

## USER REPORT

### RAWLINS SE, RAWLINS SW, RAWLINS NW WYOMING

#### NATIONAL WETLANDS INVENTORY MAPS

##### A. INTRODUCTION

The U.S. Fish and Wildlife Services National Wetlands Inventory is producing maps showing the location and classification of wetlands and deepwater habitats of the United States. The Classification of Wetlands and Deepwater Habitats of the United States by Cowardin et al. is the classification system used to define and classify wetlands. Photointerpretation conventions, hydric soils lists and wetland plant lists are also available to enhance the use and application of the classification system.

##### B. PURPOSE

The purpose of the notes to users is threefold: (1) to provide localized information regarding the production of NWI maps, including specific imagery and interpretation discussion; (2) to provide a descriptive crosswalk from wetland codes on the map to common names and representative plant species; and (3) to explain local geography, climate, and wetland communities.

##### C. STUDY AREA

###### Geography:

The study area covered by Rawlins SE, Rawlins SW, and Rawlins NW base maps is located in south-central Wyoming. Bailey's Ecoregion Classification (1980) divides the study area into two provinces, the Wyoming Basin Province and the Rocky Mountain Forest Province.

The basin area consists of broad expanses of sagebrush and numerous small sandy streams. Major rivers in this area are Little Snake River, the North Platte River, and Savery Creek. Relief in the area ranges from 6,200 feet to 8,000 feet.

The Rocky Mountain Province consists of the Medicine Bow National Forest. The elevation in this province ranges from 8,000 feet to 12,000 feet. This area is dominated by saturated areas above 9,000 feet and numerous mountain lakes. Areas below 9,000 feet are predominantly mountain streams inhabited by numerous beaver.

### Climate:

The climate of the Basin Province is characterized by short, hot summers, with cold winters. Annual temperatures range from 40°F to 52°F. The average annual precipitation for the area ranges from 5 - 14 inches, fairly evenly distributed throughout the year.

The climate in the Rocky Mountain Forest Province is characterized by a semiarid steppe regime in which precipitation falls in the winter. A considerable amount of precipitation is in the form of snow, however, permanent snow fields cover only small areas. Average annual temperatures are mainly 35°F - 45°F but reach 50°F in lower valleys.

### Vegetation:

Vegetation in the Wyoming Basin Province is dominated by sagebrush or shadscale, with a mixture of short grasses. Moist alkaline flats support such vegetation as ~~alkali-tolerant~~ greasewood, and other alkali tolerant plants. Where water is good, along streams and mountains, valley bottoms are lined by willows and sedges.

The Rocky Mountain Forest Province consists of vegetational zones controlled by a combination of latitude, ~~altitude~~, *elevation*, direction of prevailing winds, and slope exposure. Vegetation here includes Blue spruce, Engleman spruce, aspen, Douglas fir, and lodgepole pine. Clearings in the Forest Province, approximately 9,000 feet and higher, consist of emergent vegetation, including carex, elephants head, marigold, and moss.

### Soils:

Within the study area, there are two major soil groups defined as Great Groups by the "Wyoming General Soil Map". The two groups are 1) Soils of the Mountains and Mountain Valleys, and 2) Soils of the Intermountain Basins and Foothills. This classification is further broken into climatic zones and soil associations.



The Medicine Bow National Forest, located in the southwestern portion of Rawlins SE and eastern part of Rawlins SW, is dominated by the Soils of Mountains and Mountain Valley Great Group. They are dominantly dark colored soils that are usually moist in some parts during the summer. These soils are formed in a cool climate with moist summers. Within this area elevations range from 8,000 feet - 12,000 feet. The primary soil association is the Rock outcrop-Cryoboralfs-Cryoborolls association. This association is found on very steep terrain, developing in residuum and transported materials from igneous bedrock. The soil association Cryoborolls-Cryothents is also found in the mountainous areas. This association is found in rolling to steep terrain, developed in residuum and transported material from sedimentary bedrock.

