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CHAPTER ONE: INTRODUCTION

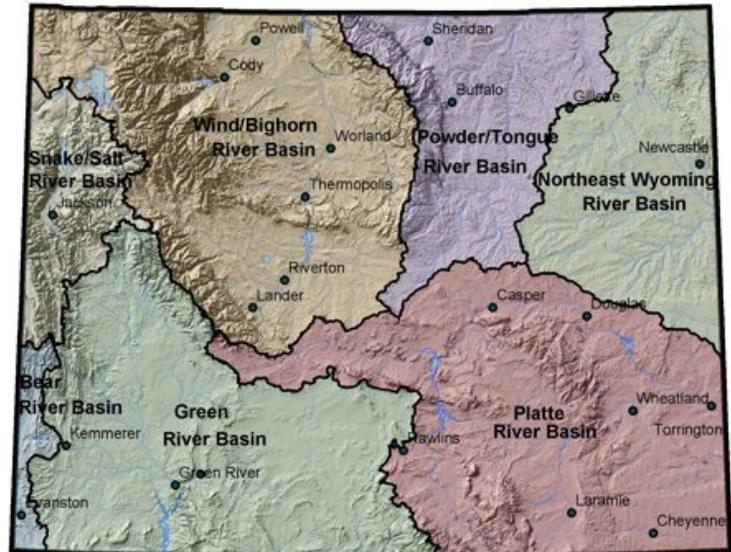
The Platte River Basin Plan is the seventh and last of a series of Wyoming river basin plans prepared for the Wyoming Water Development Commission (WWDC). Wyoming previously completed water plans for the following river basins:

- Bear River
- Green River
- Northeast Wyoming Rivers
- Powder/Tongue Rivers
- Snake/Salt Rivers
- Wind/Bighorn

The Wyoming State Engineer’s Office (SEO) and the Wyoming Water Planning Program completed *The Wyoming Framework Water Plan* in 1973. The

intent of the 1973 document was to provide a “basis upon which to launch further water resource planning.”

(Wyoming State Engineer’s Office, 1973) This document addressed water issues in all Wyoming river basins.



In 1996, the Wyoming Legislature directed the WWDC and the SEO to prepare recommendations for updating the 1973 Framework Water Plan. These agencies prepared and submitted recommendations in October 1996. Under legislative direction, WWDC, the SEO, and the University of Wyoming completed a water planning feasibility study during 1997. The 1999 Wyoming Legislature authorized completion of the Bear River and Green River Basin Plans and has subsequently authorized completion of the other basin plans listed above, including this Platte River Basin Plan.

The Wyoming basin planning process is founded on Prior Appropriation Doctrine and the understanding that the State of Wyoming should manage its water resources “for the benefit of the citizens of the state.” (Wyoming Water Development Commission, 2002) Major goals of the basin planning process include:

- Providing accurate, timely Wyoming water information, both to state officials and to the general public
- Maintaining an inventory of water uses
- Assisting Wyoming government officials in developing effective state water policies
- Protecting future water demands

- Keeping Wyoming’s water planning process comparable to those of other western states
- Protecting Wyoming’s water resources from downstream competitors

PLATTE RIVER BASIN PLAN ORGANIZATION

The Platte River Basin Plan consists of the following components:

- Technical memoranda containing detailed assessments of specific Platte River Basin water issues
- A Geographical Information System (GIS) map-based database containing Platte River Basin water resource information that has been generated for and during this project
- A “Water Atlas” web-based educational tool that is intended to provide key Platte River Basin Plan information to the public in a readily-accessible fashion
- This Platte River Basin Plan Report, which contains a summary of information from the other three components of the project

Maps are used prominently in the Platte River Basin Plan. Data compiled for the river basin is contained in a GIS map-based database that serves as a library of information available for the river basin and a foundation for the figures presented in the technical memoranda and this report, as well as the Platte River Basin Water Atlas. Most components of Basin Plan documents are organized in the context of Platte River Basin subbasins, as follows:

- Above Pathfinder Dam
- Pathfinder to Guernsey
- Guernsey to State Line
- Upper Laramie
- Lower Laramie
- Horse Creek
- South Platte



OVERVIEW AND HISTORY OF THE PLATTE RIVER BASIN

Location

The Platte River Basin encompasses nearly a one-quarter of the land area of Wyoming and comprises the southeast portion of the state. All of Albany, Laramie, and Platte Counties and portions of Carbon, Converse, Fremont, Goshen, Natrona, Niobrara, Sublette, and Sweetwater Counties are located within the Basin.

