Reclamation's Missouri Basin Region





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Regional Director, Missouri Basin



Brent C. Esplin is the regional director for the Missouri Basin (Interior Region 5) and Arkansas-Rio Grande-Texas Gulf (Interior Region 6), which collectively are the largest and most ecologically diverse regions in Reclamation.

Esplin began this position June 21, 2020. He provides leadership for the management, development and protection of water and related resources across nine states. This includes 80 Reclamation reservoirs, 20 powerplants and 93 recreational areas that host more than 14 million visitors each year. Reclamation facilities in the region deliver water to rural and urban communities, providing drinking water to more than three million people, in addition to irrigating more than two million acres of agriculture. This complex region which is inclusive of nine western states has an annual appropriated budget of approximately \$180 million and a workforce of 650 employees.

Esplin has more than 20 years of service with the Bureau of Reclamation, most recently serving as Upper

Colorado Basin Regional Director; prior to that position he served as Deputy Regional Director for the Upper Colorado Basin. He also served as Area Manager for Reclamation's Montana Area Office in Billings, Montana; Deputy Area Manager for the Phoenix Area Office in Arizona; and Deputy Area Manager for the Nebraska-Kansas Area Office in McCook, Nebraska. His years of experience include successfully addressing complex water supply and hydropower production issues; working with endangered species recovery programs; implementing American Indian water rights settlements; overseeing important facility construction, upgrades and safety of dam improvements; and collaborating on key river compact issues across multiple western river systems. Esplin first joined Reclamation in 1997 as a civil engineer in the Montana Area Office.

A native of Smithfield, Utah, Esplin holds a Bachelor of Science degree in civil engineering and a Master of Science degree in civil engineering, both from Utah State University.





Gibson Dam, Montana Photo by Jeff Ticknor



VALUE TO THE AMERICAN WEST

interest of the American public.

Established in 1902, Reclamation is best known for the dams, powerplants, and canals it constructed in the 17 Western states. These water projects led to homesteading and promoted the economic development of the West.

Reclamation is the largest wholesaler of water in the country, bringing 10 trillion gallons of water to more than 31 million people, and providing 20 percent of Western farmers with irrigation water for 10 million acres of farmland that produce A top priority of Reclamation is to operate and maintain 60 percent of the nation's vegetables and 25 percent of its fruits and nuts.

The Bureau of Reclamation's mission is to manage, Additionally, Reclamation is the second largest producer of Reclamation ensures their dams do not create unacceptable L develop, and protect water and related resources in hydropower in America, providing enough energy to power risk to the public by monitoring, evaluating, and performing risk reduction modifications if needed. an environmentally and economically sound manner in the 3.5 million homes. Reclamation produces 14,000 megawatts and 40 billion killowatt hours annually. Hydropower Geographically, the Missouri Basin Region is Reclamation's operations generate \$700 million in revenue for the U.S. largest region. The Region encompasses all or parts of nine Treasury.

> Reclamation manages 245 recreation sites that average approximately 90 million visits every year. Activities that fall under Reclamations' areas of respsonsbility contribute \$63.9 billion to econmic output and support more than 456,000 jobs.

> projects in a safe and reliable manner to protect the health and safety of the public and employees. Furthermore,

states including Montana, North Dakota, South Dakota, Wyoming, Colorado, Nebraska, Kansas, Oklahoma, and Texas.

The Region's programs have constantly changed to meet the needs of a changing society. Facilities once created and operated solely for irrigation now need to meet other demands placed on the finite water resource. Managers recognize the need to constantly evaluate more efficient ways of working with others to solve water resource problems.



The Bureau of Reclamation L began in response to the need for stable water supplies in the semiarid American West. Water was often farm economies. Following the not available when needed for crops, livestock, and people. At first, settlers simply diverted water from streams, but in many areas demand outstripped supply as rivers diminished following of water projects. high spring flows.

settlers wanted to store "wasted" runoff from rains and snow for later use to make more water available in drier seasons. The stored runoff would also limit damage from flooding that occurred along rivers and streams where the most successful irrigation was practiced.

Congress passed the Reclamation Act It is important to remember that of June 17, 1902. From 1902 to 1907,

thousands to tens of thousands of acres gave way to those that served hundreds of thousands of acres of irrigation along with municipal water, many communities.

One example of a complex program that was created and has evolved to meet the needs of the west is the Pick-Sloan Missouri Basin Program.