The foothills surrounding the mountains are dominated by Soils of the Intermountain Basins and Foothills. These soils are light colored soils of basins, terraces, and fans which are dry or may be moist in some parts during the summer. These soils form in cool climates with spring moisture. The elevations range from 6,700 feet - 8,000 feet. The soil associations are formed by both transported and residual materials. Soil associations found this area are: Torrifluvents-Fluvaguents-Halaguepts association; Torrifluvents, alkali association; Torriorthents-Haplargids-Natrargids association; Torriorthents-Camborthids-Haplargids association and Torriorthents, shallow-Torriorthents association.

D. WETLAND CLASSIFICATION CODES AND WATER REGIME DESCRIPTIONS

TABLE 1: NWI CLASSIFICATION FOR RAWLINS SE, SW, and NW, WYOMING  
(1 of 3)

NWI CODE WATER REGIME	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION
R2UB (G,H)	Riverine, lower perennial, unconsoli- dated bottom	Rivers	Unconsolidated bottoms
R3UB (G,H)	Riverine, upper perennial, unconsoli- dated bottom	Mountain rivers or streams	Cobble-Gravel substrate
R2US (C)	Riverine, lower perennial, unconsoli- dated shore	Flats	Sand or mud
R3US (C)	Riverine, upper perennial, unconsoli- dated shore	Flats	Sand, mud or cobble-gravel
R4SB (F,C,A)	Riverine, intermittent, stream bed	Streams or irrigation canals	Sand or mud
L1UB (H)	Lacustrine, limnetic, unconsolidated bottom	Lakes, reservoirs, alpine lakes	Unconsolidated bottoms
L2AB (G,F,C)	Lacustrine, littoral, aquatic bed	Deep Marsh, lakes, or reservoirs	Submerged and floating aquatics
L2US (C,A)	Lacustrine, littoral, unconsolidated shore	Lake flats, beach	Sand or mud
PUB (G,H)	Palustrine, unconsoli- dated bottom	Gravel pits, oil and gas pits, alpine ponds	Unconsolidated bottoms
PAB (F,G)	Palustrine, aquatic bed	Vegetated ponds, beaver ponds or sewage ponds	<u>Lemna</u> sp. (duckweed) <u>Ruppia</u> sp. (pearlwort)

D. WETLAND CLASSIFICATION CODES AND WATER REGIME DESCRIPTIONS

TABLE 1: NWI CLASSIFICATION FOR RAWLINS SE, SW, and NW, WYOMING  
(2 of 3)

NWI CODE WATER REGIME	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION
PEM (F,C,B,A)	Palustrine, emergent	Meadows, depressions, swales, floodplains, seeps, or springs	<u>Hordeum</u> sp. (barley) <u>Elymus cincreus</u> (basin wild-rye) <u>Allenrolfea</u> <u>occidentalis</u> (iodine bush) <u>Rumex</u> sp. (dock) <u>Mentha</u> sp. (mint) <u>Salicornia rubra</u> (red saltwort) <u>Juncus</u> sp. (rush) <u>Distichlis</u> sp. (saltgrass) <u>Agrostis alba</u> (redtop) <u>Phleum pratense</u> (timothy) <u>Agropyron</u> <u>smithii</u> (western wheatgrass) <u>Beckmannia</u> <u>syzigachne</u> (american sloughgrass) <u>Triglochin</u> sp. (arrowgrass) <u>Equisetum</u> sp. (horsetail) <u>Iris</u> sp. (iris) <u>Carex</u> <u>nebrascensis</u> (nebraska sedge)

D. WETLAND CLASSIFICATION CODES AND WATER REGIME DESCRIPTIONS

TABLE 1: NWI CLASSIFICATION FOR RAWLINS SE, SW, and NW, WYOMING  
(3 of 3)

