Introduction

The Southern Washington County Watershed Protection Plan/EA encompasses 35,800 acres and is located in Southern Washington County, Idaho. The project area extends from approximately 10 miles west of the City of Weiser to the Snake River, and east to the Galloway diversion dam on the Weiser River and then south of Weiser to the county line.

The Weiser River flows through the project area into the Snake River southwest of the City of Weiser. Land ownership within the watershed is comprised of 94 percent private, 5 percent City of Weiser, and one percent Bureau of Land Management (BLM). Elevation within the watershed ranges from 2,500 feet, to 2,085 feet where the Snake River exits the project area. The dominant land uses within the project area includes intensively managed, irrigated row crop farmland along with pasture and hayland uses.

This Plan/EA provides for practices that are focused on reducing off-site sediment by 66 percent and associated nutrients to surface waters by 62 percent, improving and or restoring groundwater quality by reducing leached nitrate nitrogen and pesticides by 59 percent and reduction of bacteria, pathogens and pesticides delivered to the Weiser and Lower Snake Rivers. The planned water quality practices will have an overall effect of improving or restoring the designated beneficial uses of the surface and ground waters of the Southern Washington County Watershed, and at the same time providing the necessary treatment for resolving TMDL mandates.

This land treatment project which is a federally assisted action, was prepared under the authority of the Watershed Protection and Flood Prevention Act, Public Law 566, 83rd Congress, 68 Stat., 666, as amended (16 U.S.C. 1001-1008); and the National Environmental Policy Act of 1969, Public Law 91-190, as amended (42 U.S.C. 4321 et seq.). An interdisciplinary team assisted with development and review of the Environmental Assessment of the proposed project. The USDA, Natural Resources Conservation Service (NRCS) procedural requirements for conducting an environmental assessment are specified in 7 CFR, Part 650.11.

Planned Action

The Plan/EA provides P.L. 566 financial and technical assistance for the installation of land treatment measures on irrigated cropland, and irrigated pastureland on approximately 18,280 acres. The primary objective of the watershed plan is to provide land treatment to address the problems associated with degradation of ground water quality and surface water quality within the project area. Benefits will be realized from reduced groundwater contamination by reducing deep leaching of nutrients, pesticides and bacteria to the Western Snake River Plain Aquifer.
(Southern Washington County), protection of long-term soil productivity, improved surface water quality of Idaho 303(d) listed stream segments by reducing irrigation induced erosion and reducing sediment, nutrient, pesticide and pathogen delivery to the Weiser and Snake Rivers and area tributaries.

Practices will include: irrigation system-gated pipe (with surge), micro (drip) irrigation, tail water recovery systems, sprinkler re-nozzle, sprinkler systems, irrigation water management (moisture sensors and meters) and sediment basins. Management practices include: conservation crop rotation, irrigation water management, nutrient management, anionic polyacrylamide (PAM) erosion control, pest management, prescribed grazing, residue management (mulch till and seasonal), and straw mulch.

**Environmental Impacts**

Many of the pollutants contributing to the water quality problems within the project area are directly related to the irrigation runoff and deep leaching from agricultural areas. These sources are primarily surface and sprinkler irrigated cropland and pastures, dairies, animal feeding operations (AFOs), and areas where animals are concentrated during certain times of the year. The surface water contributions are mainly sediment, phosphorus and bacteria to the Weiser and Snake Rivers and area tributaries through the irrigation laterals that carry irrigation return flow water back to the streams. The groundwater contributions are mainly nitrogen, pesticides and bacteria from cropland, pastures and AFOs, as a result of applied commercial fertilizers, animal waste from AFOs and inefficient irrigation systems.