The Platte River Basin is part of the Missouri-Mississippi River Basin. The headwaters of the North Platte originate with streams east of the Continental Divide located in the mountains surrounding North Park in Colorado and the Sierra

Madre and Snowy Range mountains of southern Wyoming. The river flows northerly through central Wyoming and east on to Nebraska, gathering an average annual run-off of 1.4 million acre-feet. In central Nebraska, the North and South Platte rivers join to form the Platte River flowing eastward to the Missouri River south of Omaha, Nebraska.

Although portions of the drainages for both the North and South Platte Rivers exist in Wyoming, only the North Platte River flows through the state. The South Platte River drainage in Wyoming consists of headwater streams that drain into Colorado and Nebraska. The North Platte River drainage in Wyoming has been divided into the first six subbasins listed previously. One of the major tributaries of the North Platte is the Laramie River, which also headwaters in Colorado.

Geomorphology

The greater Platte River Basin is located within the Rocky Mountain, Wyoming Basin, and Great Plains Physiographic Provinces, and encompasses a total area of approximately 23,907 square miles. The North Platte River Basin in Wyoming includes upstream portions of the North Platte River drainage basin and adjacent areas, which cover an area of approximately 21,907 square miles. Important tributary streams to the North Platte River in Wyoming include the Laramie, Medicine Bow, and Sweetwater Rivers. The South Platte subbasin in Wyoming covers an area of approximately 2,000 square miles. Crow and Lodgepole Creeks are important tributaries to the South Platte River in Wyoming.

The topography of the Platte River Basin includes valleys, high plains, hills, and mountains with elevations up to 12,013 feet above mean sea level at Medicine Bow Peak of the Medicine Bow Mountains. The lowest point of elevation in the Platte River Basin in Wyoming is 4,025 feet above mean sea level and is located on the North Platte River where the river crosses the Wyoming-Nebraska State Line. The Platte River Basin spans four major geomorphic units. The headwater areas of the Basin originate in the Southern and Middle Rocky Mountains. Lower reaches drain the Wyoming Basin and the Great Plains. The Platte River Basin is a snowmelt-driven system. Most of the water conveyed throughout the Basin is derived from spring runoff from the mountainous headwater regions.

Climate

Precipitation and streamflows throughout the Platte River Basin follow topography and geomorphology. A large portion of the Basin within Wyoming receives an average of 8-12 inches of precipitation annually. Downstream portions of the Basin typically receive an average of 12-16 inches of precipitation annually. The heaviest precipitation in the Basin falls over the mountain ranges. Precipitation increases with elevation and can exceed 60 inches a year at the highest points in the Basin.

The majority of the Basin has a negative water balance (mean annual potential evapotranspiration exceeding mean annual



precipitation). As these areas also correspond to most of the agricultural lands in the Basin, irrigation is an essential demand on the Basin. Only 15% of Wyoming has a positive water balance, a percentage that is largely skewed by the mountains of the northwest corner of the state. It is only within the upper reaches of the headwaters streams in the Platte River Basin where a positive water balance occurs (mean annual precipitation exceeding mean annual potential evapotranspiration).

History

The first recorded visit of whites to the North Platte Valley was in 1812. Trappers in the employ of fur magnate John Jacob Astor ventured down the North Platte back from the Pacific Coast making their first winter camp at a spot 15 miles north of what would be Casper.

By the 1840s, thousands of settlers were following the 2,020-mile long Oregon Trail, from Independence, Missouri, to Oregon, California, and Utah. This trail, which followed the North Platte and Sweetwater Rivers, was the best known and most traveled migration route across the continent. Stage stops, trading posts and federal army forts were established along the route to support the western migration. Fort Laramie, the best known of the military outposts during this time, was originally established by fur traders near the confluence of the Laramie and North Platte Rivers. It was later purchased by the federal government in 1849. Fort Laramie is now a National Historic Site operated by the Park Service.



Only twenty years later in 1869, the Union Pacific established the transcontinental railroad and it became the primary artery to the West. An unusual geological feature located about 85 miles south of the Oregon Trail known as the “gangplank” dictated the route of the railway. Before the Laramie Mountains rose, this area was covered with a thick sequence of sedimentary rocks. Typically when mountain ranges are formed, the overlying layers of sedimentary rock erode, exposing core igneous rocks with steep, irregular topography. At the gangplank in the Laramie range, the sedimentary layers did not erode, creating a narrow ramp to the granite summit of the range. Major General Grenville M. Dodge, the man responsible for planning the railroad's route, identified the gangplank as an ideal route for the transcontinental railroad. He established a major railroad terminal at his campsite on the plains just east of the gangplank, and named the town Cheyenne.