NWI CODE WATER REGIME	NWI DESCRIPTION	COMMON DESCRIPTION	CHARACTERISTIC VEGETATION
PEM (cont'd)			<u>Phalaris arundinacea</u> (reed canary grass) <u>Juncus sp.</u> (rush) <u>Carex sp.</u> (sedge) <u>Eleocharis sp.</u> (spikerush) <u>Sium suave</u> (water parsnip) <u>Typha latifolia</u> (cattail) <u>Scirpus acutus</u> (hardstem bullrush) <u>Scirpus pungens</u> (american three square <sup>bullrush</sup> ) <u>Pedicularis groenlandica</u> (elephants head) Marigold Moss
PSS (C,B,A)	Palustrine, scrub-shrub	Shrub wetlands	<u>Sarcobatus vermiculatus</u> (greasewood) <u>Salix sp.</u> (willow)
PFO (A)	Palustrine, forested	Forested wetlands	<u>Populus angustifolia</u> (narrowleaf cottonwood)



## E. WATER REGIME DESCRIPTION

- (A) Temporarily Flooded - Surface water present for brief periods during growing season, but water table usually lies well below soil surface. Plants that grow both in uplands and wetlands are characteristic of this water regime.
- (B) Saturated - The substrate is saturated to surface for extended periods during the growing season, but surface water is seldom present.
- (C) Seasonally Flooded - Surface water is present for extended periods especially early in the growing season, but is absent by the end of the growing season in most years. The water table after flooding ceases is extremely variable, extending from saturated to a water table well below the ground surface.
- (F) Semipermanently Flooded - Surface water persists throughout the growing season in most years. When surface water is absent, the water table is usually at or very near the land's surface.
- (G) Intermittently Exposed - Surface water is present throughout the year except in years of extreme drought.
- (H) Permanently Flooded - Water covers land surface throughout the year in all years.
- (K) Artificially Flooded - The amount and duration of flooding is controlled by means of pumps or siphons in combination with dikes or dams.
- (U) Unknown - The water regime is not known.

## F. MAP PREPARATION

The wetland classification that appears on the Rawlins SE, Rawlins SW, and Rawlins NW National Wetlands Inventory (NWI) Base Map (Table 1) is in accordance with Cowardin et al. (1977). The delineations were produced through stereoscopic interpretation of 1:58,000 scale color infrared photography. The photography was taken during July 1980, 1981; August 1980; September 1980, 1981; and October 1981.

Field checks of areas found within Rawlins NW, Rawlins SW, and Rawlins SE photography were made prior to the actual delineation of wetlands. Field check sites were selected to clarify varying signatures found on the photography. These photographic signatures were then identified in the field using vegetation types and soil types, as well as additional input from field personnel.

Collateral data included U.S.G.S. topographic maps, climate, vegetation, and ecoregional information. The user of the map is cautioned that, due to the limitation of mapping primarily through aerial photo interpretation, a small percentage of wetlands may have gone unidentified. Since the photography was taken during a particular time and season, there may be discrepancies between the map and current field conditions. Changes in landscape which occurred after the photography was taken would result in such discrepancies.

Aerial photo interpretation and drafting were completed by Martel Laboratories, Inc., St. Petersburg, Florida.

G. MAP ACQUISITION

To discuss any questions concerning these maps please contact:

Regional Wetland Coordinator  
U.S. Fish and Wildlife Service - Region VI  
Denver Federal Center  
Post Office Box 25486  
Denver, CO 80225

To order maps, please contact:

Rocky Mountain Mapping Center, ESIC  
United States Geological Survey  
Box 25046, STOP 504, Denver Federal Center  
Denver, CO 80225-0146

