

INTRODUCTION

GEOGRAPHY

GEOLOGY

EPA ECOREGIONS

CLIMATE

HYDROLOGY

POLITICS

DEMOGRAPHICS

ECONOMICS

AGRICULTURE

THREATENED AND ENDANGERS SPECIES

OTHER GROUPS WORKING IN THE WATERSHED

OTHER FACTORS TO CONSIDER

Purpose

anthropogenic factors such as economics, demographics, discharges, diversions, hydrologic modifications and land-use patterns

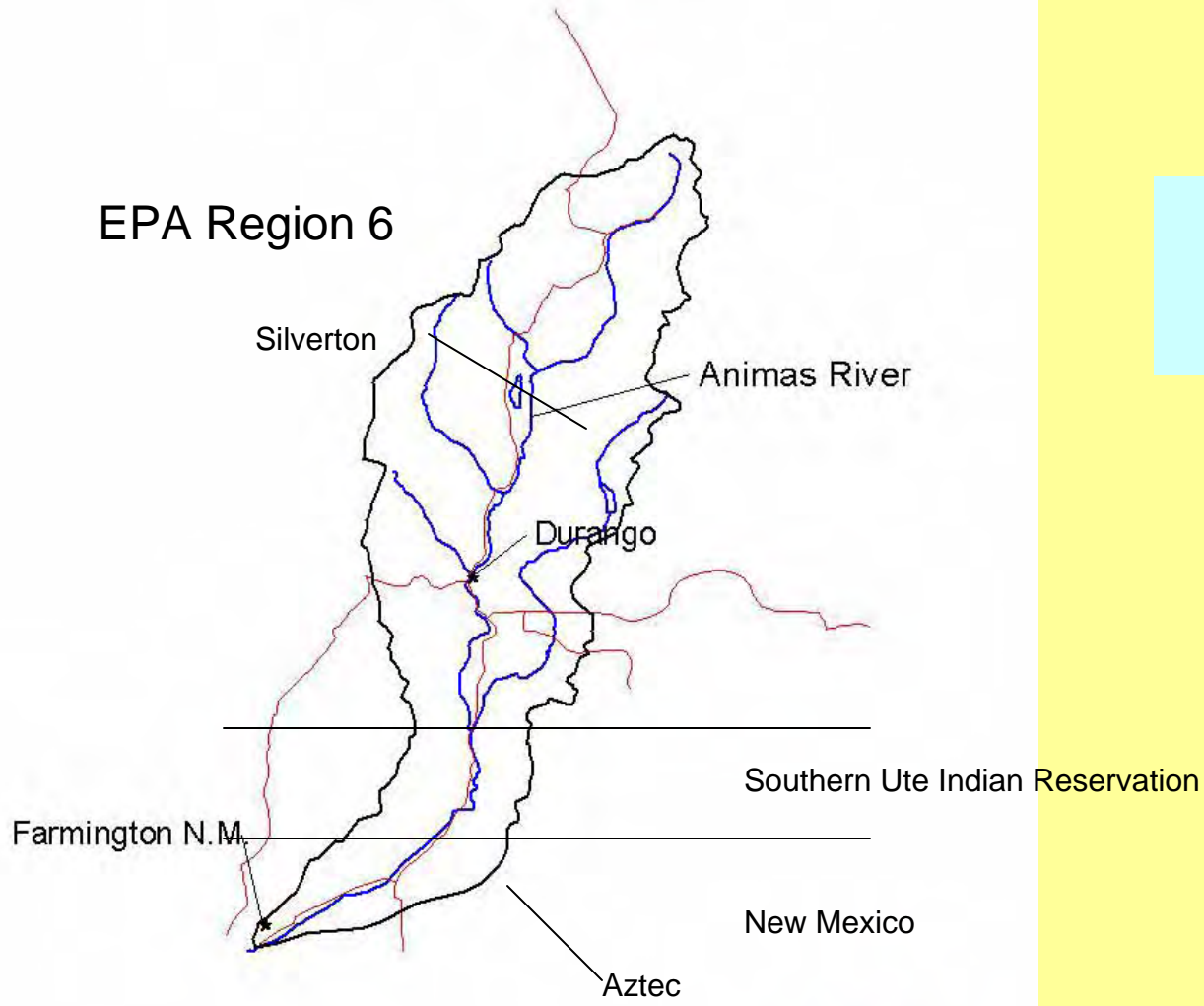
natural factors such as climate, hydrology, geology, soils and land cover

Programmatic

- threatened and endangered species
- sources of drinking water and
- treatment plants
- diversions
- in-stream flows