The program was a national response to severe drought and the severe flooding cycles that marked the to tame the Missouri River and its tributaries were divided between the two federal organizations. As the Corps of Engineers developed The nine state Great Plains area was mainstem reservoirs primarily for served by three Reclamation regions:

generation, as multipurpose projects with and population served) rural municipal water supply systems.

Single-purpose projects serving mere flood control and hydroelectric the Southwest, Lower Missouri, and Reclamation was the Upper Missouri regions. The last developing features on tributaries two regions were merged in 1985 to form the Missouri Basin Region. emphasis on irrigation. The Pick- This allowed for better planning hydropower, and flood control for Sloan program gradually became and administration of projects increasingly complex and now (especially the Pick-Sloan Missouri encompasses a host of services not Basin Program). In 1988 declining originally envisioned such as small (in Reclamation budgets and fewer demands for construction activities led to much of the Southwest and the Missouri Basin regions merging Similarly, the Great Plains Region to create the Great Plains Region. Further organizational refinements included the creation of area offers (Montana, Wyoming, Oklahoma-Texas, Nebraska-Kansas, Dakotas offices managing their construction and Eastern Colorado) to effectively administer Reclamation activities.

organization has repeatedly adapted to meet the changing needs of the American West. Initially Reclamation basin. The development of facilities projects were administered by local and settlement.

of the West depended upon stable irrigation and their own experience, the western public often strongly

In 1867 John Wesley Powell began explore the West. He is often considered the father of reclamation because he not only detailed the land, natives, and conditions he development and mapped locations for future dams and irrigation.

agriculture was the dominant industry Reclamation began about 30 projects in the West. The continued settlement in Western states with many of them in the Missouri River Basin. Among them was Buffalo Bill's project on example of Native American the Shoshone River in Wyoming. The Belle Fourche Project in South Dakota, Huntley in Montana, North supported large-scale development Platte in Wyoming and Nebraska, and others began in the early years of Reclamation in the Great Plains.

As demand for water increased, a series of expeditions to further Early Reclamation works began as single-purpose projects that were designed to store and deliver irrigation water. Other benefits such as flood control, municipal water, encountered but also advocated water hydropower, and fish & wildlife habitat were secondary to irrigation or were not planned during the construction of these projects.





— BUREAU OF — RECLAMATION

DAKOTAS AREA OFFICE



The Dakotas Area Office is responsible for administering Reclamation programs in North Dakota and South Dakota. The Area Office is located in Bismarck, North Dakota, with two f_{eld} offices in South Dakota. The Area Off_{ce} manages nine dam and reservoirs, three of which are in North Dakota. Activities include operation and maintenance of Reclamation facilities; contract renewals; water conservation; and oversight of the construction, and operation and maintenance of rural water systems – including those for tribes in the two states.

Reclamation projects in both states provide a water supply to a total irrigated acreage of 97,000 acres producing an average of \$16 million worth of crops annually. Municipal, rural and industrial water supply projects will serve over 700,000 people when completed. Over a million visitors participate in recreation activities in Reclamation reservoirs in the states.

DAMS

PROJECTS

NORTH DAKOTA

Deerfield

Reservoir

Buford-Trenton Dickinson Unit Fort Clark Unit Garrison Diversion Unit Heart Butte Unit Jamestown Dam & Reservoir

SOUTH DAKOTA

Angostura Division Belle Fourche James Diversion Rapid Valley Rapid Valley Unit Shadehill Unit

NORTH DAKOTA

Dickinson Heart Butte Jamestown

SOUTH DAKOTA

Angostura Belle Fourche Deerf_{eld} James Diversion Pactola Shadehill





Deerfield Dam, South Dakota Photo by Todd Potter

Bell Fourche Reservoir, South Dakota Photo by William Domagall

Reudi Dam, Colorado Photo by Kara Lamb



Marys Lake Powerplant, Colorado Photo by Reclamation Staff

EASTERN COLORADO AREA OFFICE



Fry-Ark contains five large reservoirs, five major dams, and 22 tunnels. It provides supplementary water to 12 Colorado counties, a population around 650,000, and 200,000 irrigated acres.