The 1860s spawned an era of growth in the cattle industry across Wyoming and Nebraska. However, the cattleman's complete control of the prairie was short-lived as homesteaders and irrigated agriculture began to take hold with the increase migration of settlers to Wyoming in the later part of the 19th century.

WATER-RELATED HISTORY OF THE BASIN

The Territory of Wyoming was created on July 25, 1868 and shortly thereafter, the first water laws for Wyoming were drafted. The early laws set the foundation of water law as it exists today by establishing the ideas of priority of appropriation and stewardship of water resources. In 1889, in preparation for statehood, the Constitutional Convention included eight provisions pertaining to irrigation and water issues in the State Constitution. It was intended that further refinement of Wyoming water law be done statutorily through legislation.

In 1890, Wyoming was divided into four water divisions, with Division One containing the Platte River Basin. The Carey Act was passed in 1894 to promote reclaiming lands in each of the western states for irrigation and settlement. This prompted investment in water development projects, including the construction of Wheatland No. 1 (1897) and Wheatland No. 2 (1898) Reservoirs on the Laramie River by the Wyoming Development Company. Reservoir construction continued through the early 1900's throughout Division One and the rest of Wyoming.

The construction of several large reservoirs by the Bureau of Reclamation along the North Platte River in Wyoming during the first half of the 20th century has had a significant effect on the use and distribution of water in the Basin. Pathfinder, Guernsey, Seminoe, Kortes, Alcova, Glendo, and Guernsey Reservoir provide storage supplies for federal irrigation projects serving over 226,000 acres, as well as hydropower generation.

Along the Laramie River, major reservoirs include Wheatland No. 2, Wheatland No. 3, and Grayrocks. All of these reservoirs store water for irrigation. Figure 1-1 shows the location of rivers, streams and major reservoirs within Wyoming's portion of the Basin.



Photo courtesy of USBR.

Interstate Decrees

Irrigation is the largest use of water in the Platte Basin. The apportionment of water between the States of Wyoming, Colorado, and Nebraska for irrigation use has historically been disputed between the three states. The first interstate lawsuit regarding the apportionment of water was filed by Wyoming in 1911 against the State of Colorado and its use of water from the Big Laramie River. Eleven years later, the Supreme Court ruled that priority of appropriation would be used to apportion waters across state lines since both states recognized that doctrine individually.

With the drought of the 1930's, Nebraska filed a lawsuit against Wyoming in 1934 claiming that priority water rights in Nebraska were not being honored due to diversions in Wyoming for junior rights. In its 1945 decree, the Supreme Court upheld rights in Nebraska and set limitations on appropriations of North Platte water in Wyoming. Subsequently, Nebraska filed a lawsuit reopening the decree in 1986 that resulted in establishment of the Modified North Platte Decree in 2001.

For additional information regarding the interstate apportionment of water in the North Platte and Laramie Rivers, a more detailed explanation of the two court decrees that was prepared by the Wyoming SEO is appended to this chapter. For additional information visit the Wyoming SEO's website at <http://seo.state.wy.us/>.

COOPERATIVE AGREEMENT AND DRAFT ENVIRONMENTAL IMPACT STATEMENT

Cooperative Agreement

In 1997, the States of Colorado, Wyoming, and Nebraska and the U.S. Department of the Interior (DOI) signed the Cooperative Agreement for Platte River Research and Other Efforts Relating to Endangered Species Habitat Along the Central Platte River, Nebraska (Cooperative Agreement). The purpose of the Cooperative Agreement is to implement certain aspects of the U.S. Fish and Wildlife Service's (USFWS) recovery plans for target species (whooping crane, piping plover, interior least tern, and the pallid sturgeon) that relate to the habitats of these species by providing for the following during the term of the Cooperative Agreement:

- Implementation of research, analysis, and other measures that will benefit the target species and their associated habitats
- Implementation of efforts to acquire, restore, and manage land or interests in land so as to provide and improve associated habitats for the target species
- Development and implementation of certain water management, conservation, and supply measures
- Development of a Basin-wide program, the Platte River Recovery Implementation Program (PRRIP), to be implemented following evaluation of the Proposed Alternative and a range of reasonable alternatives in compliance with the National Environmental Policy Act (NEPA) and the Endangered Species Act (ESA)
- Establishment of a governance structure that will ensure appropriate state government and stakeholder involvement in the completion of NEPA compliance tasks, in the implementation of research and other projects beneficial to the target species and their associated habitats, and in the development of the PRRIP. (U.S. Department of the Interior, 1997)

The Cooperative Agreement led to the creation of a Governance Committee composed of member representatives from the three signatory states, the federal government, environmental groups, and Basin water users. The Governance Committee was charged with developing details of the first 13-year long increment of the PRRIP. In the absence of the PRRIP, each water project or activity in the Platte River Basin having a federal nexus (link) will be required to address and comply with federal Endangered Species Act (ESA) regulations individually, a process that could be costly and inefficient and would severely impact the states and their water users.

