

## **1.0 Purpose and Need**

### **1.1 INTRODUCTION**

On November 9, 2000, Public Law 106-485 (Appendix A) was signed directing the Secretary of the Interior (Secretary), acting through the Bureau of Land Management (BLM) to convey all right, title, and interest (excluding mineral interest) in approximately 16,500 acres of public land in Big Horn and Washakie Counties, Wyoming, to the Westside Irrigation District (WID). On agreement of the Secretary and the WID, acreage may be added to or subtracted from the land to be conveyed as necessary to satisfy any mitigation requirements under the National Environmental Policy Act of 1969 (NEPA). The land would be conveyed to the WID following the completion of an environmental analysis under the NEPA.

Under the guidance of the NEPA and Council on Environmental Quality (CEQ), implementation of Public Law 106-485 and the connected actions of the WID purchasing and developing the land for crop production fall within the definition of a major federal action and requires the preparation of an Environmental Impact Statement (EIS).

### **1.2 HISTORY OF THE WESTSIDE PROJECT**

1942 – U.S. Bureau of Reclamation (USBR) identified three potential irrigation units with a total of 3,740 acres along the west side of the Big Horn Canal.

1962 – USBR published the “Report on Big Horn Basin Division” showing 2,556 irrigable acres in the three original areas, based on detailed land classification.

May 1974 – The Big Horn Canal Association filed an application with the Wyoming Office of the State Engineer for an enlargement of the Big Horn Canal. The application was amended in May of 1976 to modify the acres served by the original application. The application requested a change of capacity from 579 cubic feet per second (cfs) to 1,693.4 cfs. The enlarged canal, as amended in May of 1976 was to provide irrigation water to 39,530.79 acres of private, state and federal lands.

June 1975 – Clyde-Criddle-Woodward, Inc. (C-C-W) published the “Feasibility Study of Big Horn Westside Irrigation Project” for the Big Horn Basin Irrigation Development Association, a local group of farmers and businessmen interested in developing the Westside area identified by the USBR in 1942. Approximately 28,000 acres were outlined for study, with about 21,000 acres identified as actual farmable area. The BLM prepared an environmental analysis. The Wyoming Department of Environmental Quality (DEQ) commented on the Bighorn Basin water supply and on turbidity in the Bighorn River due to temporary diversion dams. The Big Horn Basin Irrigation Development Association applied to the Wyoming Interdepartmental Water Conference for assistance to develop the Westside Irrigation Project.

May 1976 - The Big Horn Canal Association filed five separate applications (Westside Irrigation Project Diversion Numbers 1 - 5) to the Wyoming Office of the State Engineer for five separate points of diversion totaling 590 cfs of water from the Bighorn River. The purpose of the water was for irrigation of a total of 39,561.89 acres of private, state and federal lands.

March 1978 – Engineering Associates prepared the “Westside Irrigation Project Study” for the Governor’s Interdepartmental Water Conference. This soil and drainage study eliminated 8,000 acres outlined by C-C-W. A pre-feasibility study on the lands considered suitable for farming concluded that the original area was not cost effective, so four increasingly smaller project area alternatives were considered. They concluded that a project of about 7,500 acres or less was most likely to be economically viable.

September 1983 – USBR prepared the “Westside Irrigation Project (Wyoming) Special Report” concluding that a 9,026-acre irrigation project was economically justifiable and further investigation of this project was warranted. This project would require diversion of 20,363 acre-feet per year from the Big Horn Canal, and fifteen pumping stations to raise the irrigation water the necessary 200 feet.

February 1984 – A petition for the organization of the WID was filed with the Fifth Judicial District Court of Wyoming in Washakie County. A formal hearing was held in March 1984 and the WID was officially formed.

June 1985 – Nelson Engineering, Inc. produced the “Westside Project Plan Formulation Working Document” to document consensus among government and public entities for the preferred project alternative. The report stated a need for the irrigation project to stabilize area farm income. “Alternative 3” from that report was the preferred plan to pursue, and it included 12,135 total acres, including 9,400 irrigable acres.

September 1988 – USBR produced the “Westside Irrigation Project Planning Report/Draft Environmental Statement” analyzing the USBR preferred plan to irrigate 4,068 acres and a no-action alternative. The preferred plan would divert 15,400 acre-feet per year from the Bighorn River, with supplemental water released from Boysen Reservoir during low flows. Water would be conveyed through the Big Horn Canal, which would require three pumping plants. The State of Wyoming would finance construction with 75 percent anticipated as a grant, and 25 percent as a loan.

