Miles of Pipeline: **2.7 total** (1.7 miles of LN Canal, 1.0 mile for 6-inch line)

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Blue Alternative - Impacts

- Summary of Long-Term Impacts *(see Draft EIS for a complete list)*
  - Remove structures from properties and convert from residential to use-restricted undeveloped land; would also reduce future risk
  - Enclose about 1.7 miles of LN Canal
  - Permanent loss of riparian vegetation at LN Canal POD
  - Removing and/or modifying canal structures would affect resources that might be eligible for listing on the NRHP
  - Potential improvement of irrigation water quality due to separating stormwater from irrigation water in about 1.5 miles of the LN Canal
  - 1,300 acre-feet of irrigation water would no longer be lost to seepage, resulting in a reduction in annual groundwater recharge; 1,300 acre-feet of water conserved as a result
- Summary of Construction Impacts *(see Draft EIS for a complete list)*
  - 63 construction easements needed
  - Short-term construction-related effects: noise, dust, and traffic disruptions
  - Short-term benefit to local economy during construction
  - Could disrupt irrigation to users between the LN Canal POD and Laub Diversion if construction occurs during irrigation season

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Other Alternatives Considered but Eliminated

Yellow Alternative

- Modify existing LN Canal POD structure
- Install a new pipeline under Canyon Road to 400 North
- Discharge LN Canal water back into the existing canal at about 400 North/600 East

This alternative was not carried forward because it would not provide substantial benefits over the other alternatives. When compared to the Blue Alternative, the Yellow Alternative is in the same general area, would use the same POD, would cost about the same amount, and would deliver water to the same location. Furthermore, the Yellow Alternative would cause substantial construction-related effects to people living along Canyon Road.

Green Alternative

- Modify the LHPS Canal POD structure
- Carry LN Canal and LHPS Canal water in a box culvert installed in the LHPS Canal to the Logan Golf & Country Club
- Carry the LN Canal water west to the existing LN Canal through the Logan Golf & Country Club and under US 89 using an underground pipeline
- Discharge LN Canal water back into the existing canal at about 400 North/600 East

This alternative was not carried forward because it would not provide benefits over the other alternatives. The Green Alternative would require major construction on US 89, a state and federal scenic highway and only western access for the Logan Canyon and USFS land in the area.

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Environmental Impact Statement Process and Schedule

We Are Here

Notice of Intent (NOI)	Scoping	Alternatives Screening	Draft EIS	Final EIS	Record of Decision (ROD)
NRCS completes a NOI to prepare an EIS and publishes the notice in the Federal Register and in a local paper; this begins the public involvement process.	Public, state, and federal agencies help identify subjects of concern to review in the EIS. The process leads to a list of key factors that will guide the EIS analysis and develop the criteria for alternatives screening.	All reasonable alternatives are screened to determine if they meet the project purpose and need. Alternatives that meet the purpose and need are carried forward for further study in the EIS.	A Draft EIS is released for 45-day public review and comment. The EIS identifies a preferred alternative based on which provides the best fit with the key factors identified during scoping and has the least environmental impact when compared with other options.	Comments on the Draft EIS are addressed and a Final EIS is released for a 30-day review and comment period.	Governmental agencies consider the EIS findings. NRCS decides which alternative to implement and prepares a ROD.
Jul 2010	Aug 2010	Oct 2010	March 2011	Summer 2011	Fall 2011

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How Can I Comment on the Draft EIS?
Submit comments using one of the following methods
Use comment cards and deposit them in the comment box here at the meeting
Visit the Court Reporter here at the meeting
By U.S. Mail or e-mail (see Fact Sheet for mailing information)
Comments are due by May 2, 2011