RECLAMATION

Managing Water in the West

Central Oregon Irrigation District
Water Conservation Project
Water 2025 Program

Environmental Assessment
Finding of No Significant Impact

U.S. Department of the Interior
Bureau of Reclamation
Pacific Northwest Region
Lower Columbia Area Office

Fall 2007

FINDING OF NO SIGNIFICANT IMPACT

Central Oregon Irrigation District
Water Conservation Project
Water 2025 Program
Reclamation
Pacific Northwest Regional Office
Boise, Id
PN FONSI 07-06

INTRODUCTION

The Bureau of Reclamation (Reclamation) is proposing to partially fund a conservation project for the Central Oregon Irrigation District (COID) under the Water 2025 program. COID, along with the Deschutes Water Alliance (with the exception of the Arnold Irrigation District), plans to install flow measurement and telemetry reporting systems at location in five irrigation districts to measure and document irrigation flows in many of the canals and laterals planned for piping and lining conservation projects. It is estimated that 5,510 acre-feet per year will be saved from measurement and flow management.

Proven technology and equipment will be used to measure and record flows both before and after implementation of many of the conservation projects. This will quantitatively measure water savings from implementation of conservation projects. Flow measurement and reporting will also provide a means of accounting for saved water in reallocations to other basin needs, including agricultural irrigation, municipal and industrial supply, and instream needs for fishery, recreation, water quality and habitat enhancement.

Funds will also be used by the Deschutes Water Alliance towards developing a basinwide water conservation plan that expands on the districts individual water conservation plans and Reclamation's 1997 report on water conservation opportunities.

ALTERNATIVES

One action alternative was considered and evaluated in the Environmental Assessment (EA). The No Action Alternative was also evaluated as required by the National Environmental Policy Act. Following are brief descriptions of the alternatives considered in the EA.

Alternative A – No Action

Under this alternative, Reclamation would not fund the proposed flow measurement and telemetry reporting system. The districts would continue to operate under current methods and conditions.

Alternative B - Proposed Action

Reclamation proposes to contribute half the money needed, up to about $122,000 for two activities described in the grant application submitted by the COID. The project proposal requests funding for two related activities:

- Funds will be used by the Deschutes Water Alliance towards developing a basin-wide water conservation plan that expands on the districts individual water conservation plans and Reclamation's 1997 report on water conservation opportunities.
- Funds will be used to plan and construct 18 water telemetry stations on five irrigation districts in central Oregon.

FINDING

This Finding of No Significant Impact is based upon the EA which identified no negative impacts to wetlands, fish and wildlife, recreation, environmental justice, Indian Trust Assets, or sacred sites. The EA also identified no negative impacts to ground water, vegetation, Historic Properties, or threatened and endangered species.

Based on a review of the analysis of the environmental impacts as presented in the final EA and fulfillment of all environmental commitments identified in the final EA, Reclamation has concluded that implementation of the preferred alternative would have no significant impacts on the quality of the human environment or the natural resources of the area. This Finding of No Significant Impact has therefore been prepared and is submitted to document environmental review and evaluation in compliance with the National Environmental Policy Act of 1969.

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11/30/07
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DRAFT
CENTRAL OREGON IRRIGATION DISTRICT
WATER CONSERVATION DISTRICT
WATER 2025 PROJECT
Environmental Assessment
Bureau of Reclamation
Pacific Northwest Regional Office
Boise, ID

Background Information

Why is Reclamation Involved?

The Water 2025 grant program is intended to focus attention on the explosive growth in western urban areas, the emerging need for water for environmental and recreational uses, and the national importance of the domestic production of food and fiber from western farms and ranches. All of these factors are driving major conflicts between these competing uses of water. Water 2025 also recognizes that state and local governments should have a leading role in meeting these challenges, and that the Department of the Interior should focus its attention and existing resources on areas where scarce federal dollars can provide the greatest benefits to the West and the nation. Each year the Bureau of Reclamation (Reclamation) selects projects for funding under the Water 2025 program that support cooperation and reduce conflict over water supply and scarcity. This Environmental Assessment (EA) concerns one of the projects selected for funding in fiscal year 2008.