November 2000 – Public Law 106-485 (Nov. 9, 2000; 114 Stat.2199) directed the Secretary of the Interior, acting through the BLM, to convey all right, title, and interest (excluding mineral interest) in a portion of public land in Big Horn County and Washakie County, Wyoming, comprising approximately 16,500 acres. The land would be conveyed to the WID at appraised value and following the completion of an environmental analysis under NEPA. On agreement between the BLM and WID, acreage could be added or subtracted to the conveyed land to satisfy mitigation requirements under the NEPA.

### 1.3 PURPOSE OF AND NEED FOR ACTION

This chapter describes the purpose and need for the project and the connected Applicant's (the WID) need for the project. Because the proposed action is specified in Public Law 106-485, the federal purpose and need is brief and very specific. The Applicant's purpose and need statement is broader and reflects the WID's specific land acquisition, development and water supply management needs. This analysis is based largely on the connected actions proposed by the Applicant.

The basic project purpose is to comply with Public Law 106-485, which is to provide for the conveyance of all rights, title and interest (excluding mineral interest) of approximately 16,500 acres of public land currently administered under the BLM in Big Horn and Washakie counties, Wyoming, to the WID. The law provides that this acreage may be adjusted as necessary by agreement between BLM and WID.

#### **1.3.1 Objectives**

##### 1.3.1.1 BLM Objectives

The primary objective of the BLM is to comply with Public Law 106-485. As part of this federal action (project), the BLM has determined that the proposed land conveyance, and the resale of the land for agricultural development that is expected to occur as a reasonably foreseeable consequence of the conveyance, would be a major federal action as defined by NEPA. To meet this objective the BLM must comply with NEPA and thus, the BLM has prepared this EIS. The objectives of the EIS are to (1) assess the environmental, social, and economic impacts associated with the land conveyance and subsequent connected actions, and (2) evaluate a range of reasonable alternatives to the proposed action (in this case the connected actions to be taken by the WID) and to identify potential measures that could be incorporated to mitigate identified potential impacts.

If the land is conveyed into private ownership, BLM would exercise no regulatory control, nor make any further decisions regarding the development related to surface rights that would ensue. (Mineral rights would remain under federal ownership, and the BLM would exercise regulatory control over mineral development.) However, the BLM has an obligation under the NEPA to analyze and disclose reasonably foreseeable "connected actions" that might result from its decision to convey the land and to insure that the conveyance is accomplished in compliance with all other state and federal laws and regulations.

##### 1.3.1.2 WID Objectives

The primary objective of the WID is to exercise their right under Public Law 106-485. Subsequent to acquiring the land from the BLM, the WID proposes to resell the lands to private individuals or organizations, minus those lands needed for infrastructure development or for mitigation purposes. The final project configuration and land conveyances from the WID is unknown but will be determined based on a number of factors including results of this environmental analysis and mitigation requirements, the WID's infrastructure design, existing rights of way, and the participation of private individuals/entities in the project.

### **1.3.2 Need for Project**

The WID, as described in the original Civil Action filing in District Court, includes a 2,254.75 acre private land area on the west side of the Big Horn Canal in Washakie and Big Horn Counties. In general, the district is bordered on the west by BLM land and on the east by the Big Horn Canal. Members of the WID own the majority (2,226.5 acres) of the land within the district. A petition to form the WID was filed in District Court in February 1984 and the petition was granted in March 1984 officially forming the WID.

The project would provide additional agricultural development opportunities for potential members of the WID and to contribute to and expand agricultural production in Washakie and Big Horn Counties.

To meet these objectives the WID must develop the necessary irrigation infrastructure capable of delivering water to individual parcels of land conveyed to participating landowners and to divert irrigation water necessary for developed agriculture. Current development plans envision: (1) up to two pumping stations along the Bighorn River for diversion of up to 83 cubic feet per second (cfs) during the irrigation season; (2) pipeline infrastructure that will deliver the water to each property; and, (3) on-site infrastructure such as roads, pipelines, and powerlines. However, the current plans could change depending on the final project configuration. Certain development activities may require additional permits, such as a Section 404 permit from the Corps. A Section 404 permit may require additional studies and NEPA analysis to evaluate the details of the connected action. The WID will provide continued support for agriculture and irrigation development to its members for the life of the development. It is anticipated that following the initial land conveyance, development grant applications will be submitted to the State of Wyoming Water Development Office (WWDO) for continued project development (irrigation development) within the project boundaries.