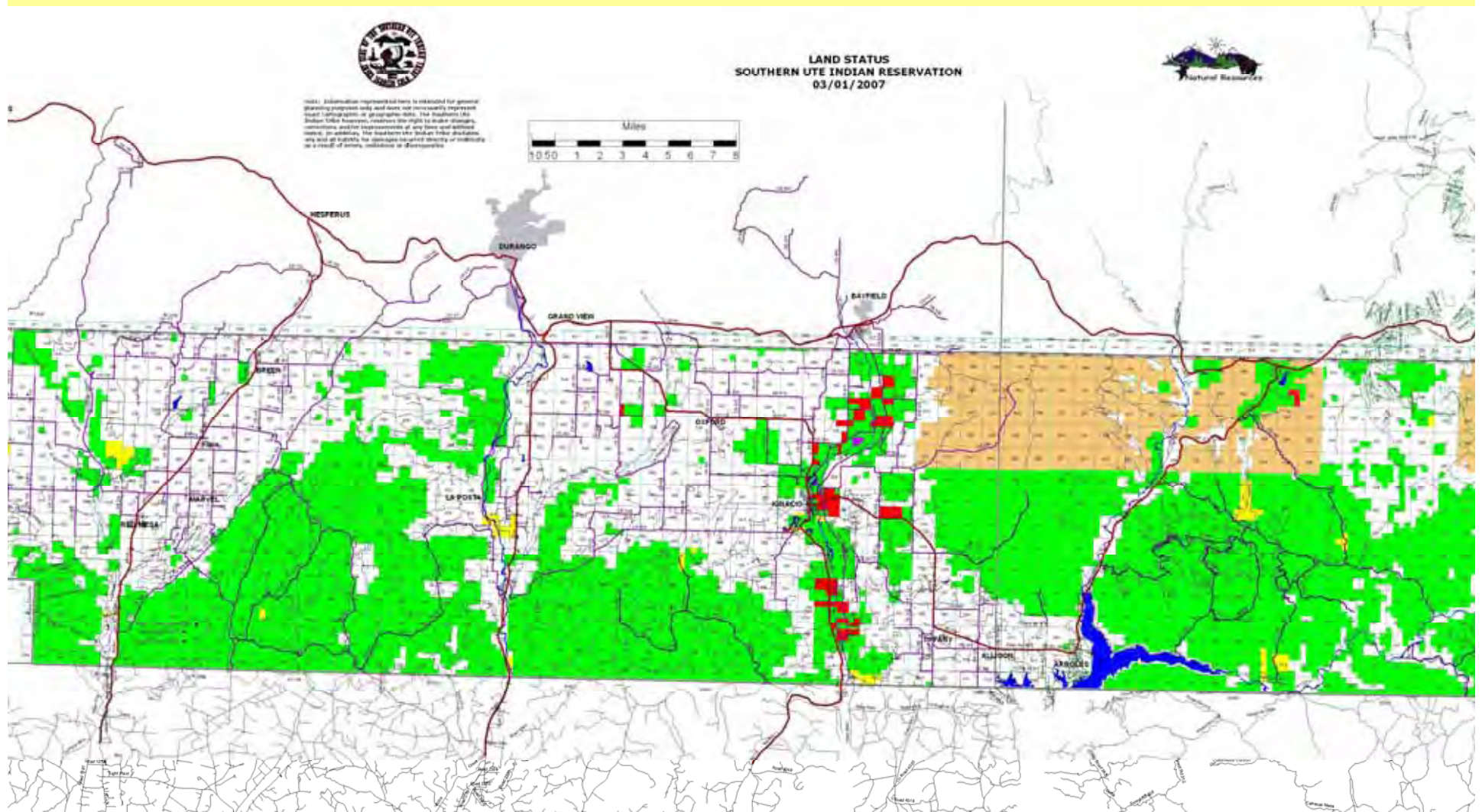
that may have programs in place that affect the management of water in the river.