Who Else is Involved?

Central Oregon Irrigation District (COID) is the grant applicant and will be the recipient of the funds. COID will distribute the funds to four other irrigation districts in the Deschutes River basin through existing partnerships. The other irrigation districts are North Unit, Ochoco, Swalley and Tumalo. The five districts are members of the Deschutes Basin Board of Control, which is an association of irrigation districts that also includes Three Sisters and Arnold. The Board of Control is a partner of the Deschutes Basin Alliance (Alliance), which is comprised of the Board of Control, the Confederated Tribes of the Warm Springs, Deschutes River Conservancy, and the Central Oregon Cities Organization. The Alliance's mission is to improve stream flows and water quality to support fish and wildlife through a more natural hydrograph and to secure a reliable and affordable supply of water for agriculture and communities.

Purpose and Need for Action

In the Deschutes River basin there are water-users, water conservation organizations, and public agencies each with a stake in water conservation. Many of these, including

Reclamation, spend money on water conservation projects. Stakeholders, water users, and citizens need to know the benefits of these projects in terms of water saved. Additional water measurement stations are needed serve this purpose. The data gathered will be used in the future to demonstrate effectiveness and to validate the expense of water conservation projects. Stakeholder partnerships reduce water conflicts through collaborative planning and management of the water supply.

General Location of the Affected Area

The location of the project area is shown on the attached maps. The proposed action plan applies to five irrigation districts in the upper Deschutes Basin.

PROPOSED ACTION AND ALTERNATIVES

Alternative A – No Action

Under this alternative, Reclamation would not fund the proposed flow measurement and telemetry reporting system. The irrigation districts would continue to operate under current methods and conditions.

Alternative B - Proposed Action

Reclamation proposes to contribute half the money needed, up to $122,000 for two activities described in the grant application submitted by the COID. The project proposal requests funding for two related activities:

- Funds will be used by the Deschutes Water Alliance towards developing a basin-wide water conservation plan that expands on the districts individual water conservation plans and Reclamation's 1997 report on water conservation opportunities.
- Funds will be used to plan and construct 18 water telemetry stations on five irrigation districts in central Oregon.

The telemetry stations record flows in irrigation district canals. The initial data collected from the stations will provide the baseline flow information necessary to measure the amount of water conserved in the future. The Alliance is focusing attention on the problem water lost to canal seepage.

Each telemetry station will consist of a telemetry tower and either a small stilling basin or small diameter tubing plumbed to the edge of canal. Stilling basins will be connected to the canal channel by a buried, small diameter tube. Instrumentation will match the existing telemetry stations in each district. Each station will be calibrated and kept operational by its District. The districts will develop flow data collection and analysis protocols.

ENVIRONMENTAL IMPACTS

Unaffected resources include wetlands, fish and wildlife, and recreation. No wetlands will be drained or filled by the project area; fish and wildlife will not be negatively affected because no additional water will be diverted, and no habitat will be altered or destroyed; additionally, the canals are not legally used for recreation.

Neither alternative will impact environmental justice, Indian Trust Assets, or Indian Sacred Sites. This action does not discriminate against low-income or minority communities; the alternatives obstruct no mineral, land, fishing, hunting, gathering, or water rights held in trust by the federal government; neither alternative will impact access to, or the integrity of, any identified Indian sacred sites.

The proposed alternative will have no effect on threatened or endangered species. Reclamation determines that neither alternative will affect listed species since the project area does not include or have the potential to disturb suitable habitat for any listed species.

Groundwater

Alternative A – No Action

No change will occur to groundwater hydrology under this alternative.

Alternative B – Proposed Action

No change will occur to groundwater hydrology under this alternative.

