

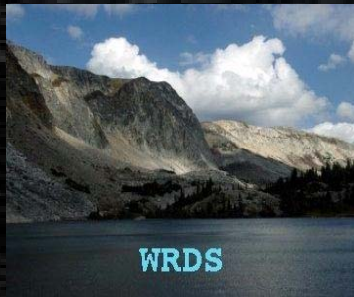
The Statewide Framework: Improved Data Delivery and Water-Planning Tools

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Chris Nicholson

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Department of Civil and Architectural Engineering

University of Wyoming

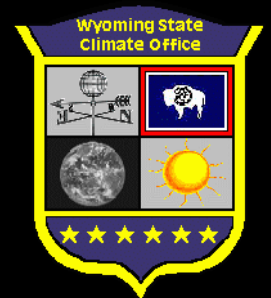
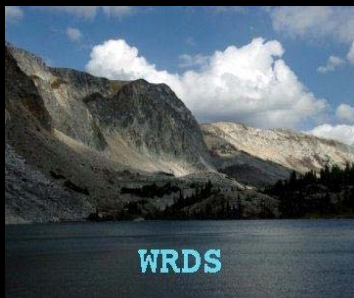


WRDS on the WEB

<http://www.wrds.uwyo.edu/>
Water Library and State Climate Office

State Water Plan WEB

<http://waterplan.state.wy.us/>
Framework Plan and Irrigated Lands IMS



The Statewide Framework and Related Products

- Introduction to the Online Presentation Tool
- Irrigated Lands IMS
- Improving access to Water Plan documents and data

Statewide Framework Database

Table 5-2 1973 Versus Current Active Crop Distribution

River Basin	Active Irrigated Lands	Grass/Pasture	Alfalfa	Corn	Sugar Beets	Beans	Small Grains
	acres						
Bear	64,000	59,000	5,000				
Green ⁴	331,100	298,000	31,000	100			2,000
Northeast Wyoming ⁵	77,600	53,000	21,000	600			3,000
Platte	613,000	368,000	137,000	43,000	21,000	19,000	25,000
Powder/Tongue ⁵	161,000	49,000	93,000	6,000			13,000
Snake/Salt ⁵	99,000	46,000	37,000				16,000
Wind/Bighorn	601,000	70,000	261,000	33,000	78,000	34,000	125,000
2007 Framework Total	1,947,000	943,000	585,000	82,700	99,000	53,000	184,000
1973 Framework ⁶	1,622,000	964,000	369,000	59,000	63,000	33,000	125,000

¹ Grass/Pasture category includes any kind of grass or hay (wild, native, tame, other; excluding alfalfa), mountain meadow, and pasture.
² Small Grains category contains winter wheat, spring wheat, barley, and oats.
³ Above crops aggregated for comparisons; all current basin plans did not distinguish based on identical crop types.
⁴ Green River Basin Plan reported irrigated crop acreage for some of the subbasins; percent distribution for most; corn and grains acreage taken from subbasins for which they were reported; other subbasins reported no corn or grain; basin distribution was
⁵ Only Northeast Wyoming, Powder/Tongue, and Snake/Salt Basin Plans reported irrigated crop acreage; other acreages calculated from crop distribution percentages from individual basin plans.
⁶ 1973 Framework Plan included potatoes and other categories.

- All tables from the Framework Plan stored in a master database
- Allows for easy updates and promotes consistency between plans
- Sets the stage for creation of a clearinghouse where the most up-to-date Water Plan data will be made available
- Facilitates linkages between Water Plan data and other products
- Provides a means for creating new products as the process demands

WYOMING WATER PLAN

Search the Water Plan

Search powered by Google

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EXPAND ALL COLLAPSE ALL

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5.2.3 Irrigated Acreage

The majority of the appropriated water in the state's seven river basins has been appropriated for irrigation. Therefore, an estimate of the amount of water used for irrigation is central in the development of a comprehensive state water use inventory. The first step in estimating irrigation water consumption is to estimate irrigated acreage. Figure 5-1 shows irrigated lands by river basin in Wyoming.