The Cooperative Agreement and the PRRIP were considered necessary as a result of Congressional approval of the ESA in 1973. Since then, the U.S. Fish and Wildlife Service (USFWS) has issued "jeopardy biological opinions" for virtually all existing and new water-depletive projects requiring federal actions and approvals. One such "biological opinion" cites water depletions resulting from Platte River Basin water projects as contributing factors in jeopardizing the continued existence of target endangered species and adversely affecting their federally designated critical habitat along and within the Platte River in central Nebraska.

The Cooperative Agreement is intended to provide an “efficient, effective, and equitable way to create improvements in the habitat” of the four Platte River target species while allowing numerous existing and some proposed Platte River water projects and activities to continue and to meet the requirements of the ESA. (USFWS, 2004)

The Governance Committee prepared and submitted a draft PRRIP to the DOI for review under the NEPA and for use in preparing a DEIS. When submitted, the components of the draft PRRIP were at various stages of development and completion (Platte River Endangered Species Partnership, 2004). Following NEPA review, the DOI will issue a Record of Decision. Following issuance of the Record of Decision, the governors of Wyoming, Nebraska, and Colorado and the U.S. Secretary of the Interior may enter into a PRRIP, which is anticipated to occur in 2006. Governance Committee goals for the first 13-year increment of the PRRIP include:

- Land habitat restoration
- Protecting and/or restoring 10,000 acres of habitat in the Central Platte area in Nebraska
- Program target river flows
- Improving achievement of USFWS Platte River flow targets by an average of 130,000 acre-feet to 150,000 acre-feet annually by changing the timing, magnitude, and duration of flows
- Enhancing pallid sturgeon habitat
- Testing the assumption that managing Central Platte River flows will also improve Lower Platte River pallid sturgeon habitat

Draft Environmental Impact Statement (DEIS)

The U.S. Bureau of Reclamation (USBR) and the USFWS have jointly prepared a DEIS for the first 13-year increment of the Governance Committee’s Platte River Recovery Implementation Program (PRRIP). The DEIS assesses the environmental consequences of the PRRIP as required by NEPA. USBR and USFWS released the DEIS for public comment in January 2004. The DEIS is the precursor to an Environmental Impact Statement (EIS) that is required by NEPA.

Two related documents prepared in conjunction with the DEIS are a USFWS Biological Opinion and a National Research Council report reviewing the science of the Platte River. The Biological Opinion will assess conformance of the PRRIP with the requirements of the ESA. The Biological Opinion has not been completed at the time of preparation of this report. The National Research Council report is commonly referred to by Cooperative Agreement participants as the National Academy of Sciences (NAS) or NAS report. The National Research Council of the National Academies was asked to “evaluate the science regarding the central Platte River habitat needs and flow recommendations for the federally listed whooping crane, piping plover, interior least tern, and the pallid sturgeon.” (Platte River Endangered Species Partnership, 2004) The draft NAS report, Endangered and Threatened Species of the Platte River, was released for public review in April 2004.

BASIN PLAN FINAL REPORT CONTENTS

This following sections of this report contains a summary of more detailed analyses that are contained in Basin Plan technical memoranda, including:

- An overview of topics and issues that are pertinent to the Wyoming Platte River Basin subbasins, including a discussion of the PRRIP, and the results of a Basin Plan survey regarding basin environmental issues
- An assessment of current basin water use, including agricultural water use, municipal and domestic water use, industrial water use, recreational water use, environmental water use, and water use from storage
- A determination of high basin stream flow years, low basin stream flow years, and average or normal basin stream flow years
- An assessment of basin groundwater resources
- Water demand projections based on a review of economic, demographic, and other data as well as development of a water demand forecasting model
- An assessment of future Basin water use opportunities and basin water quality issues

Basin Plan documents address water use and resources in the context of the individual subbasins. Water demands projections and future water use opportunities are presented for the river basin as a whole.