Vegetation

Vegetation concerns resulting from this alternative consist mainly of post-construction proliferation of invasive noxious weeds. Noxious weeds tend to proliferate in areas of soil disturbance. Areas of disturbance will occur mainly in the areas where the telemetry stations will be installed. The locations for telemetry station installation will occur within currently farmed, disturbed lands or along existing roads and canals.

Alternative A – No Action

Under this alternative, vegetation will remain unaltered by any new activity. COID currently has a program to control noxious weeks and vegetation in and around its canal system.

Alternative B – Proposed Action

Under this alternative, there will be no significant impact to vegetation in and around the proposed project areas for telemetry stations. Weeds will most likely invade areas with

ground disturbance, including those areas where telemetry stations will be installed. However, regular weed control will prevent the spread of noxious weeds. The districts currently have a weed control program, and will continue the program after project completion.

Historic Properties and Coordination with Indian Tribes

COID contracted with a professional archeologist for an archeological survey of all telemetry installation locations. No prehistoric sites or isolated materials were found. The archeologist provided the report to the Oregon State Historic Preservation Office (SHPO) on October 2007 for review and comment. In a letter dated November 20, 2007, the SHPO concurred that the project will have no effect on any known cultural resources and that no further archeological research was needed for the project. Therefore the action can proceed with no further consideration under the National Historic Preservation Act. However, in the unlikely event that previously unrecorded archeological site is encountered during installation of a telemetry system, all work in the vicinity of the find must cease and the proponent must notify Reclamation and the SHPO and comply with their direction for compliance with the discovery requirements under the NHPA and State law (ORS 358.905-955). In the unlikely event that human remains are encountered, the proponent will immediately halt work within the vicinity of the find, notify Reclamation and the SHPO and comply with State burial law (ORS 97.740-760). Work cannot proceed within the vicinity of any discovery until written notice to proceed is provided by Reclamation.

Indian Trust Assets: A description of important Native American Indian trust assets in the Deschutes River basin has been documented by the Confederated Tribes of the Warm Springs Reservation (Tribes) in "Restoring Oregon's Deschutes River - Developing Partnerships and Economic Incentives to Improve Water Quality and Instream Flows (Environmental Defense Fund, 1995)." The Tribes have identified that their paramount goal is to enhance Deschutes River tribal fisheries by increasing instream flows. The Tribes portfolio of trust assets and treaty rights –on-reservation and off-reservation water resources –"all. . .depend on a continuing supply of high-quality water. . . " in the Deschutes River basin (EDF, 1995). The COID Water 2025 Project is a recommended action designed to conserve water. Therefore, this project is expected to enhance and protect Native American trust assets in the Deschutes River basin.

Alternative A – No Action

The no action alternative will have no significant impact on historic properties as no ground disturbance or construction activities will occur.

Alternative B – Proposed Action

Reclamation has determined that the action alternative will have no effect to cultural resources as the cultural resources survey failed to identify any significant cultural

evidence, both prehistoric and historic. The generally disturbed nature of the locales along the canals has been caused by the initial canal construction, maintenance and other mechanical disturbances.

Cumulative Impacts

Alternative A – No Action

The No Action alternative does not change the rate or effect of cumulative impacts to the human environment.

Alternative B – Implementation of the Water 2025 COID Conservation Project

No cumulative impacts associated with implementation of alternative B are expected. The future benefit through the accumulation of many water conservation projects and activities is intended to improve the human environment though reduced conflict over scarce water resources. The Proposed Action specifically intended to demonstrate this benefit over time.