PROJECTS

Animas-La Plata Armel Unit Bostwick Park Collbran Colorado-Big Thompson Grand Valley Unit Lower Gunnison Basin Unit McElmo Creek Unit Meeker Dome Unit Paradox Valley Unit Dallas Creek Dolores Florida Fryingpan-Arkansas Grand Valley Mancos Navajo-Gallup Paonia Pine River San Luis Valley Silt

Carter Creek Carter Lake

The Eastern Colorado Area Office manages the Colorado-Big Thompson (C-BT), the Fryingpan-Arkansas (Fry-Ark), the Leadville Mine Drainage Tunnel and Treatment Plant which removes heavy metals resulting from mining activity before they can enter into the Arkansas River.

C-BT contains 20 dams and dikes, and 22 tunnels and canals. Its 6 hydroelectric power plants produce 759,000,000 kilowatt hours annually. It provides supplementary water to 30 cities and towns or roughly 925,000 people, and 640,000 irrigated acres.

DAMS

POWERPLANTS

Chapman Diversion Dille Diversion Dixon Canyon East Portal Diversion Flatiron Afterbay Fryingpan Diversion Granby Granite Creek Diversion Green Mountain Halfmoon Diversion Horsetooth Hunter Creek Diversion Ivanhoe Diversion Lily Pad Diversion Inlet Little Hell Creek Diversion Marys Lake Dike Middle Cunningham Creek Diversion Midway Creek Diversion Mormon Creek Diversion Mt Elbert Forebay No Name Creek Diversion North Cunningham Creek Diversion North Fork Diversion Olympus

Pole Hill Afterbay Pueblo Rattlesnake Ruedi Satanka Dike Sawyer Diversion Shadow Mountain Soldier Canyon South Cunningham Creek Diversion South Fork Diversion Spring Canyon Sugar Loaf Twin Lakes Willow Creek Co

Smith Fork Uncompange **Big** Thompson Blue Mesa Crystal Estes Flatiron Green Mountain Lower Molina Marys Lake McPhee Morrow Point Mount Elbert Pole Hill Towaoc Upper Molina

MONTANA AREA OFFICE



Some of Reclamation's earliest projects were built in Montana. Work began on the Lower Yellowstone Project in 1905 just three years after the agency was created.

Today there are 13 projects east of the Continental Divide - the portion of the state managed by the Missouri Basin Region. There are 13 dams and reservoirs, 9 diversion dams, 10 pumping plants and 2 power plants which provide a variety of benefits and meet multiple needs, including recreation.

The Montana Area Office (MTAO) in Billings manages Reclamation's projects and programs in this part of the state and spends \$7.5 million annually for operation and maintenance. Most of the Montana development occurred under the Pick-Sloan Missouri Basin Program, including the large Yellowtail and Canyon Ferry units. Both provide considerable storage for irrigation and power generation and are popular recreation areas. Yellowtail and Canyon Ferry power plants produce about 43 percent of the Missouri Basin Region's annual power generation, resulting in about \$15 million in revenue each year. The Montana projects provide water to 352,915 acres of agricultural land. Principal crops are sugar beets, hay, corn, wheat and barley. More than 1 million visitor days are spent at Reclamation facilities in Montana each year.

PROJECTS

DAMS

POWERPLANTS

Bitter Root Buffalo Rapids Canyon Ferry Unit Crow Creek Pump Unit East Bench Unit Frenchtown Helena Valley Unit Hungry Horse Huntley Intake Lower Marias Unit Milk River Missoula Valley Savage Unit Sun River

Anita Barretts Diversion Canyon Ferry Clark Canyon Dodson Diversion Fort Shaw Diversion Dam Fresno Gibson Helena Valley Hungry Horse Lake Sherburne Lower Yellowstone Nelson Paradise Diversion

Pishkun Dikes St. Mary Diversion Sun River Diversion Swift Current Dike Tiber Vandalia Diversion Willow Creek Yellowstone Diversion Yellowtail Afterbay Yellowtail

Canyon Ferry Hungry Horse Yellowtail





Glacier National Park, Montana Photo by Jim Mogen

Yellowtail Dam Spillway, Montana Photo by Jeff Ticknor

Box Butte Dam, Nebraska Photo by Ken Tiffany





Webster Dam, Kansas Photo by Samantha Bartz

NEBRASKA-KANSAS AREA OFFICE





Located in the country's heartland, Kansas was settled during the late 1880's primarily by farmers. Today, about 95 percent of the state is devoted to agricultural production. Dryland farming was marginally successful, but farmers were soon digging wells and banding together to sink deep wells for irrigation. The Bureau of Reclamation's first involvement in Kansas came in the mid-1940's as projects were started to provide storage for irrigation and to protect the land from devastating floods.