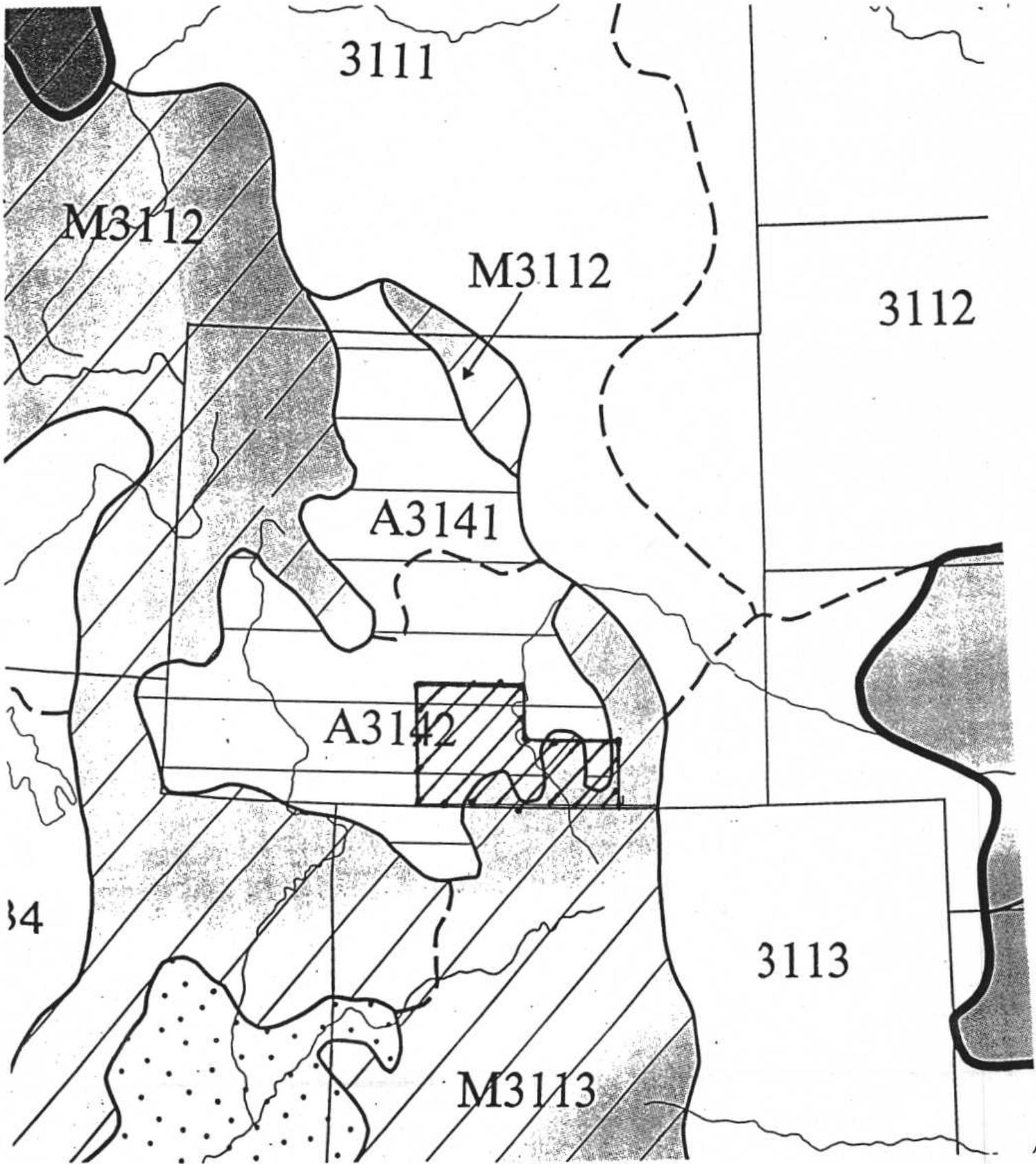
(303)236-5829

Maps are identified by the name of the corresponding U.S.G.S. 1:24,000 scale topographic quadrangle name. Topographic map indices are available from the U.S. Geological Survey.