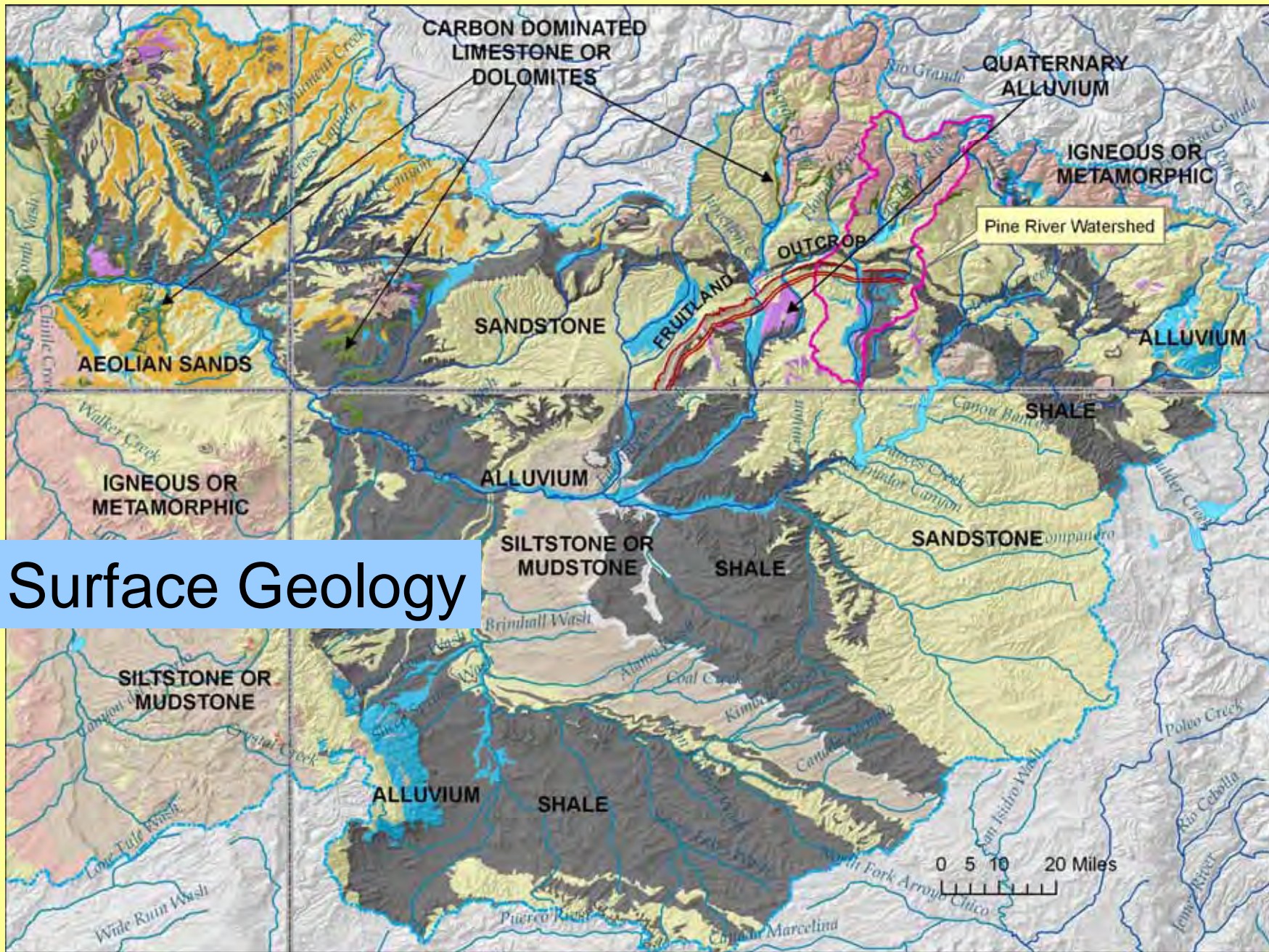
Animas Watershed



Politics

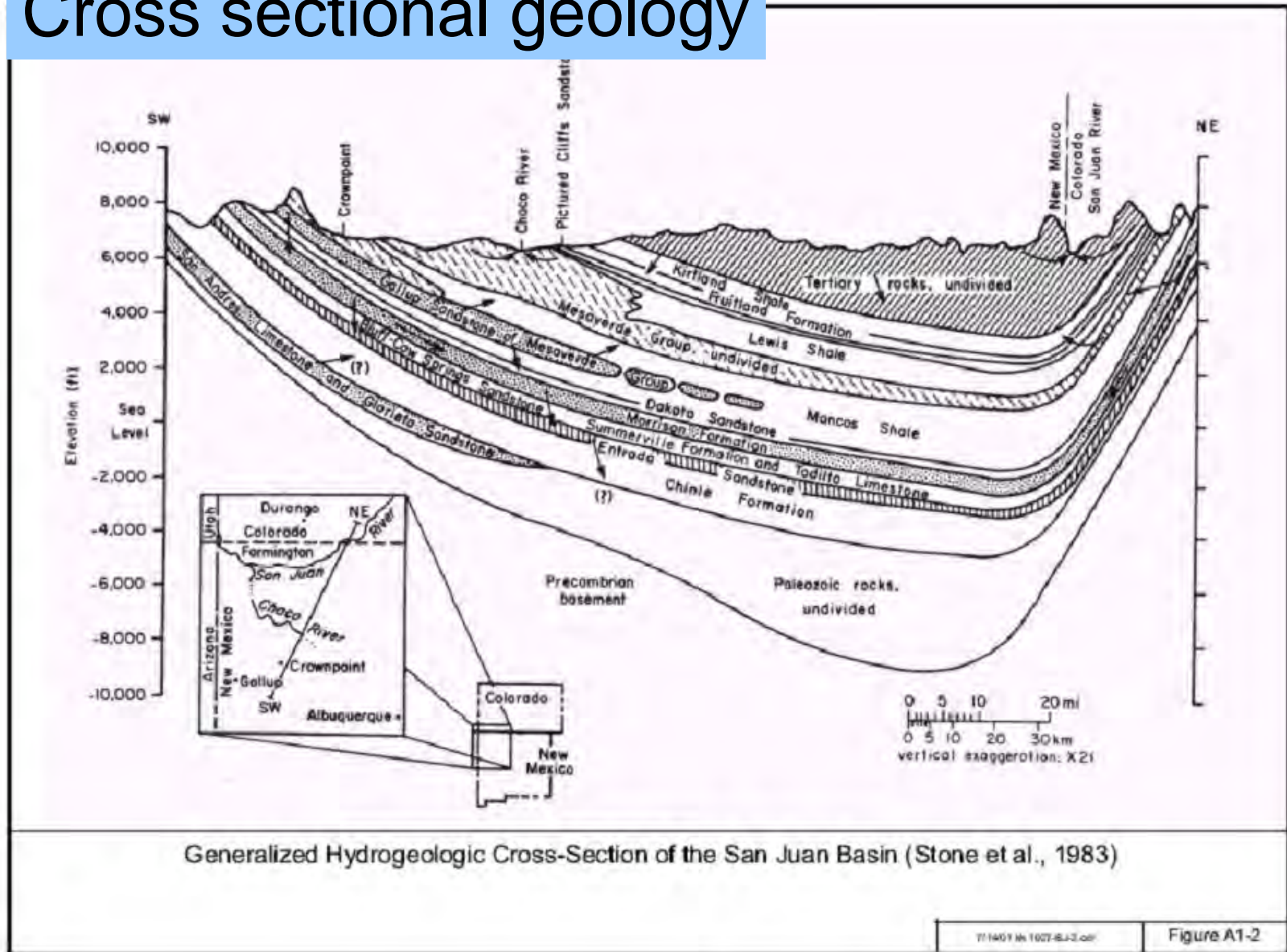
Within the Reservation



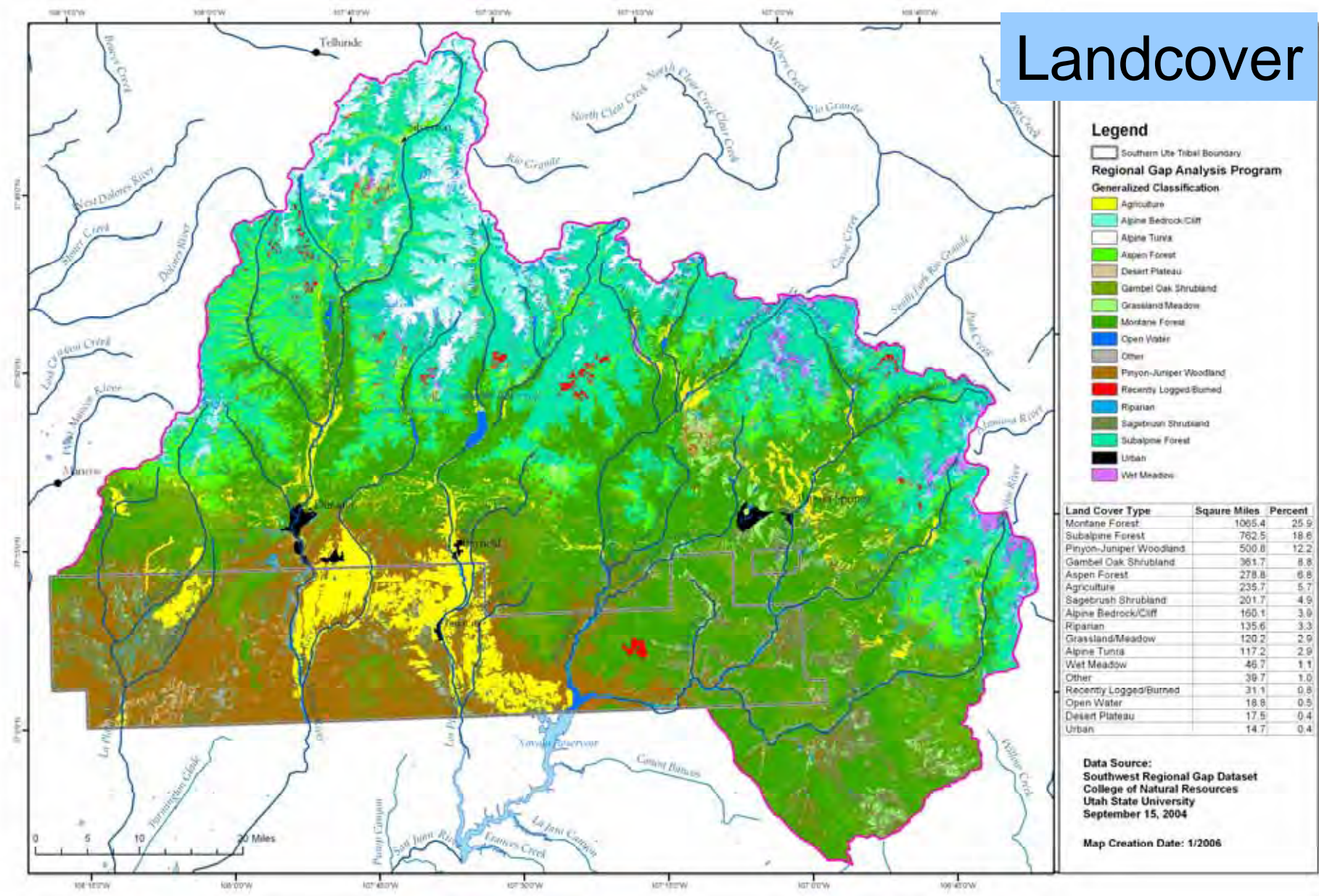


Surface Geology

Cross sectional geology



Landcover