AGENCIES AND PERSONS CONSULTED

Central Oregon Irrigation District
Oregon State Historic Preservation Office

LIST OF PREPARERS

Rick Rieber, Fishery Biologist
Lynne MacDonald, Regional Archeologist

DISTRIBUTION LIST

Central Oregon Irrigation District
North Unit Irrigation District
Swalley Irrigation District
Tumalo Irrigation District
Ochoco Irrigation District

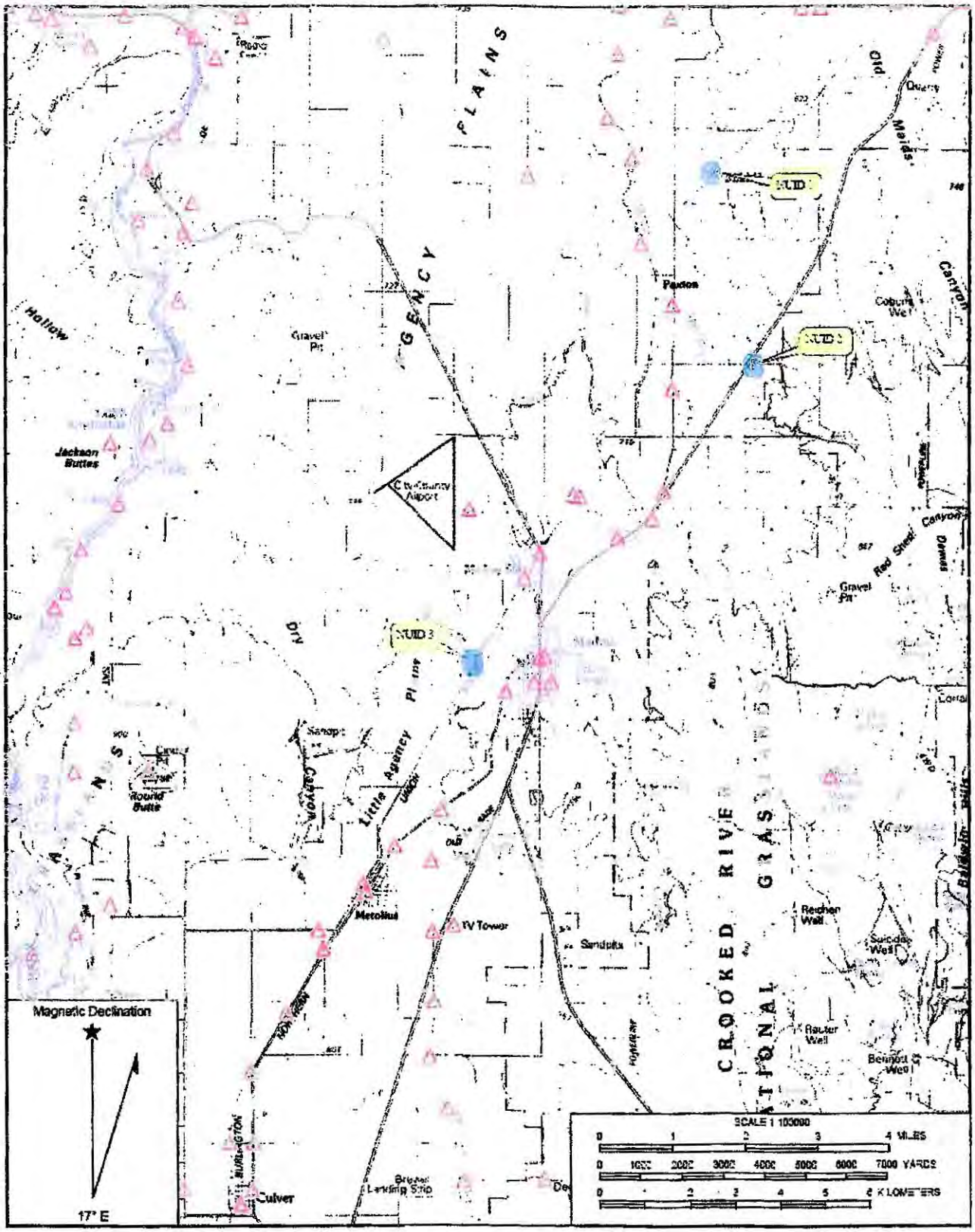

Figure 1. North (Madras) Portion of the Project Area

SITE LOCATIONS HIGHLIGHTED

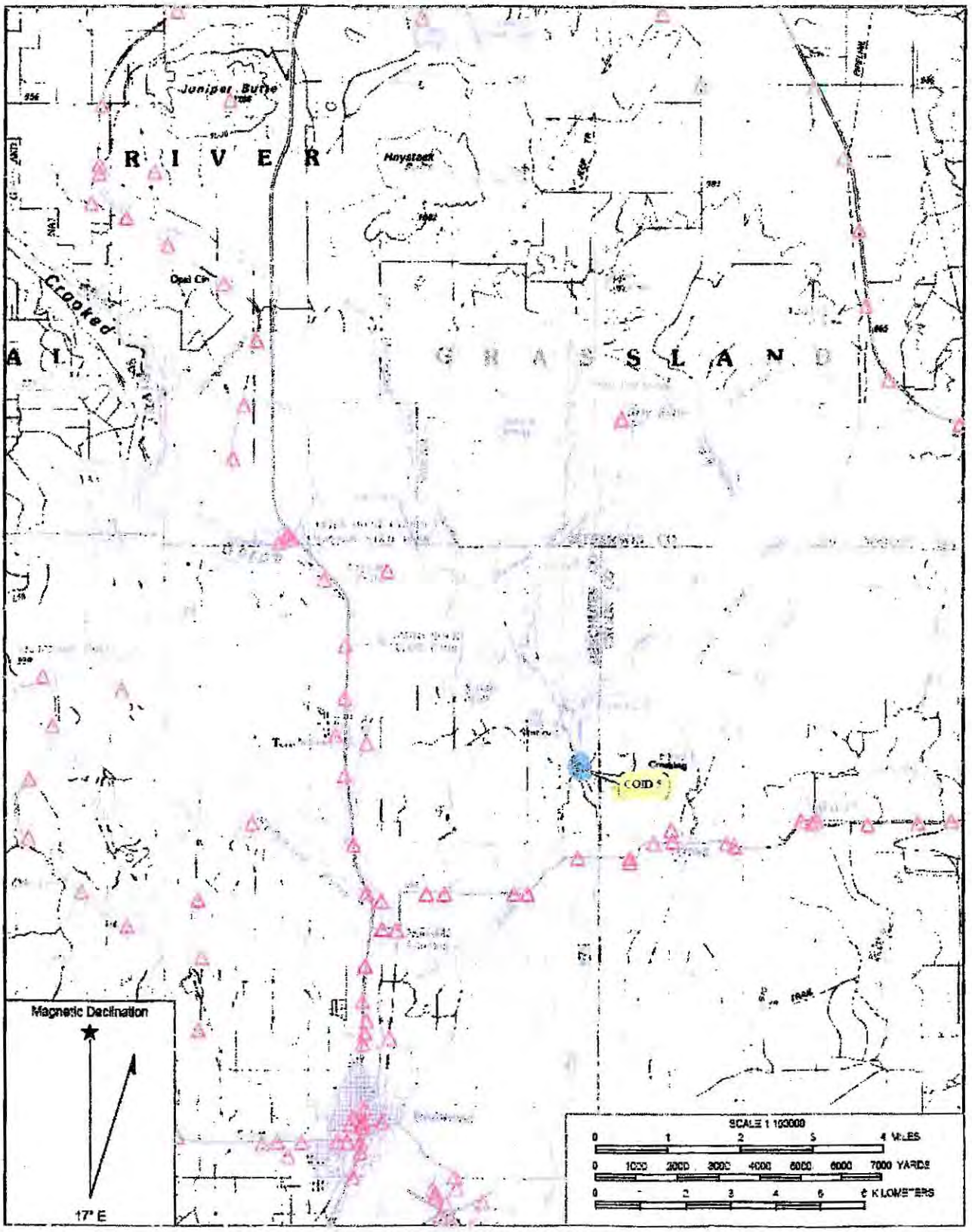

Figure 2. Redmond Portion of the Project Area