PROJECTS

NEBRASKA

Ainsworth Unit Frenchman-Cambridge Division Mirage Flats North Loup Division

KANSAS

Almena Unit Cedar Bluff Unit Glen Elder Unit Kirwin Unit Wichita Project voir

The Nebraska-Kansas Area Off_{ce} (NKAO) is in McCook, Nebraska with a f_{eld} off_{ce} in Grand Island, Nebraska. NKAO manages Reclamation projects in Nebraska, Kansas, and Colorado. The management area for NKAO includes all of Nebraska, except the North Platte Project Area, the northern portion of Kansas within the drainage basin of the Missouri River, and a portion of northeast Colorado that encompasses Bonny Reservoir.

NKAO projects provide water for approximately 264,000 acres of farmland as well as flood control; municipal and industrial water; recreation, and fish and wildlife benefits. The reservoirs provide approximately 56,000 acres of water surface at normal pool and 75,000 acres of adjacent land for public use. The reservoir areas are managed by several Federal, State, and local entities for fish and wildlife, and recreational purposes.

Reclamation's work in Nebraska began soon after the agency was created in 1902. Facilities in Nebraska provide water to over 250,000 acres of farmland which provide about \$170 million worth of crops each year.

DAMS

NEBRASKA

Bartley Diversion Box Butte Cambridge Diversion Culbertson Diversion Davis Creek Dry Spotted Tail Diversion Dunlap Diversion Énders Kent Diversion Lake Alice No 1 Lake Alice No 1 and 1 Half Lake Alice No 2 Medicine Creek Merritt Minatare Red Willow Creek Diversion Red Willow Dam

Superior Courtland Diversion Trenton Tub Springs Creek Diversion Virginia Smith

KANSAS

Almena Diversion Cedar Bluff Cheney Glen Elder Kirwin Lovewell Norton Webster Woodston Diversion

COLORADO

Bonny

OKLAHOMA-TEXAS AREA OFFICE



The Oklahoma-Texas Area Office is responsible for oversight of 11 Reclamation dams located in southern Kansas, all of Oklahoma, and all of Texas, except the southwest portion located west of the Pecos River. All the dams and facilities are operated and maintained under contracts by water districts, river authorities, or cities.

The primary purpose of most Reclamation reservoirs in Oklahoma is to provide municipal and industrial water supply. The only exception is the W.C. Austin Project whose primary purpose is agricultural irrigation. This Project provides irrigation water to over 40,000 acres of farmland.

As with the Oklahoma projects, the primary purpose of the three Reclamation reservoirs in Texas is to provide municipal and industrial water supply.

DAMS

OKLAHOMA

Altus Arbuckle Bretch Diversion Fort Cobb Foss McGee Creek Mountain Park Norman

TEXAS

Choke Canyon Sanford Twin Buttes





OKLAHOMA

Arbuckle McGee Creek Mountain Park Norman W.C. Austin Washita Basin

TEXAS

Balmorhea Canadian River Lower Rio Grande Rehabilitation Nueces River San Angelo

Choke Canyon Dam, Texas Photo by Thomas Michalewicz

Altus Dam, Oklahoma Photo by Adam Milligan

Shoshone Powerplant, Wyoming Photo by Joe Rohde







Buffalo Bill Dam, Wyoming Photo by Laura Hertz

Pathfinder Dam, Wyoming Photo by Jeff Ticknor

WYOMING AREA OFFICE



of hydroelectric power generation is produced annually and supplies the needs of 73,000 households. The Wyoming Area Office manages over 500,000 acres of land for beneficial uses. Other benefits include flood control, fish and wildlife enhancement, and recreation.

PROJECTS

Boysen Unit Eden Hanover-Bluff Unit Kendrick Keyhole Unit Kortes Unit Lyman Owl Creek Unit Riverton Unit Seedskadee Alco Ancl Big Sa Boys Buffald Bull I Corbett D Dear Edd Fonte: Glen Grassy Gray I Guern R eclamation has been involved with the conservation and development of Wyoming's water resources for more than 100 years. The Wyoming Area Off_{ee} service area includes the states of Wyoming east of the Continental Divide and extends into western Nebraska.

The Wyoming Area Office in Mills, Wyoming, manages multipurpose projects including 20 reservoirs, 3,800 miles of canals and laterals, and 11 operating hydroelectric power plants. The collective storage capacity is more than 4.5 million acre-feet and the combined installed power capacity is over 280 megawatts.