Figure 5-1. Irrigated Lands

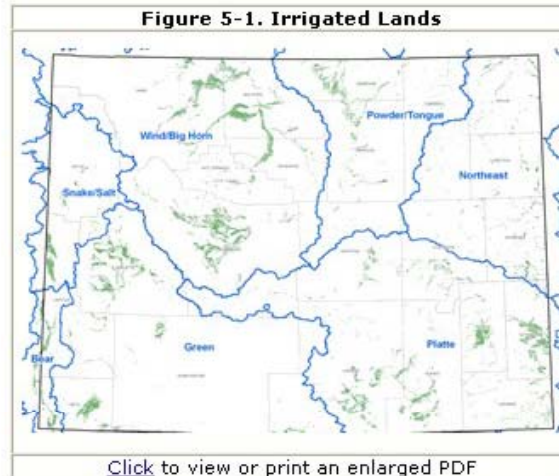


Table 5-1 shows that 1,947,000 acres of Wyoming land are irrigated and provides a comparison to the irrigated acreage by basin determined in the 1973 Framework Plan. Generally, the current figure includes groundwater, man-induced subirrigation, idle lands, and man-made riparian acres, as described in the different basin plans. The total figure does not include Tribal Futures Projects (52,667 acres) in the Wind/Bighorn Basin awarded to the Wind River Indian Reservation. However, the Tribal Futures Projects lands have an 1868 priority and play an important role in determining potential water use in that basin (see discussion in Chapter 6).

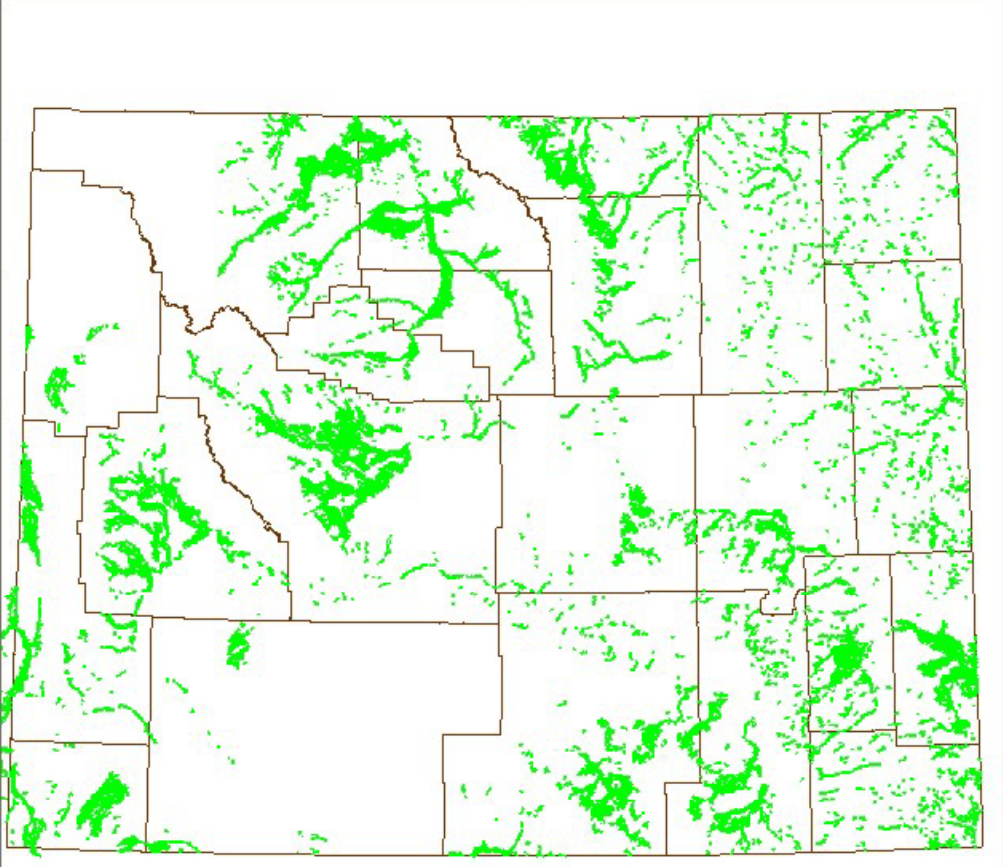
Irrigated Lands Mapper

Statewide Framework Water Plan - Irrigated Lands - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://ims2.wrds.uwyo.edu/Website/Irrigated_Lands/viewer.htm

Statewide Framework Water Plan - Irrigated Lands



Zoom In
Zoom Out
Full State
Last View
Drag Map
Pan
View Permit Data for Irrigated Land Polygon

LAYERS

- All Layers
 - Roads
 - Highways
 - Counties
 - Cities/Towns
 - Irrigated Lands
 - Irrigation Districts
 - Data Points
 - Hydrography
 - Twn-Range and Section Survey
 - County Aerial (2002 CIR)
 - County Aerial (1994 B&W)
 - County DRGs (Topo Maps)

Refresh Map
 Auto Refresh

Key:

- Closed data folder. Click to show contents.
- Open data folder. Click to hide contents.
- A map layer.
- Item not displayed on map. Click to show.
- Item displayed on map. Click to remove.
- A visible layer, but not at this scale.
- Not all contents displayed on map
- An inactive layer.
- The active layer.
- Labels are displayed. Click to hide labels.
- Labels are not shown. Click to show labels.