#### LITERATURE CITED

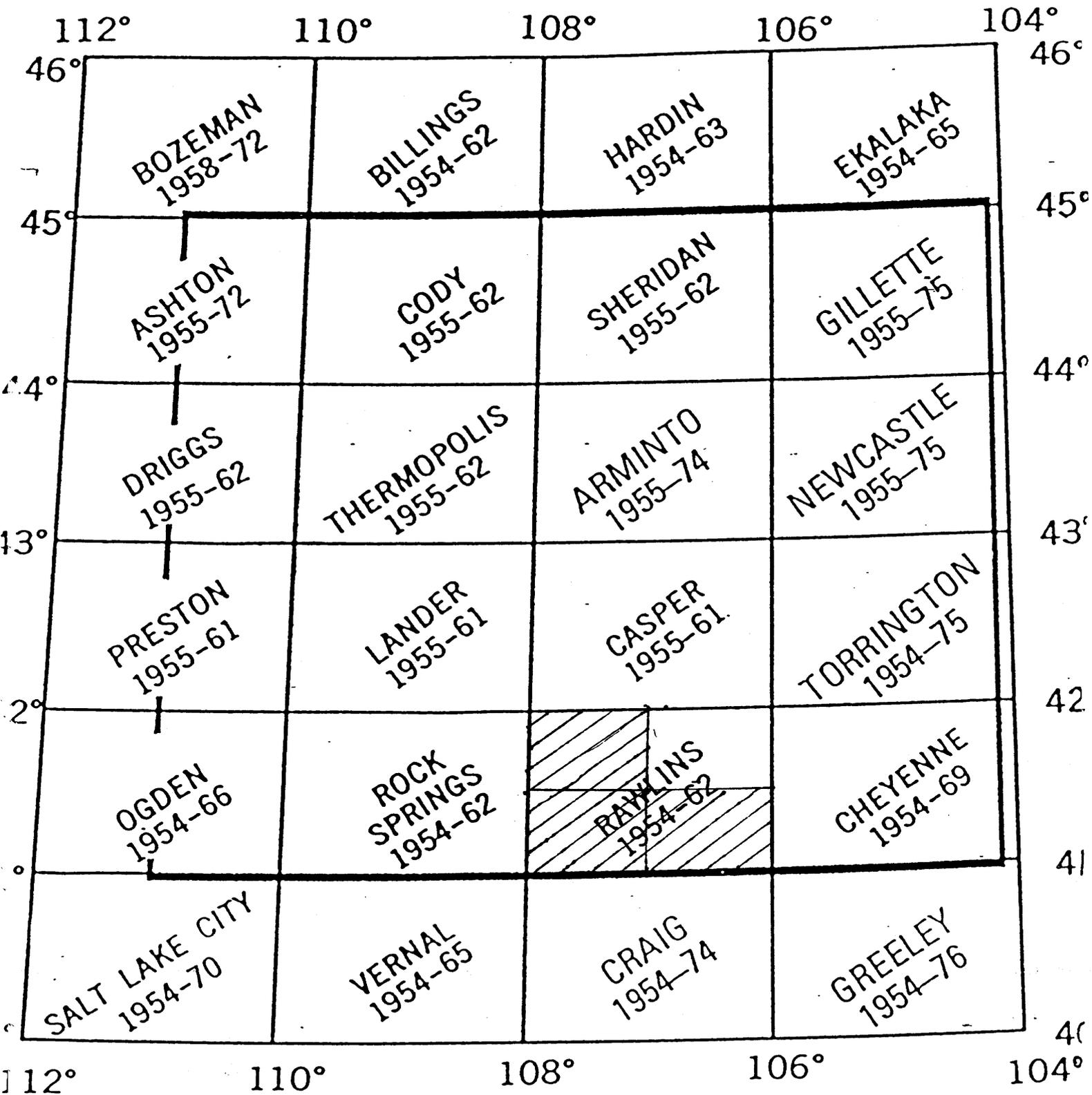
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RAWLINS N.W., S.W., and S.E.  
Locator Map (A)



RAWLINS N.W., S.W., and S.E.

LOCATOR MAP (B)





LOCATOR MAP (C)  
 RAWLINS N.W., S.W., and S.E.