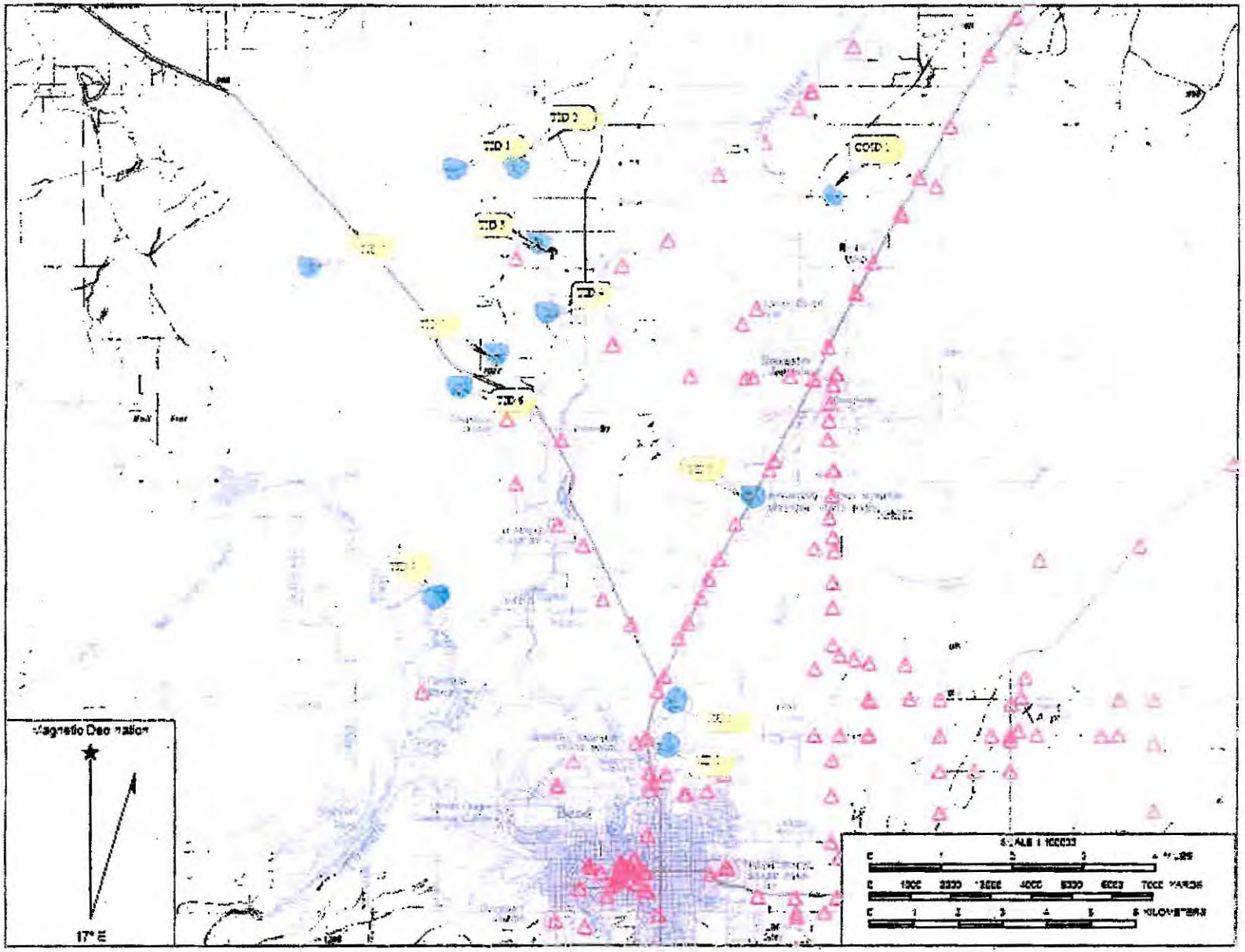

Figure 3. Central Portion of Project Area

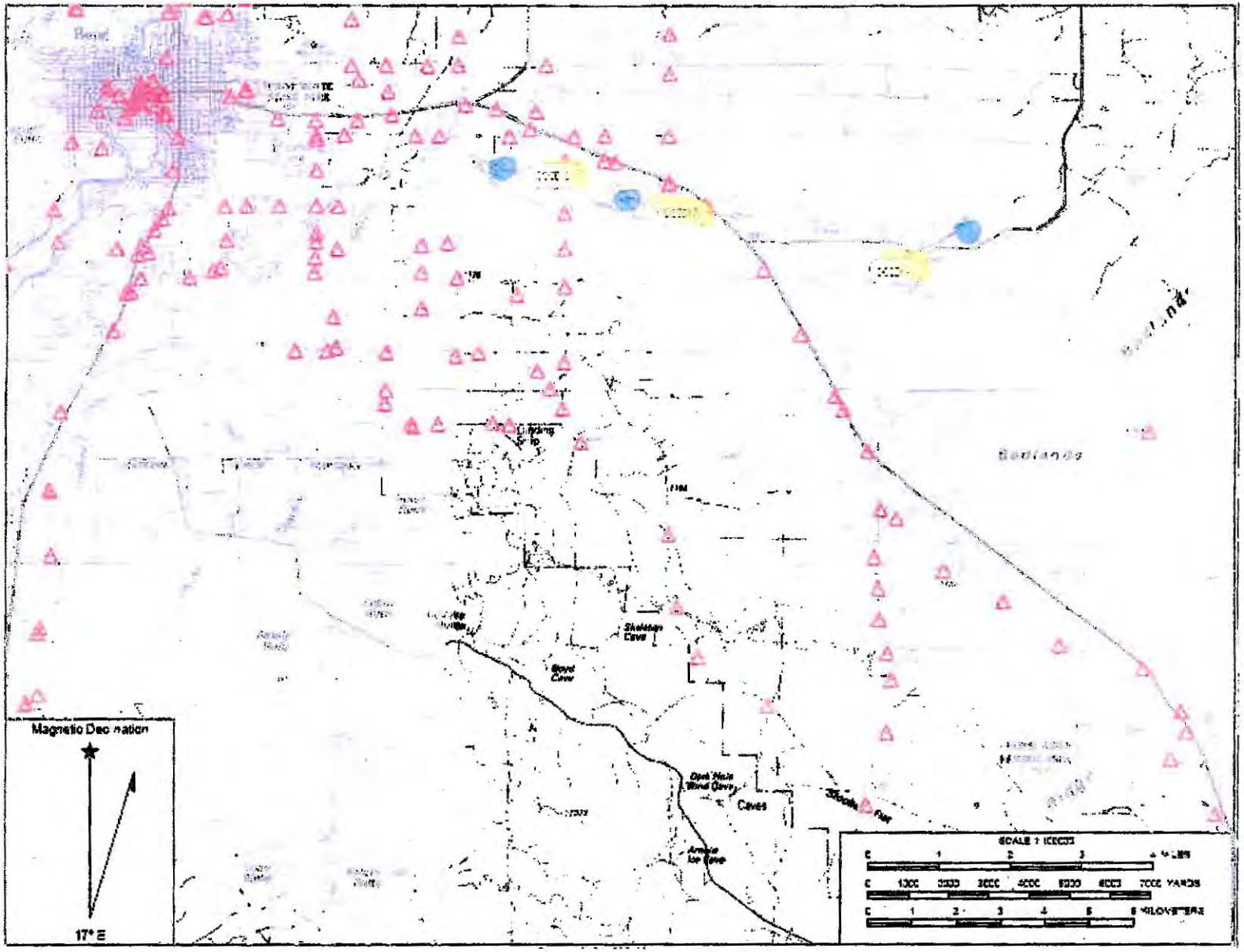

Figure 4. Southern Portion of Project Area