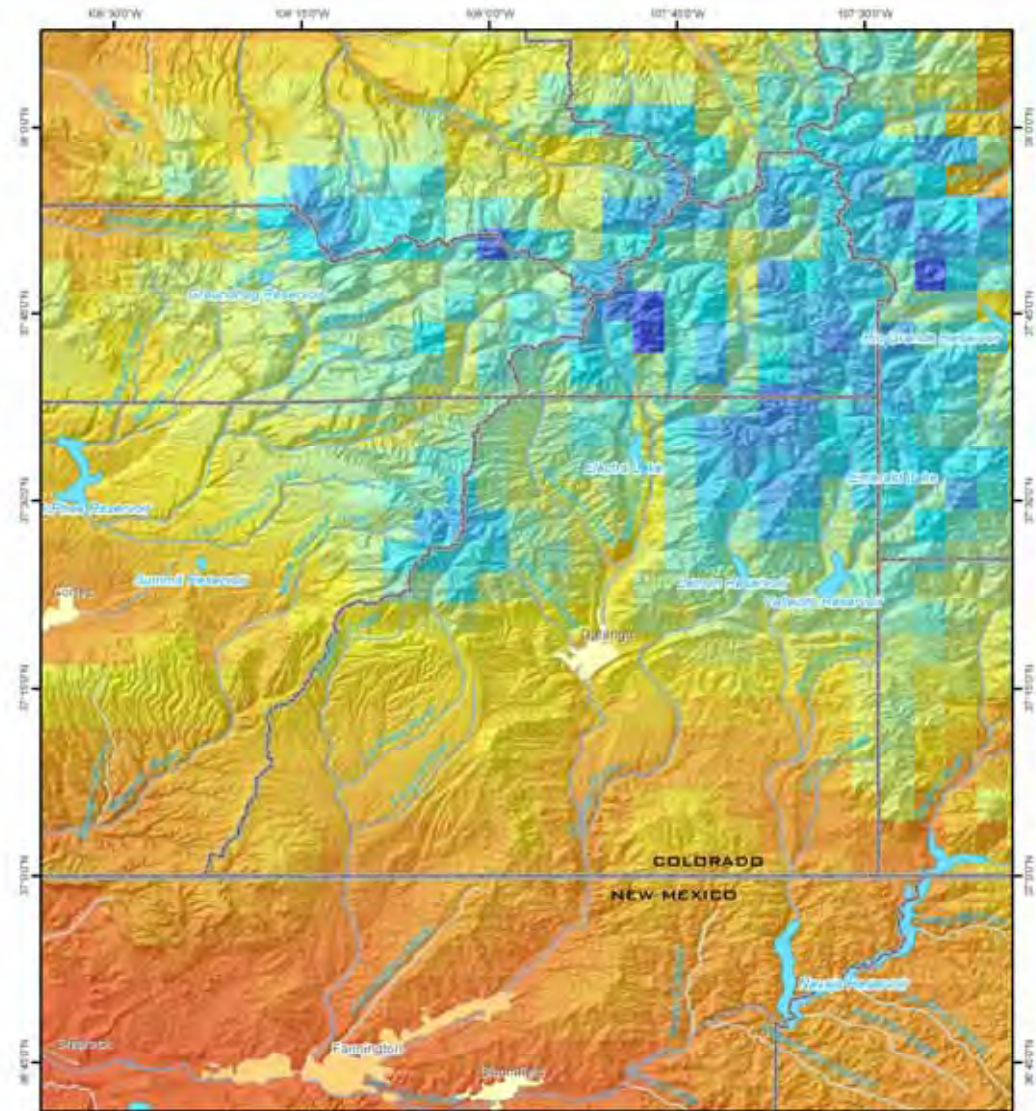


EPA Ecoregions



21. SOUTHERN ROCKIES

20. COLORADO PLATEAUS

22. ARIZONA/NEW MEXICO PLATEAU



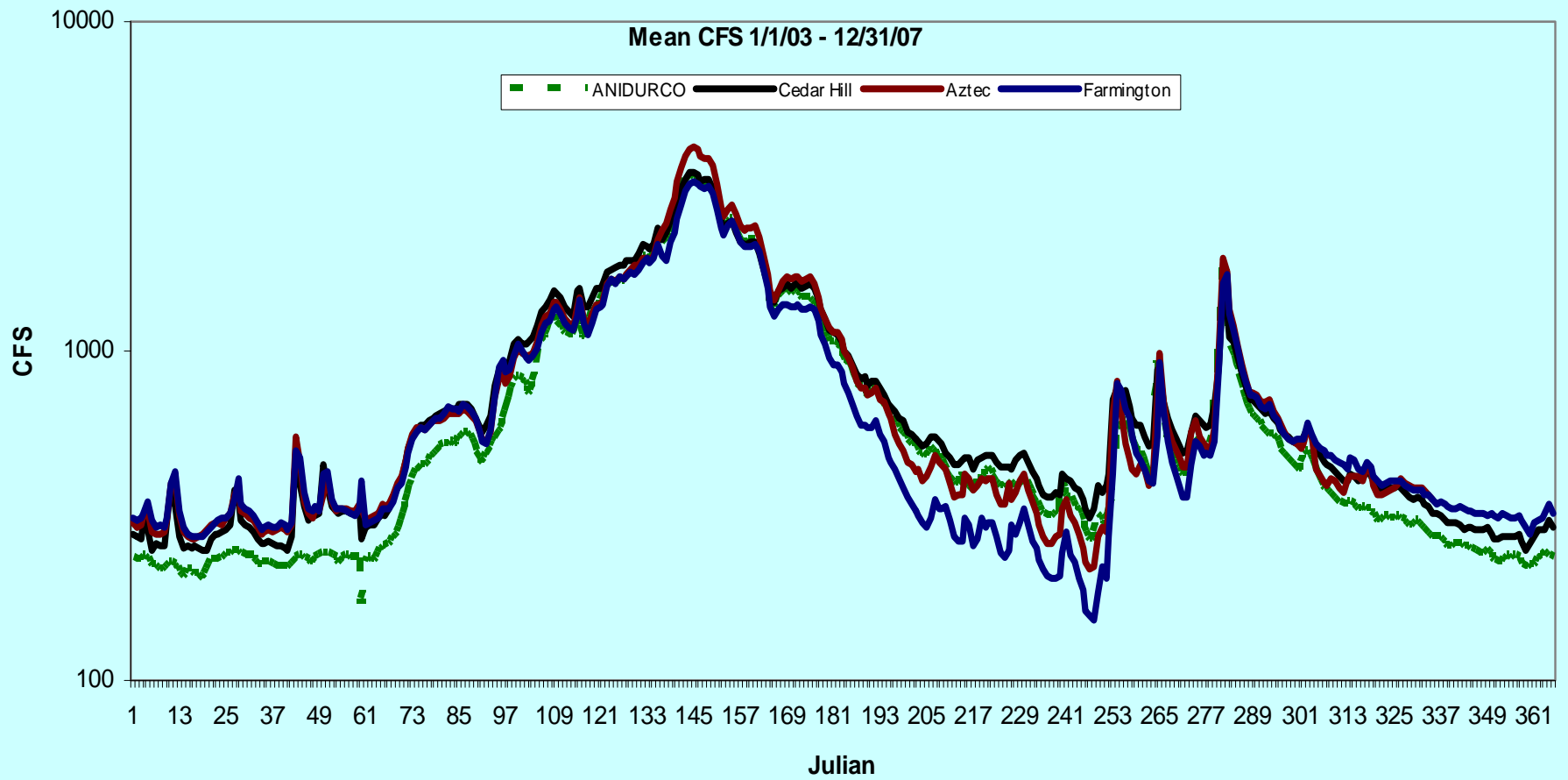
Climate/Precipitation

 ECOSPHERE ECOLOGICAL SERVICES	FOOD SECURITY STUDY LA PLATA COUNTY ANNUAL PRECIPITATION		FIGURE
	100 year average annual precipitation High : 53.0 Inches Low : 5.5 Inches		DATA SOURCE: NOAA 2005
	0 3 6 12 Miles 		12/2006

Hydrology

Month	Jan	Feb	Mar	Ap	May	June	July	Aug	Sept	Oct	Nov	Dec
Average	204	207	303	842	2305	2806	1180	583	465	423	288	223
Variation	2263	2727	28023	313747	1774346	2482141	753801	158016	158939	145744	14072	4063
Maximum	431	489	1700	3510	9500	10700	7300	3570	7740	7000	1340	539
Minimum	103	104	94	141	285	172	130	116	121	134	134	100