## **1.4 RELATIONSHIP TO POLICIES, PLANS, AND PROGRAMS**

### **1.4.1 Conformance with the Grass Creek Resource Management Plan**

The applicable land-use plan for the area is the Grass Creek Resource Management Plan (GCRMP) (1998). With respect to landownership adjustments, the plan provides that “Before any public lands are exchanged or sold ... the BLM will consult with county commissioners and other representatives of local government in the affected areas. Other affected and interested citizens will be given opportunities to comment as well.” Appendix 4 of the GCRMP provides guidance regarding conveyance of public lands. It states that “No landownership adjustments would be implemented without a feasibility study, site-specific environmental analyses, and a determination that the sale, exchange, or transfer is in the public interest.” It also describes certain categories of land that will not be conveyed, including lands within Wilderness Study Areas, withdrawn lands, and lands with important resource values, such as habitat for threatened or endangered species.

### **1.4.2 Relationship to Other Statutes and Authorities**

The sale of land to the WID is to take place upon completion of an environmental analysis under the NEPA by the Worland Field Office of the BLM. The NEPA requires that federal agencies not only evaluate the impacts of the proposed action, but also identify and comply with all other federal laws that may pertain or have jurisdictional authority. CEQ Regulations (Sec 1502.25) direct agencies to conduct the EIS process concurrently with environmental impact analyses and related studies required by other federal laws.

The following federal laws or executive orders may have some jurisdiction over the proposed action and project and will be considered during the NEPA process.

#### **Aquatic Resources**

##### *Clean Water Act (CWA)*

*Section 401.* State certification requires that discharge of dredge or fill material will not harm jurisdictional water or wetlands such that an exceedance of state water quality standards will occur.

*Section 402.* A General Stormwater Permit under the National Pollutant Discharge Elimination System (NPDES) is required for all soil-disturbing activities where one or more acres will be disturbed and where the acreage will have a discharge of storm water to a receiving water.

*Section 404.* A permit from the Army Corps of Engineers (ACOE) is required for the discharge of dredge or fill material into jurisdictional waters, including wetlands of the U.S.

#### **Wildlife and Vegetation**

*Endangered Species Act (ESA)* – The U.S. Fish and Wildlife Service (USFWS) is responsible for implementation and enforcement of the primary law that protects species threatened with or in danger of extinction. Under Section 7 of the ESA, federal agencies are directed to consult with the USFWS if listed species are present in the vicinity of the agency proposed action. The agency must prepare a Biological Assessment describing potential effects to listed species that may be affected by the action.

*Fish and Wildlife Coordination Act (FWCA)* – Federal and state agencies are required to consult with the USFWS, National Marine Fisheries Service (NMFS), and the appropriate state agencies regarding activities that impact, impound, or modify public waterways. This Act may address plant and wildlife concerns that may not be addressed by the ESA.

*Migratory Bird Treaty Act (MBTA)* – The MBTA generally protects all birds classified by the act as migratory in the U.S. and is enforced by the USFWS. The MBTA prohibits take, import, export, possession, purchase, sale, or barter of any migratory bird, feathers, or other parts, eggs, nests, and products made from migratory birds. *Take* is defined as pursuing, hunting, shooting, poisoning, wounding, killing, capturing, trapping, or collecting.

*Bald and Golden Eagle Protection Act (BGEPA)* - The BGEPA prohibits import, export, take, sale, purchase, or barter of any bald or golden eagle, their parts, products, nests, or eggs. Take

includes pursuing, shooting, poisoning, wounding, killing, capturing, trapping, collecting, molesting, or disturbing eagles.

### **Cultural Resources**

#### National Historic Preservation Act (NHPA)

*Section 106*, Historic sites, building, objects, and antiquities – All federal agencies are required to consider the effect of their actions on historic properties. The Advisory Council on Historic Preservation (ACHP) and the Wyoming State Historic Preservation Officer (SHPO) must be given an opportunity to comment on the undertaking/action in compliance with section 106 of the National Historic Preservation Act, and pursuant to the BLM's 1997 National Programmatic Agreement with the Council and the Conference of National Historic Preservation Officers and the Wyoming Protocol. Major cultural resource categories include historic places, Native American cultural resources, and archaeological sites. The BLM has requested the comments of the Advisory Council on Historic Preservation (Council).