<http://waterplan.state.wy.us/frameworkplan.html>

Irrigated Lands Mapper

Statewide Framework Water Plan - Irrigated Lands - Microsoft Internet Explorer

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 - Basin Boundaries
 - Streams/Rivers
 - Water Bodies
- Twn-Range and Section Surve
- County Aerial (2002 CIR)
 - Albany
 - Big Horn
 - Campbell
 - Carbon
 - Converse
 - Crook
 - Fremont
 - Goshen
 - Hot Springs
 - Johnson
 - Laramie
 - Lincoln
 - Natrona
 - Niobrara
 - Park
 - Platte
 - Sheridan
 - Sublette
 - Sweetwater
 - Teton
 - Uinta
 - Washakie
 - Weston

<http://waterplan.state.wy.us/frameworkplan.html>

Irrigated Lands Mapper

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Statewide Framework Water Plan - Irrigated Lands

Permit	Priority	Source	Facility	Use	Unit	Type	Status	Amount
	19-Apr-1879	Laramie River	Pioneer Canal	IRR	OS	ADJ	71.40	CFS

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<http://waterplan.state.wy.us/frameworkplan.html>

Prototype: Water/Climate Data Mapper

The screenshot displays a web browser window with the address <http://ims2.wrds.uwyo.edu/Website/Statewide/viewer.htm>. The browser interface includes a menu bar (File, Edit, View, Favorites, Tools, Help), a toolbar with navigation and search icons, and a search bar. The main content area features a map of Wyoming with a color-coded overlay representing water or climate data. The map is divided into several regions: Snake-Salt, Wind-Bighorn, Powder-Tongue, Northeast, Bear, Green, and Platte. A dashed black line outlines the state boundary. To the left of the map is a vertical toolbar with icons for zooming, navigation, and data tools. Below the toolbar are sections for 'Data Tools' and 'Well Data', with buttons for 'Off', 'Depth', 'Actual Yield', and 'MWBZ Top'. To the right of the map is a 'LAYERS' panel with a tree view of map layers. The 'Precipitation Averages' folder is expanded, showing a list of months from January to December for the years 1971-2000. A 'Refresh Map' button and an 'Auto Refresh' checkbox are located at the bottom of the layers panel.

Help!!

Map Tools: Full State, Last View, Goto GRB, Drag Map, Pan

Data Tools: [Icons for data tools]

Well Data: Off, Depth, Actual Yield, MWBZ Top

LAYERS:

- All Layers
- Roads
- Highways
- Counties
- Cities/Towns
- Irrigated Lands
- Irrigation Districts
- Bedrock Geology
- Land Ownership
- Wells
- Surface Water
- Climate Stations
- Hydrography
- Twn-Rng and Sections
- Precipitation Averages
 - Annual (1971-2000)
 - Jan (1971-2000)
 - Feb (1971-2000)
 - Mar (1971-2000)
 - Apr (1971-2000)
 - May (1971-2000)
 - Jun (1971-2000)
 - Jul (1971-2000)
 - Aug (1971-2000)
 - Sep (1971-2000)
 - Oct (1971-2000)
 - Nov (1971-2000)
 - Dec (1971-2000)
- County Aerial (2002 CIR)
- County Aerial (1994 B&W)
- County DRGs (Topo Maps)

Refresh Map

Auto Refresh

Prototype: Water/Climate Data Mapper

http://ims2.wrds.uwyo.edu/Website/Statewide/viewer.htm - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://ims2.wrds.uwyo.edu/Website/Statewide/viewer.htm

Google ate water plan framework Go RS Bookmarks Popups okay Check Settings

Help!!