PLATTE RIVER BASIN PLAN WATER ATLAS EDUCATIONAL TOOL

An online educational tool called the Platte River Basin Water Atlas was also developed as part of this study. The Water Atlas is intended to serve as an information resource accessible to the general public via the Internet that broadly educates the public about the water resources of Wyoming's Platte River Basin. The Water Atlas is an ideal way to begin exploring for information presented in the Basin Plan. Access to the Water Atlas is available through the Water Plan website at <http://waterplan.state.wy.us>.

Water Atlas organization parallels that of the Basin Plan. Like the full Platte River Basin Water Plan, which is also available to the public at the Wyoming Water Development Commission (WWDC) website listed above, the Water Atlas is intended to provide an overview of information regarding:

- Current water use in the Basin
- Available basin surface and groundwater resources
- Estimated future basin water demand
- Potential future basin water use opportunities
- Basin water quality issues

The major difference between the Water Atlas and the full Platte River Basin Water Plan is the more concise nature of the Water Atlas. The Water Atlas may be used by the public to obtain a general understanding of the Basin Plan and as the basis upon which to research Basin Plan topics in more detail in the Basin Plan technical memoranda that are posted on the WWDC website.

The organization of the Water Atlas generally parallels that of the Basin Plan. The Water Atlas pull-down menu consists of nine items, including:

- Overview: Contains water resources information that is pertinent to the entire Platte River Basin in Wyoming
- Links: Links to the official websites of the WWDC, the Wyoming SEO, and other pertinent websites
- Pull-down menus: Access to maps and water resources information pertaining to each of the seven subbasins comprising the River Basin Plan

The Water Atlas also contains numerous color maps, text, and tables, which can all be printed for reference.

REFERENCES

Wyoming State Engineer's Office and Wyoming Water Planning Program. 1973. *The Framework Water Plan*.

Wyoming Water Development Commission. 2002. *Summary of the State Water Planning Process*.

Cooper Consulting, LLC and Sunrise Engineering, Inc. 2004 *A History of Water Law, Water Rights & Water Development in Wyoming, 1868-2002*. Wyoming Water Development Commission and State Engineer's Office.