"An Act for the Preservation of American Antiquities," also known as the Antiquities Act of 1906 (P.L. 59-209; 34 Stat. 225; 16 U.S.C. 432, 433)

Historic Sites Act of 1935 (P.L. 74-292; 49 Stat. 666; 16 U.S.C. 461)

Reservoir Salvage Act of 1960, as amended by Archeological and Historic Preservation Act of 1974 (P.L. 86-523; 74 Stat. 220, 221; 16 U.S.C. 469; P.L. 93-291; 88 Stat. 174; 16 U.S.C. 469)

National Historic Preservation Act of 1966 (P.L. 89-665; 80 Stat. 915; 16 U.S.C. 470)

Executive Order 11593 ("Protection and Enhancement of the Cultural Environment," 36 F.R. 8921, May 13, 1971)

American Indian Religious Freedom Act of 1978 (P.L. 95-431; 92 Stat. 469; 42 U.S.C. 1996)

Archaeological Resources Protection Act of 1979 (P.L. 96-95; 93 Stat. 721; 16 U.S.C. 470aa et seq.) as amended (P.L. 100-555; P.L. 100-588)

Native American Graves Protection and Repatriation Act of 1990 (P.L. 101-601; 104 Stat. 3048; 25 U.S.C. 3001)

Executive Order 13007 ("Indian Sacred Sites," 61 F.R. 104, May 24, 1996)

Executive Order 13287 ("Preserve America" 68 F.R. 43, March 5, 2003)

### **Socioeconomics**

Executive Order 12898 Federal Actions to Address Environmental Justice in Minority and Low Income Populations – Federal agencies are directed to incorporate environmental justice as part of their mission to the greatest extent practicable and permitted by law. Federal agencies are specifically directed to identify and address, as appropriate, disproportionately high and adverse

human health effects of their programs, policies, and activities on minority and low-income populations.

### **Air Quality**

National Ambient Air Quality Standards (NAAQS) are established by the Environmental Protection Agency (EPA) for certain air pollutants at concentration levels against which all areas of the country are evaluated. If an area meets the standards, it is in “Attainment,” and if it does not, it is considered a “Nonattainment” area. New stationary sources of air emissions in nonattainment areas must undergo more rigorous permitting than equivalently-sized sources in attainment areas. Mobile sources (construction equipment, maintenance vehicles) are regulated separately under the federal Clean Air Act through vehicle inspection and maintenance programs, and are not included when determining if a source requires permitting.

### **Public Health and Safety**

Occupational Safety and Health Act (OSHA) – OSHA provides for standards for health and safety in Federal regulations.

National Electrical Manufacturers Association, Institute of Electrical and Electronics Engineers – This law sets standards for the design of electrical equipment and controls.

Spill Prevention Control and Countermeasures (SPCC) – The SPCC regulates the handling of hazardous materials, including batteries, mineral oil coolants, fuel for vehicles, cleaning solvents, and lubrication fluids.

## **1.5 AGENCY ROLES AND RELATIONSHIPS**

### **1.5.1 Joint Lead Agencies**

Under CEQ regulations implementing the NEPA (40 CFR Sec. 1501.5), more than one agency may act as joint lead agencies, if at least one is a federal agency. For the current project the BLM and the WWDO are acting as joint lead agencies for the NEPA process and the development of the EIS. The lead agency or joint lead agencies take responsibility for preparing the EIS, developing the interdisciplinary study team, and requesting participation of cooperating agencies.

#### **1.5.1.1 BLM**

The BLM Worland Field Office is acting as the federal lead agency for the NEPA process. The federal lead agency is typically the federal agency with the greatest magnitude of involvement in the project and with project approval authority. In this case Public Law 106-485 authorizes the sale of BLM-managed public land to the WID.

#### **1.5.1.2 WWDO**

The WWDO is acting as the state lead agency for the proposed project and the joint lead agency with the BLM. Under the state water development program, the WWDO is authorized to provide financial support and facilitate project development and implementation for water projects in

Wyoming. The primary objective of the WWDO in this project is to provide financial support for the NEPA process.

The Wyoming Water Development Commission (WWDC) was established in 1975 to implement the State water development program and to conduct water and related resource planning and management including the facilitation and promotion of the development of the state's human, industrial, mineral, agricultural, water, and recreational resources. The program provides procedures and policies for planning, selection, financing, construction, acquisition and operation of projects and facilities for the conservation, storage, distribution and use of water in Wyoming. Projects must be in the public interest to develop and preserve Wyoming's water and related land resources. The program is intended to encourage development of water facilities for irrigation, flood control, and pollution control; preservation and development of fish and wildlife resources; and, for protection and improvement of public lands. The program is also intended to help make available the waters of the state for beneficial uses, including but not limited to municipal, domestic, agricultural, industrial, instream flows, hydroelectric, recreational, conservation of land resources, and protection of public health and safety.