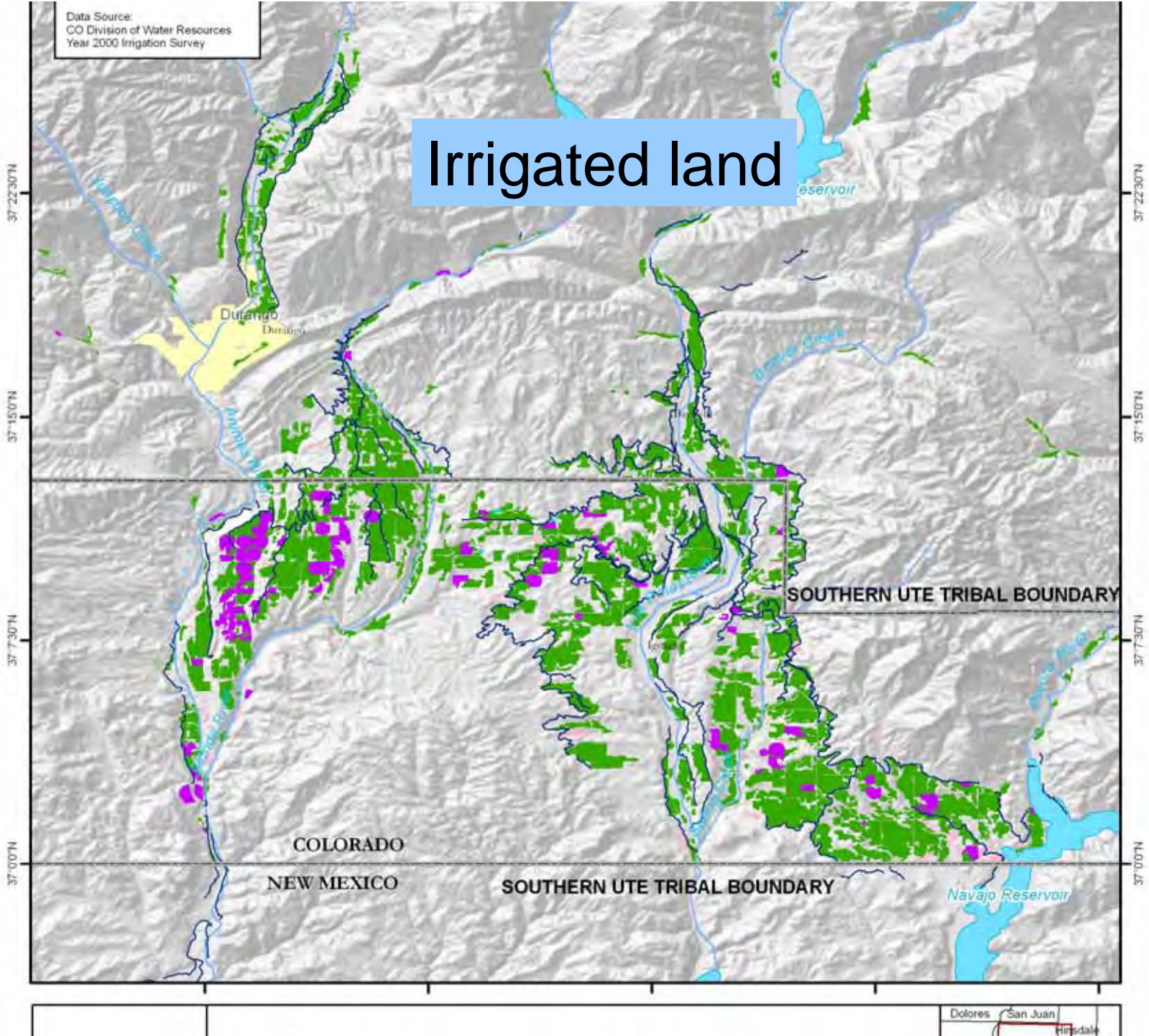
Diversions



Diversion databases

Data Source:
CO Division of Water Resources
Year 2000 Irrigation Survey

Irrigated land



Urban Runoff

In NM, land ownership within the Animas...

Watershed is 84% private, 60% BLM and

6% State land. Land use includes 56%

forest, 8% agriculture, 29% rangeland, 5%

built-up land, 1% water, and less than 1%

wetlands and barren land.

Land Ownership	Private	State	Federal
Animas Watershed	84%	6%	10%
Private	40%	13%	47%
State Land	4%	12%	5%
Federal	50%	47%	36%
BLM	51%	21%	28%
Sate Land	4%	12%	16%
Southern Ute	125,708	179,055	
Ute Mt. Ute		1,685	
National Park			
Total Acreage of county	872,959	1,083,085	