# GENERAL SOIL MAP

## WYOMING

NOVEMBER 1975



HANSEN LAKE 1960	MONUMENT LAKE 1966	RUBY KNOLLS 1966	HANSEN LAKE NE 1960	LARSEN KNOLL 1960	BUCK DRAW 1960	RAWLINS PEAK 1956	RAWLINS NW 1953	RAWLINS 1953	SINGLAIR 1953	LONE MOUNTAIN HAYSTACK 1953
WANSUTER LAKE 1966	CRESTON 1966	JUNCTION 1966	SEVERSON RESERVOIR 1966	FILMORE RANCH 1966	RIVER 1966	BRIDGER PASS 1956	BRIDGER PASS 1956	BOLTEN RANCH 1956	BRIDGER PASS 1956	BRIDGER PASS 1956
EIGHTMILE LAKE 1966	HIGH POINT 1966	SEVERSON RESERVOIR 1966	DOTY MTN 1957	POLE GULCH 1961	MC CARTY RANCH 1961	BRIDGER PASS 1956				
MEXICAN FLATS NW 1970	DUCK LAKE 1970	SEVERSON RESERVOIR 1966	DOTY MTN 1957	POLE GULCH 1961	MC CARTY RANCH 1961	BRIDGER PASS 1956				
SOUTH SPRING 1970	MEXICAN FLATS 1970	SEVERSON RESERVOIR 1966	DOTY MTN 1957	POLE GULCH 1961	MC CARTY RANCH 1961	BRIDGER PASS 1956				
DRIPPING ROCK SPRING 1970	FLAT TOP MOUNTAIN 1970	SEVERSON RESERVOIR 1966	DOTY MTN 1957	POLE GULCH 1961	MC CARTY RANCH 1961	BRIDGER PASS 1956				
MC PEPERSON SPRINGS 1970	POISON BASIN 1970	SEVERSON RESERVOIR 1966	DOTY MTN 1957	POLE GULCH 1961	MC CARTY RANCH 1961	BRIDGER PASS 1956				
WALCK RANCH 1961	INDIAN ROCKS 1961	SEVERSON RESERVOIR 1966	DOTY MTN 1957	POLE GULCH 1961	MC CARTY RANCH 1961	BRIDGER PASS 1956				
SARATOGA 1961	COV CREEK RANCH 1961	SEVERSON RESERVOIR 1966	DOTY MTN 1957	POLE GULCH 1961	MC CARTY RANCH 1961	BRIDGER PASS 1956				
FINLEY RESERVOIR 1961	COV CREEK 1961	SEVERSON RESERVOIR 1966	DOTY MTN 1957	POLE GULCH 1961	MC CARTY RANCH 1961	BRIDGER PASS 1956				
KENNAUD PEAK 1961	RYAN PARK 1961	SEVERSON RESERVOIR 1966	DOTY MTN 1957	POLE GULCH 1961	MC CARTY RANCH 1961	BRIDGER PASS 1956				
TURPIN RESERVOIR 1961	PHANTOM LAKE 1961	SEVERSON RESERVOIR 1966	DOTY MTN 1957	POLE GULCH 1961	MC CARTY RANCH 1961	BRIDGER PASS 1956				
SAND LAKE 1961	MEDICINE BOW PEAK 1961	SEVERSON RESERVOIR 1966	DOTY MTN 1957	POLE GULCH 1961	MC CARTY RANCH 1961	BRIDGER PASS 1956				
MORGAN 1961	CENTENNIAL 1961	SEVERSON RESERVOIR 1966	DOTY MTN 1957	POLE GULCH 1961	MC CARTY RANCH 1961	BRIDGER PASS 1956				
STROSS HILL 1961	REX LAKE 1961	SEVERSON RESERVOIR 1966	DOTY MTN 1957	POLE GULCH 1961	MC CARTY RANCH 1961	BRIDGER PASS 1956				
WOODS LANDING 1961	LAKE OWEN 1961	SEVERSON RESERVOIR 1966	DOTY MTN 1957	POLE GULCH 1961	MC CARTY RANCH 1961	BRIDGER PASS 1956				

LOCATOR MAP (D)

RAWLINS N.W., S.W., and S.E.