FIGURES

CHAPTER ONE: INTRODUCTION

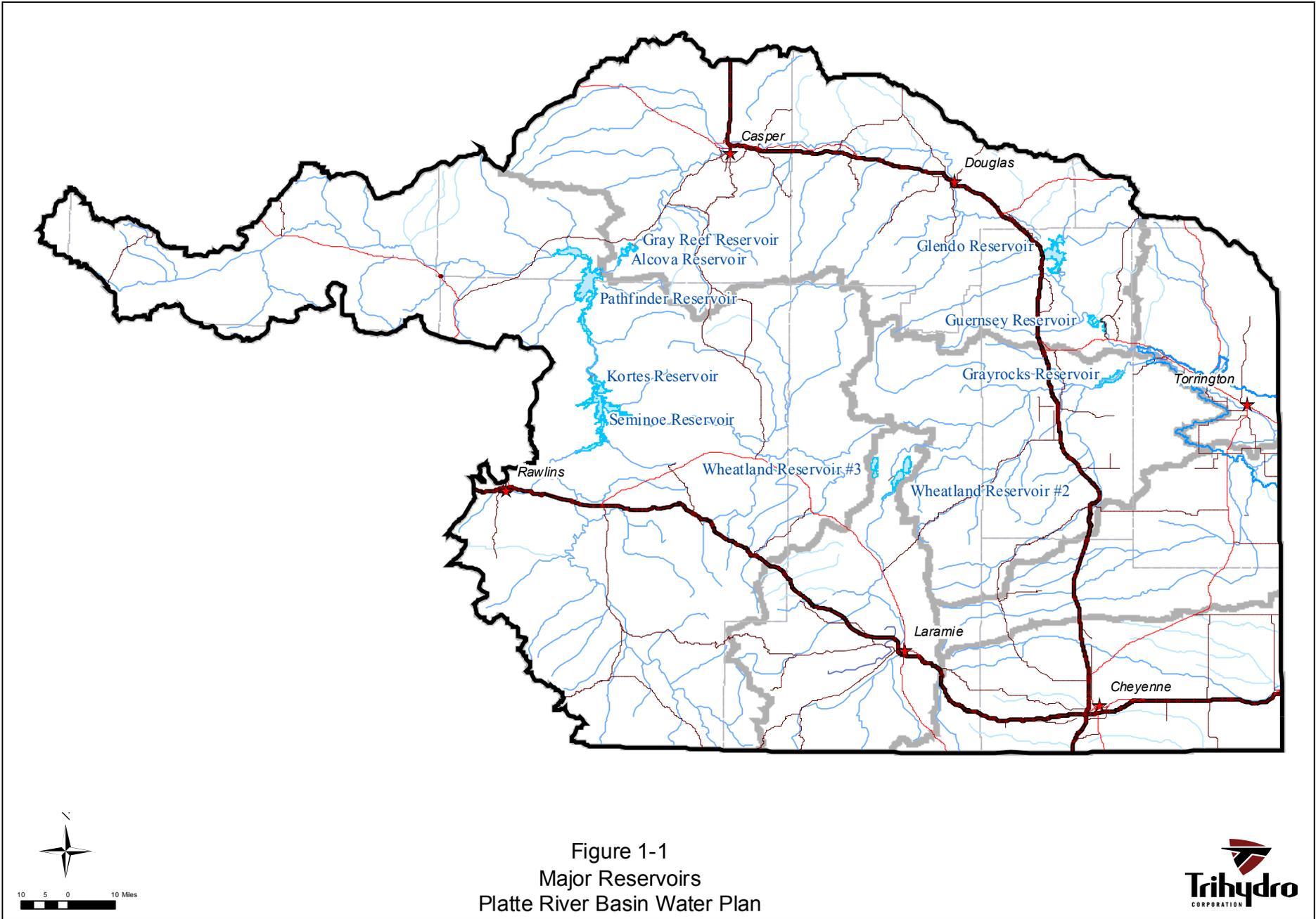


Figure 1-1
 Major Reservoirs
 Platte River Basin Water Plan





APPENDIX: SUMMARY OF NORTH PLATTE RIVER
AND LARAMIE RIVER COURT DECREES

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SUMMARY OF NORTH PLATTE RIVER
AND LARAMIE RIVER COURT DECREES

Interstate Streams Division, Wyoming State Engineer's Office

Date Completed: December 1, 2004

1. North Platte River. During the mid-1930s the state of Nebraska filed an action against the states of Colorado and Wyoming in the U.S. Supreme Court over the flows of the North Platte River. In 1945 the Court handed down a decree equitably apportioning the waters of the North Platte among the states. The decree included the following provisions:

(a) Exclusive of the Kendrick Project and Seminoe Reservoir, the State of Wyoming is enjoined from diverting water from the North Platte River above the Guernsey Reservoir and from the North Platte River and its tributaries above Pathfinder Dam, for the irrigation of more than a total 168,000 acres of land during any one irrigation season.

(b) Exclusive of the Kendrick Project and Seminoe Reservoir, the State of Wyoming is enjoined from storing more than 18,000 acre-feet of water from the North Platte River and its tributaries above the Pathfinder Reservoir for irrigation purposes during any one year.

(c) The storage rights of the Pathfinder, Guernsey, Seminoe, and Alcova reservoirs are junior to 1165 second-feet of rights for the irrigation of land in Western Nebraska, and the State of Wyoming is enjoined from storing or permitting the storage of water in these reservoir otherwise than in accordance with the rule of priority.

(d) The natural flow of the North Platte River in the section of the river between the Guernsey Dam and Tri-State Dam, or approximately the Wyoming-Nebraska state line, between May 1 and September 30 of each year, is apportioned 25% to Wyoming and 75% to Nebraska.

It also limits Colorado to the irrigation of 135,000 acres, the storage of 17,000 acre-feet of water in any one year, and the diversion of an average 6,000 acre-feet out of the North Platte River Basin annually.

By stipulation agreed upon by the three States and approved by the Supreme Court of the United States the decree was amended in 1953 as follows:

Colorado was permitted to increase its irrigated acreage to 145,000 acres and the states of Wyoming and Nebraska were permitted to store 40,000 acre-feet during any water year in Glendo Reservoir, with such storage, including

holdover, never to exceed 100,000 acre-feet. The 40,000 acre-feet of storage during the year is divided 25,000 acre-feet to Nebraska and 15,000 acre-feet to Wyoming.