Bank hardening

- Documented in NM
- Needs documentation in Colorado



34 Discharge Permits

CO-0020273	BAYFIELD SANITATION DISTRICT	WATER TREATMENT PLANT
CO-0020311	SILVERTON, TOWN OF	TOWN OF SILVERTON
CO-0024082	DURANGO, CITY OF	WATER TREATMENT PLANT
CO-0026468	AMORELLI, JOE & CHERYL	DBA, LIGHTNER CREEK CAMPGROUND
CO-0027529	GOLD KING MINES CORPORATION	AMERICAN TUNNEL
CO-0029904	LIGHTNER CREEK MHP	MOBILE HOME PARK
CO-0035939	TAMARRON MANAGEMENT ASSOC., LLC	GLACIER CLUB AT TAMARRON
CO-0039691	MILL CREEK MANAGEMENT CO., LLC	CASCADE VILLAGE
CO-0040266	EDGEMONT RANCH METRO DISTRICT	METROPOLITAN DISTRICT
CO-0040860	NEEDLES HOMEOWNERS ASSOCIATION	NEEDLES HOA
CO-0041548	U.S. DEPT. OF ENERGY/S.M. STOLLER CORP.	UMTRA BODO CANYON WWTF
COG-071561	WEEMINUCHE CONSTRUCTION AUTHORITY	RIDGES BASIN DAM
COG-130005	COLO DIV OF WILDLIFE	DURANGO
COG-500241	SANDCO, INC	DALTON PIT
COG-500328	OLDCASTLE SW GROUP, INC.	THOMAS PIT
COG-500368	NIELSONS SKANSKA, INC.	RED MESA GRAVEL PIT
COG-581010	PURGATORY METRO DISTRICT	WASTEWATER TREATMENT PLANT
COG-582024	DURANGO WEST METRO DISTRICT #2	SEWAGE TREATMENT PLANT
COG-582028	LOMA LINDA SANITATION DISTRICT	SANITATION DISTRICT
COG-582037	BAYFIELD SANITATION DISTRICT	GEM VILLAGE WWTF
COG-584010	HERMOSA SANITATION DISTRICT	SANITATION DISTRICT
COG-584011	UPPER VALLEY SANITATION, INC.	UPPER VALLEY SANITATION, INC.
COG-584020	BAILEY, FRITZ L. & REBECCA D.	DBA, DURANGO N.-PONDEROSA KOA
COG-584025	FOREST LAKES METRO DISTRICT	METROPOLITAN DISTRICT
COG-584026	VALLECITO RESORT, L.L.C.	VALLECITO RESORT
COG-584030	FORREST GROVES ESTATES	SEWAGE TREATMENT FACILITY
COG-584054	DAVIS, ROBERT H. JR.	DBA, FIVE BRANCHES CAMPER PARK
COG-584057	SOUTH DURANGO SANITATION DISTRICT	SANITATION DISTRICT
COG-584059	KANAKUK COLORADO YOUTH CAMP	KANAKUK COLORADO YOUTH CAMP
COG-600510	BEAR, RUEDI	TRIMBLE HOT SPRINGS
COG-630035	OLD HOMESTEAD MHP	OLD HOMESTEAD MHP
COG-630058	READ, DAWN	DBA, SUNDOWN ACRES PARK
COG-640008	SILVERTON, TOWN OF	WATER TREATMENT PLANT
COG-850001	NATIONAL KING COAL, LLC	KING COAL MINE
COG-850042	OAKRIDGE ENERGY, INC.	CARBON JUNCTION MINE

Drinking Water Treatment Systems	Population Served	Source of water
DURANGO CITY OF	30000	Surface_water
ANIMAS WC	3200	Groundwater
LAKE DURANGO WC	3000	Surface_water
DURANGO WEST METRO DIST NO 2	930	Purch_surface_water
DURANGO WEST MD NO 1	750	
EDGEMONT RANCH MD	450	Surface_water
FLORIDA RIVER ESTATES HOA INC	291	
DURANGO REGENCY	200	Groundwater
AZTEC DOMESTIC WATER SYSTEM	6378	Surface_water
NORTH STAR WATER USERS ASSOCIATION	2737	Surface_water
DUTCHMANS HILL WATER COMPANY	360	Groundwater
EAST AZTEC WATER USERS	147	Purch_surface_water
HYDRO PURE TECHNOLOGY INC.	25	Purch_surface_water
MORNINGSTAR WATER SUPPLY SYSTEM	5184	Surface_water
LEE ACRES WATER USERS ASSOCIATION	4718	Purch_surface_water
LA VIDA MISSION COMMUNITY WATER SUPPLY	53	Groundwater
WESTWOOD CULLIGAN	25	Purch_surface_water
LEE/HAMMOND WATER TREATMENT PLANT	0	Surface_water

Threatened and Endangered Species

- Federal
- S. Ute Wildlife
- Colorado
- New Mexico

Other Groups

- **San Juan Watershed Woody-Invasives Initiative**
Animas River Stakeholder's Group (ARSG)
- **San Juan Watershed Group**
- **Friends of the Animas River (FOAR)**

Agencies and Water Districts

- **Colorado Division of Wildlife**
- **Bureau of Reclamation**
- **Colorado RiverWatch**
- **Southwestern Water Conservancy District**
- **Animas-La Plata Water Conservancy District**
- **Southern Ute Environmental, Wildlife, Agriculture, Water Quantity**

Other Factors

- Uranium mining legacy at the Durango Smelter Site
 - Natural flushing of groundwater
- Recreational boating
- Fishing interests
- In-stream flows
- Boating parks
 - Animas River Whitewater Improvements Project, Farmington, NM 1999-2000.
- Channel and stream bank restoration projects
- Wetlands and riparian areas and assimilative capacity of the river

ALP