This area has been designated by the state of Idaho since 2001 as the first-ranked priority concern for ground water nitrates. Trends from water quality testing conducted since 1991 indicate the problem is increasing and IDEQ considers the present ground water quality problems to be a serious threat to the domestic drinking water supply for the project area residents who rely on private wells for domestic water supply. The 2004 monitoring results indicate 53% of the 38 wells consistently sampled in the project area exceed 10 mg/L with a maximum value of 41 mg/L. The drinking water standard is 10 mg/L. The highest concentrations are northwest of Weiser and between Weiser and Crystal. The Snake and Weiser Rivers and tributary streams in the project area are considered by Idaho to be water quality-limited stream segments. The project area directly impacts the Weiser and lower Snake Rivers and tributaries (four other 303(d) listed stream tributaries). Total Maximum Daily Loads (TMDLs) for phosphorus, sediment and coliform-bacteria have been, or are being developed for these streams.

The RP plan (selected alternative) will reduce leached nitrate from 803,180 lbs/yr to 327,270 lbs/yr for a reduction of 475,910 lbs (59%). Irrigation water applied to cropland will be reduced to reverse the trend of leached nitrate nitrogen, bacteria and pesticides in ground water. Sediment delivery to adjacent drains and water bodies from cropland and pastureland will be reduced from 76,010 tons to 25,830 tons for a reduction of 50,180 tons (66%). Sediment delivered to the Snake River from cropland and pastureland will be reduced from 71,920 tons to 24,340 tons for a reduction of 47,580 tons (66%). Phosphorus delivered to the Snake River from cropland and pastureland will be reduced from 71,777 lbs to 27,434 lbs for a reduction of 44,343
lbs (62%). Bacteria and pathogens delivered to the Snake River and tributaries will be reduced accordingly.

The long-term effect of the project on the bald eagle will be minimal. The proposed actions will improve water quality in the Snake and Weiser rivers through the project area. Improved surface water quality will enhance aquatic biota and may improve prey species for the bald eagle within the project area.

**Adverse Environmental Impacts Which Cannot Be Avoided**

The selected alternative was found to not adversely impact the goals of protecting cultural resources, prime farmland, wetlands, threatened and endangered plants and animals, or other environmental concerns. Informal consultation with the U. S. Fish and Wildlife Service (FWS), in the form of a biological assessment (BA), has concluded in a “May Effect, Not Likely to Adversely Affect” decision for the wintering bald eagles.

**Alternatives**

Two alternatives were considered during plan formulation.

**No Action Alternative (Future Without PL-566 Project Condition):**

The No-Action Alternative was considered but was found to be unacceptable. This alternative is the “Future without Project Condition” where there is no PL-566 action, but where on-going programs continue at their present levels. This alternative predicts the conservation treatment that would be accomplished using current ongoing programs and private funds without accelerated PL-566 financial and/or technical assistance. Current ongoing and future programs that affect the degree of watershed protection on privately owned land include the USDA Environmental Quality Incentives Program (EQIP), Idaho Water Quality Program for Agriculture (WQPA to be used in future years), EPA 319 Non Point Source Program (NPSP), and State of Idaho Resource Conservation and Rangeland Development Program (RCRDP).

The ongoing federal EQIP and 319 NPSP programs for the project area were not originally funded to treat the entire watershed. Treatment utilizing these programs is focused mainly on introducing new irrigation technologies to convert existing surface irrigation systems for surface and ground water quality problems. Without completing the treatment, erosion on cropland and pastureland in the watershed will continue in the untreated areas; the sediment, nutrient and bacteria delivery to the Weiser and Snake Rivers and tributaries will continue; and the quality of the ground water will continue to decline.

**Alternative 1 Resource Protection (RP) Plan (Future With Project):**

The Resource Protection Plan (Alternative 1) is the recommended plan that will meet the sponsors project goal and objectives. It has been selected as the plan for implementation. This plan is a system of land treatment measures designed to protect the resource base; reduce off-site sediment, nutrients and bacteria entering the Weiser and Snake Rivers and tributaries; reduce
nitrate contamination of ground water; and improve the quality of both surface and ground water within the project area. The Resource Protection Plan (RP Plan) will provide treatment on 17,155 acres of cropland, 1,125 acres of pastureland and is based on a participation rate of 75 percent. The total of 17,155 acres of cropland does not include 1,490 acres of EQIP and 319 NPS acres that are currently under contract but not yet completed. The AFO/CAFO issues are contributing to surface and ground water impacts but will not be addressed in this project. Separate EQIP funds will address AFO/CAFOs on an individual-project basis.