The WWDC, supported by the WWDO, is charged with implementation of the Water Development Program. The Wyoming Water Development Program receives funding from two sources: (1) the Water Development Account I which receives twelve and forty-five hundredths percent of the revenues from the state's severance tax distribution account; and (2) the Water Development Account II which receives revenue from two and one tenth percent of the revenues from the state's severance tax distribution account and accrued interest on the accounts unspent balance. Account I is utilized for new development projects, and Account II is used to fund water projects that have been in existence for 15 years or longer.

The Water Development Account I funds are directed at the development of presently unused and/or unappropriated waters of Wyoming (i.e., the New Development Program). The WID applied to the WWDO as a Project Sponsor for assistance from the New Development Program in conducting project planning activities for the proposed land conveyance project. This NEPA analysis for the BLM is included under the project planning stages and is being funded by the WWDO.

### **1.5.2 Cooperating Agencies**

#### **1.5.2.1 Big Horn and Washakie Counties**

The project area falls within portions of Big Horn and Washakie Counties. The counties have authority over zoning of private lands in the county for development purposes and have direct interest in the conveyance of public lands to private ownership. The economies of both counties rely heavily on agriculture. As cooperating agencies, the primary objectives of the counties are to support the joint lead agencies in the description of the local regulatory authority and in the assessment of the economic impacts of the Applicant (WID) in its effort to acquire lands and develop the Westside project. Continued agriculture development falls under the overall county plans and economic development objectives for both counties.

## 1.6 PUBLIC PARTICIPATION

The BLM conducted the public scoping process from July 19, 2004 to August 19, 2004 with meetings held on August 3 and 4, 2004 in Basin and Worland, Wyoming. The purpose of the scoping process was to receive public and agency comment on the types of potential effects from the proposed project that should be addressed in the EIS, the environmental and social resources that might be affected, and the alternatives that should be considered. Specifics regarding the scoping process for this analysis are discussed in Chapter 6 of the EIS.

## 1.7 ISSUES AND CONCERNS

The following (Table 1-1) is a summary of the key issues and concerns identified during the scoping process.

**Table 1-1. Key Issues and Concerns Identified During the Scoping Period.**

| Issue                                 | Description of Issue  | Where is Issue Addressed?              |
|---------------------------------------|---|--|
| 1. Impacts to surface water hydrology | Withdrawal of water from the Bighorn River for agricultural purposes could:   |  |
|                                       | <ul style="list-style-type: none"> <li>• Adversely impact fish species in the river, particularly sauger, burbot, shovelnose sturgeon, sturgeon chub, plains minnow, and western silvery minnow.</li> </ul> | 3.6.3.1<br>4.6.3.1                     |
|                                       | <ul style="list-style-type: none"> <li>• Affect the rights of existing downstream users</li> </ul>  | 4.3.4                                  |
|                                       | Return flows of irrigation water could cause an increase in sediment, agricultural chemicals, and selenium in the river.  | 4.2.2                                  |
| 2. Changes in land use                | Only those lands actually suitable for irrigation should be conveyed.   | 2.4.3                                  |
|                                       | Existing public access routes should be maintained.   | 4.10.1, 4.10.2,<br>5.2.4               |
| 3. Impacts to wildlife species        | Conversion to agricultural use could adversely impact important habitat for several species, including pronghorn antelope, mule deer, migratory birds, and raptors.   | 4.6.2<br>4.6.2.1<br>4.6.2.2<br>4.6.5.2 |
|                                       | Fences constructed after the conveyance could restrict wildlife movement.   | 4.6.2.1                                |

**Table 1-1. Key Issues and Concerns Identified During the Scoping Period.**

| <b>Issue</b>             | <b>Description of Issue</b>   | <b>Where is Issue Addressed?</b> |
|--------------------------|---|----------------------------------|
| 4. Socioeconomic impacts | Additional agricultural development would benefit the local economy.  | 4.8.3<br>4.8.5                   |
|                          | The conveyance may affect the development of other minerals, including oil and gas.                               | 4.2.3                            |
|                          | Conveyance to private ownership could cause adverse impacts to cultural, paleontological, and historic resources. | 4.9.1<br>4.9.2                   |
| 5. Cultural resources    |   |                                  |