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Last View
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Data Tools

Well Data
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 - NRCS SnoTel
 - NWS Coop
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http://www.nrcs.usda.gov - NWCC - SNOTEL Site Information and Reports - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://www.nrcs.usda.gov

United States Department of Agriculture
NRCS Natural Resources Conservation Service
National Water and Climate Center

NWCC Home About Us Products Publications News Partnerships Contact Us

Site Information and Reports for BIG SANDY OPENING

BIG SANDY OPENING
Site Number: 342
Station ID: 09g09s

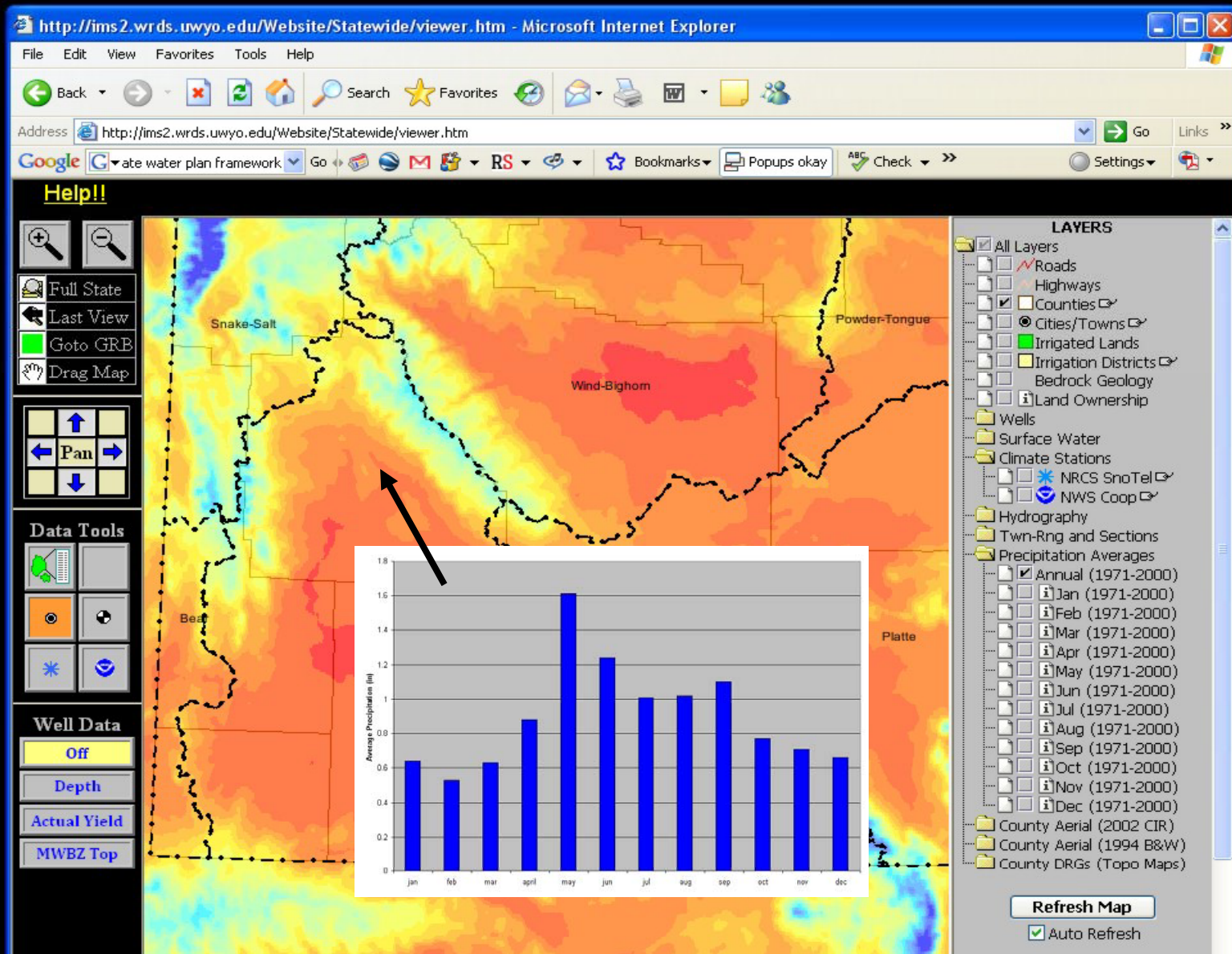
State: Wyoming
Latitude: 42°38'
Longitude: -109°15'
Elevation: 9080 feet

[Sensor Label Descriptions](#)
[Sensor History for this Site](#)

The following reports are available for this site:

Report Type	Hourly	Daily	Current Water Year*	Historical
Standard Sensors† (Most Current Data)	Last 7 Days	Last 7 Days	Daily Readings	Daily (Tab Formatted)
All Sensors (TK Format†)	Today's Data			
Precipitation, Accumulated	Last 7 Days	Last 7 Days	Daily Table	Daily Table

Prototype: Water/Climate Data Mapper



Thanks!