The cost of this alternative is $17,938,100, of which $7,518,300 is from PL-566 funds, $3,531,300 from other Financial Assistance (FA) funds and $6,888,500 from private funds. Average annual costs are $2,558,000 which includes an estimated operation, maintenance and replacement (OM&R) cost of $1,237,000. Average annual benefits are estimated at $873,000. The benefit to cost ratio is 0.34 to 1.00. Average annual benefits are low due to intangible environmental benefits or those benefits related to potential risks to public health (unable to develop economic value).

**Consultation and Public Participation**

The Weiser River Soil Conservation District (WRSCD) has made a special effort to inform the local community and land users of the project and to involve them in the planning process. The District played a major role in the planning and development of the Southern Washington County Water Quality Project.

During the initial planning phase, a steering committee was established which consisted of land users, WRSCD supervisors and local agricultural professionals. The steering committee was an excellent method to ensure communication between the WRSCD and the local producers to voice all the concerns of the community, and provide direction in specific areas. The committee was instrumental in providing realistic economic data, socially acceptable practices and cost-share rates.

The District embarked on an aggressive program by utilizing an EPA 319 NPSP grant. Contracts were developed and news articles, meetings, and tours utilized to promote the program. Several informational meetings for project land users were held. Landowners were given the opportunity to ask questions of NRCS personnel and District supervisors. Row-crop farmers provided detailed information on their daily operations. Several different operators allowed irrigation evaluations on their farms and the Washington County Extension Service, coordinating with the WRSCD, set up demonstrations using irrigation sensors on surge, drip and surface irrigation systems to demonstrate the relationships between irrigation water management and nutrient management on various crops in the project area.

Approximately 30% of the operators in the project area participated in a survey. Overall, producers seem interested in the project. The following agencies and organizations were involved in the planning process:
Coordination with the U.S. Fish and Wildlife Service regarding threatened and endangered species was successfully completed for the purposes of this water quality plan.

The Plan/EA was mailed to 44 participating and interested agencies, groups, and individuals in September 2005, as part of the public participation/interagency review process. The Plan/EA was mailed to the Nez Perce Tribe and Shoshone-Paiute Tribe during the review process. Agency consultation and public participation to date have shown no unresolved conflicts with the implementation of the planned action.

**Short Term Uses Versus Long-Term Productivity**

The planned action will assure long-term productivity, and will not change the present short-term uses of the area. Stabilization of eroding areas, reduction of sediment, nutrients and bacteria to the Snake and Weiser Rivers, and reduction of deep leaching of nutrients and pesticides to the Western Snake River Plain Aquifer (Southern Washington County) will protect the land resource base, improve surface and ground water quality and assist in restoring and protecting the designated beneficial uses of the river into the future.

**Commitment of Resources**

Labor, capital, and energy used in taking these actions will be irretrievably and irreversibly committed.

**Conclusion**

I have reviewed the Environmental Assessment Document and have determined that this project will not result in a significant local, regional or national adverse impacts affecting the quality of the human environment. Therefore, based on the above findings, I have concluded that an Environmental Impact Statement (EIS) for the Southern Washington County Watershed Protection Plan is not required.
The Environmental Assessment file is available for public inspection through the office of Mr. Richard Sims, State Conservationist, Natural Resources Conservation Service 9173 W. Barnes Dr. Suite C, Boise, Idaho 83709-1574, (208) 378-5700.

/s/  Mark Weatherstone (Acting for)

RICHARD SIMS
State Conservationist

March 7, 2006
Date