Nebraska filed a lawsuit in the U.S. Supreme Court on October 6, 1986 alleging that Wyoming had violated certain aspects of the 1945 Decree. The U.S. Supreme Court approved the Final Settlement Stipulation and entered the Modified Decree on November 13, 2001. The Final Settlement Stipulation and the Modified Decree (Appendix A) include the following provisions:

(a) For the North Platte River and its tributaries, including water from hydrologically connected groundwater wells, upstream of Pathfinder Dam and between Pathfinder Dam and Guernsey Reservoir, Wyoming is enjoined from consuming more than the largest amount of water consumed for irrigation from such sources in any ten consecutive year period between 1952 and 1999, inclusive. Pursuant to the methodology approved by the parties, the largest amount of water during the ten year period noted above is 1,280,000 acre-feet upstream of Pathfinder, and 890,000 acre-feet between Pathfinder and Guernsey.

(b) Exclusive of the Kendrick Project, for the North Platte River and its tributaries upstream of Guernsey Reservoir including water from hydrologically connected groundwater wells, Wyoming is enjoined from intentionally irrigating more than a total of 226,000 acres of land during any one irrigation season. Ten years following the settlement date, this provision will be replaced with two injunctions: one intentionally irrigated limitation for the area above Pathfinder and one for the area between Guernsey and Pathfinder. The total of the two shall not exceed 226,000 acres.

(c) Exclusive of Wheatland Irrigation District, for the Laramie River and its tributaries including hydrologically connected groundwater wells downstream of Wheatland Irrigation District's Tunnel No. 2, Wyoming is enjoined from intentionally irrigating more than a total of 39,000 acres of land during any one irrigation season.

(d) In accordance with an April 20, 1993 U.S. Supreme Court opinion, Inland Lakes has the priority of December 6, 1904, and the United States has the right to accrue up to 46,000 acre-feet of water during the non-irrigation season months of October, November, and April for storage in the four Inland Lakes located in Nebraska.

(e) Analogous to the 1945 Decree, natural flow of the North Platte River in the section of the river between the Guernsey Dam and Tri-State Dam, between May 1 and September 30 of each year, is apportioned 25% to Wyoming and 75% to Nebraska.

(f) Within the area bounded by Whalen Diversion Dam on the west, 300 feet south of the Ft. Laramie Canal on the south, one mile north of the Interstate Canal on the north, and the Wyoming-Nebraska state line on the east, diversions between May 1 and September 30 for irrigation purposes from groundwater wells with water right priorities after October 8, 1945, shall be replaced or the pumping shall be regulated to prevent such diversions.

(g) Within the area bounded by Whalen Diversion Dam on the west, the Fort Laramie Canal on the south, the

Interstate Canal on the north and the Wyoming-Nebraska state line on the east, surface water diversions for irrigation purposes from the tributaries to the North Platte River shall be administered and accounted as diversions of natural flow in accordance with the equitable apportionment of natural flow, 25% to Wyoming and 75% to Nebraska in the section of the river between Guernsey and Tri-State dam. For the depletions that occur when natural flow is insufficient to meet the demands of both Wyoming and Nebraska irrigators who divert from the North Platte River at or above Tri-State Dam, Wyoming must replace the depletion amount or those irrigation rights not in priority to divert shall be regulated to prevent such diversions.

(h) By stipulation of all three states and the United States in September 1997 (Appendix D), Wyoming shall install measuring devices at no less than the eight largest irrigation reservoirs storing water from the North Platte River and its tributaries upstream of Pathfinder Reservoir, to accurately measure the annually accrued irrigation storage in each reservoir. The storage limitation injunction from the 1945 Decree is unchanged in the 2001 Modified Decree: Wyoming is enjoined from storing or permitting the storage of more than 18,000 acre-feet of water for irrigation purposes upstream of Pathfinder Reservoir exclusive of Seminole Reservoir during any one year.

(i) By stipulation of Nebraska, Wyoming and the United States in December 1998, referred to as the 1998 Allocation Stipulation (Appendix E), the parties jointly agreed to a method of allocating storage water during periods of shortage. The Bureau of Reclamation (Reclamation) shall follow procedures and guidelines when allocating storage water from the Pathfinder and Guernsey Reservoirs, and the Inland Lakes. (See Exhibit 5 to Appendix G). During the first week in February, March, and April, the Reclamation shall advise the other parties when the current year is likely to be an “allocation year” if storage and forecasted water supplies are less than the approximate irrigation demand for the year of 1,100,000 acre-feet. With respect to water rights administration upstream of Pathfinder Reservoir before May 1st, if the Reclamation advises that the current year is a likely allocation year, the Reclamation shall be deemed to have placed a priority call for Pathfinder Reservoir, excluding the Pathfinder Modification Project. With respect to water rights administration along the mainstem of the North Platte River and the tributaries between Pathfinder Dam and Guernsey Reservoir, before May 1st, if the Reclamation advises that the current year is a likely allocation year, the Reclamation shall be deemed to have placed a priority call for Inland Lakes (April only), Guernsey, and Glendo storage rights. In both situations described above, the Wyoming State Engineer shall determine whether the calls are valid and warrant regulation upstream of the calling right. Between May 1st and September 30th during an allocation year, Wyoming will limit the cumulative diversions for irrigation purposes from the mainstem of the North Platte River between Pathfinder Dam and the Guernsey Reservoir to 6,600 acre-feet per two week period.