Approximately 2.8 million acre-feet of water is released annually. Water is supplied to 60 irrigation entities for irrigation of 680,000 acres of land and to 20 cities, municipalities, and companies for municipal and industrial purposes. An average of 800 gigawatt-hours

DAMS

POWERPLANTS

ova hor andy sen o Bill Lake Diversion ver en nelle ndo Lake Reef nsey	Horse Creek Diversion Jackson Lake Keyhole Kortes Meeks Cabin Pathfnder Pathfnder Dike Pilot Butte Ralston Seminoe Whalen Diversion Willwood Diversion Wind River Diversion	Alcova Boysen Buffalo Bill Fontenelle Fremont Canyon Glendo Guernsey Heart Mountain Kortes Pilot Butte Seminoe Shoshone Spirit Mountain



Big Horn River, Montana Photo by Jeff Ticknor

PROJECTS

COLORADO

Animas-La Plata Armel Bostwick Park Collbran Colorado-Big Thompson Grand Valley Lower Gunnison Basin McElmo Creek Meeker Dome Paradox Valley Dallas Creek Dolores Florida Fruitgrowers Fryingpan-Arkansas Grand Valley Mancos Navajo-Gallup Paonia Pine River San Luis Valley Silt Smith Fork Uncompahgre KANSAS Almena Cedar Bluff Glen Elder

Kirwin Wichita Montana Bitter Root Buffalo Rapids Canyon Ferry Crow Creek Pump East Bench Frenchtown Helena Valley Hungry Horse Huntley Intake Lower Marias Milk Rive Missoula Valley Savage Sun River

NEBRASKA

Ainsworth Frenchman-Cambridge Division Mirage Flats North Loup Division

NORTH DAKOTA

Buford -Trenton Dickinson Fort Clark Garrison Diversion Heart Butte Iamestown Oklahoma Arbuckle McGee Creek Mountain Park Norman W.C. Austin Washita Basin

SOUTH DAKOTA

Angostura Division Belle Fourche James Diversion Rapid Valley Rapid Valley Shadehill

TEXAS

Balmorhea Canadian River Lower Rio Grande Rehabilitation Nueces River San Angelo

WYOMING

Boysen Eden Hanover-Bluff Kendrick Keyhole Kortes Lyman Owl Creek Riverton Seedskadee



Photo by Reclamation Staff

DAMS

COLORADO

Animas-La Plata Armel Bostwick Park Collbran Colorado-Big Thompson Grand Valley Lower Gunnison Basin McElmo Creek Meeker Dome Paradox Valley Dallas Creek Dolores Florida Fruitgrowers Fryingpan-Arkansas Grand Valley Mancos Navajo-Gallup Paonia Pine River San Luis Valley Silt Smith Fork Uncompangre

KANSAS

Almena Cedar Bluff Glen Elder Kirwin Wichita Montana Bitter Root Buffalo Rapids Canyon Ferry Crow Creek Pump East Bench Frenchtown Helena Valley Hungry Horse Huntley Intake Lower Marias Milk Rive Missoula Valley Savage Sun River



NEBRASKA

Ainsworth Frenchman-Cambridge Division Mirage Flats North Loup Division

NORTH DAKOTA

Buford -Trenton Dickinson Fort Clark Garrison Diversion Heart Butte Jamestown Dam and Reservoir Oklahoma Arbuckle McGee Creek Mountain Park Norman W.C. Austin Washita Basin

SOUTH DAKOTA

Angostura Division Belle Fourche James Diversion Rapid Valley Rapid Valley Shadehill

TEXAS

Balmorhea Canadian River Lower Rio Grande Rehabilitation Nueces River San Angelo

WYOMING

Boysen Eden Hanover-Bluff Kendrick Keyhole Kortes Lyman Owl Creek Riverton Seedskadee







Guernsey Powerplant, Wyoming Photo by Sam Braverman

POWERPLANTS

COLORADO

Big Thompson Blue Mesa Crystal Estes Flatiron Green Mountain Lower Molina Marys Lake McPhee Morrow Point Mount Elbert Pole Hill Towaoc Upper Molina

MONTANA

Canyon Ferry Hungry Horse Yellowtail

WYOMING

Alcova Boysen Buffalo Bill Fontenelle Fremont Canyon Glendo Guernsey Heart Mountain Kortes Pilot Butte Seminoe Shoshone Spirit Mountain





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