(j) By an amended stipulation of all three states and the United States in March 2001, the Pathfinder Modification Stipulation (Appendix F) includes the following provisions:

- (i) The capacity of Pathfinder Reservoir may be increased by approximately 54,000 acre-feet to recapture original storage space lost to sediment.
- (ii) The recaptured space would store water under the existing 1904 storage right for Pathfinder Reservoir

except that it could not place regulatory calls on existing upstream water rights other than the rights pertaining to Seminole Reservoir.

(iii) Approximately 34,000 acre-feet of the 54,000 acre-feet recaptured space would be accounted for in an environmental account and operated for the benefit of endangered species and their habitat in Central Nebraska.

(iv) Wyoming has the exclusive right to contract with the Bureau of Reclamation for the use of the remaining 20,000 acre-feet of the recaptured capacity. The primary use of the 9,600 acre-feet of annual estimated firm yield from this “Wyoming Account” is to supplement Wyoming municipalities’ water right needs. The account’s other uses in prioritized order are: to serve as Wyoming’s source of replacement water required by the Modified Decree, to replace Wyoming’s excess depletions from existing water related activities under the Platte River Recovery Implementation Program (Program), or to be leased to the Program.

(k) The North Platte Decree Committee (NPDC) was created to assist in monitoring, administering, and implementing the Modified Decree and the Final Settlement Stipulation. The NPDC shall act in accordance with the NPDC Charter (Appendix G), and may modify by unanimous agreement the administrative procedures attached as Exhibits 3 through 12 to the Charter.

(l) The river carriage and reservoir loss calculations established in the 1945 Decree have been replaced with the procedures defined in Exhibit 9 to the NPDC Charter, Appendix G.

(m) Upon occurrence of ‘negative natural flow at Orin’, as defined in Exhibit 7 of the NPDC Charter, the Wyoming State Engineer will administer water rights or take other action as necessary to eliminate the negative natural flow at Orin.

(n) Within five years of the court approved settlement date, pursuant to Wyoming law, Wyoming will adjudicate the following:

(i) All unadjudicated groundwater permits for irrigation wells hydrologically 4 connected to the North Platte River or its tributaries above Guernsey Reservoir and wells hydrologically connected to the Laramie River or its tributaries downstream of Wheatland Tunnel #2, exclusive of the Wheatland Irrigation District.

(ii) All existing unadjudicated groundwater permits for irrigation wells within the area bounded by Whalen Diversion Dam on the west, 300 feet south of the Ft. Laramie Canal on the south, one mile north of the Interstate Canal on the north, and the Wyoming-Nebraska state line on the east.

(iii) All unadjudicated surface water permits for irrigation purposes that divert from tributaries and drains that lie within the area bounded by Whalen Diversion Dam on the west, the Ft. Laramie Canal on the south, the Interstate Canal on the north, and the Wyoming-Nebraska state line on the east.

2. Laramie River. In 1911, Wyoming started proceedings in the Supreme Court against Colorado to limit the Colorado diversions from the Laramie River. In 1922, the Supreme Court handed down its decree which allowed Colorado to divert annually for the meadow lands, 4,250 acre-feet, and by transmountain diversion 33,500 acre-feet plus "the relatively small amount of water appropriated. ..." from the headwaters of Deadman Creek, through the Wilson Supply Ditch. In 1936, the Supreme Court of the United States stated that the record showed that the "relatively small amount of water" referred to actually amounted to 2,000 acre-feet of water per annum. Therefore the total annual diversion allowed Colorado was 39,750 acre-feet. In 1939 Wyoming secured an order from the Supreme Court of the United States restraining Colorado from diverting more than the 39,750 acre-feet annually that had been allotted to her. The Supreme Court stated that this amount should be administered according to Colorado laws. By stipulation between Colorado and Wyoming in 1957 the Supreme Court decreed that only 19,875 acre-feet of water per year could be diverted from the Laramie River Basin and that 29,500 acre-feet per year could be diverted by the meadow land users for the irrigation of certain lands described by map in the stipulation.