



RANCHES
EXHIBIT
4



Ladder Ranch
Animas Creek







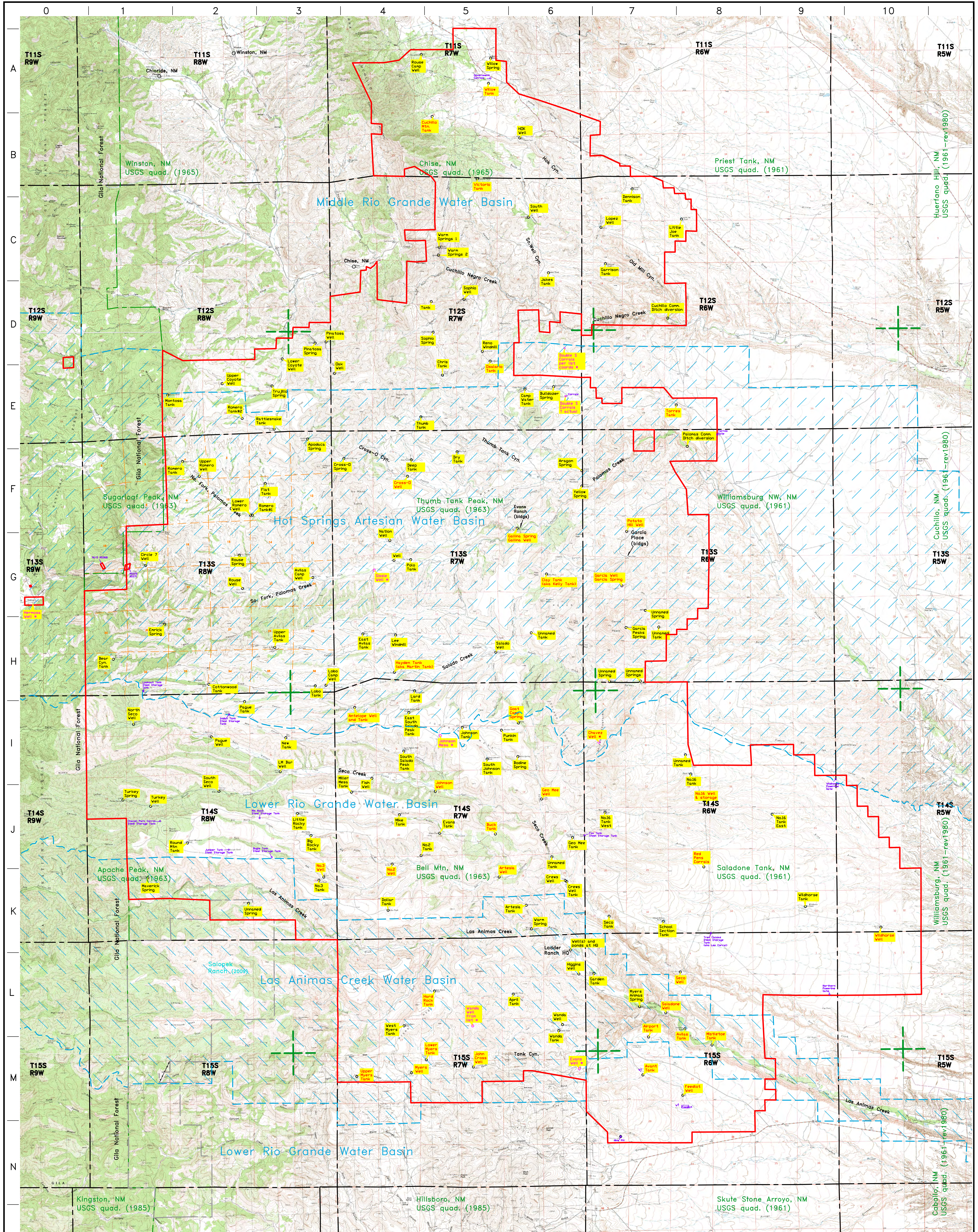








© Gary Nafis

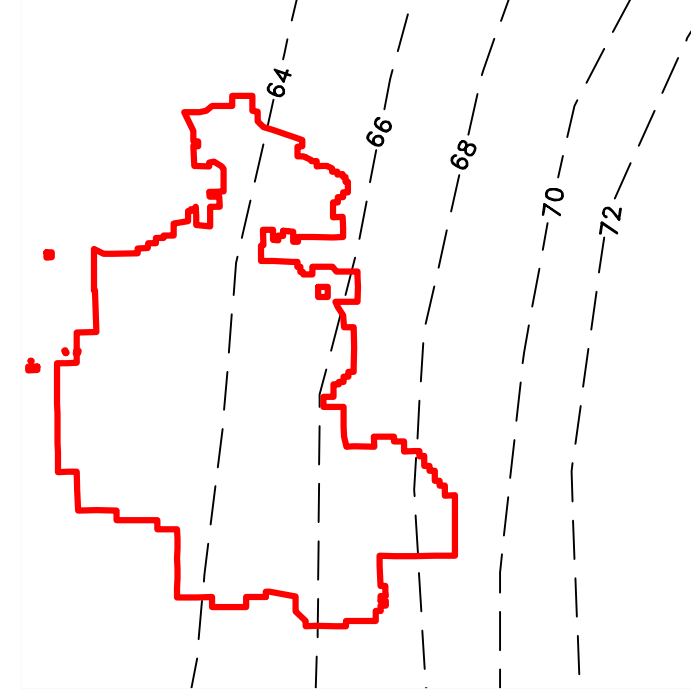
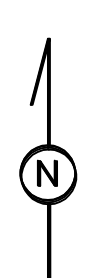


Scale: 1" = 1 mile

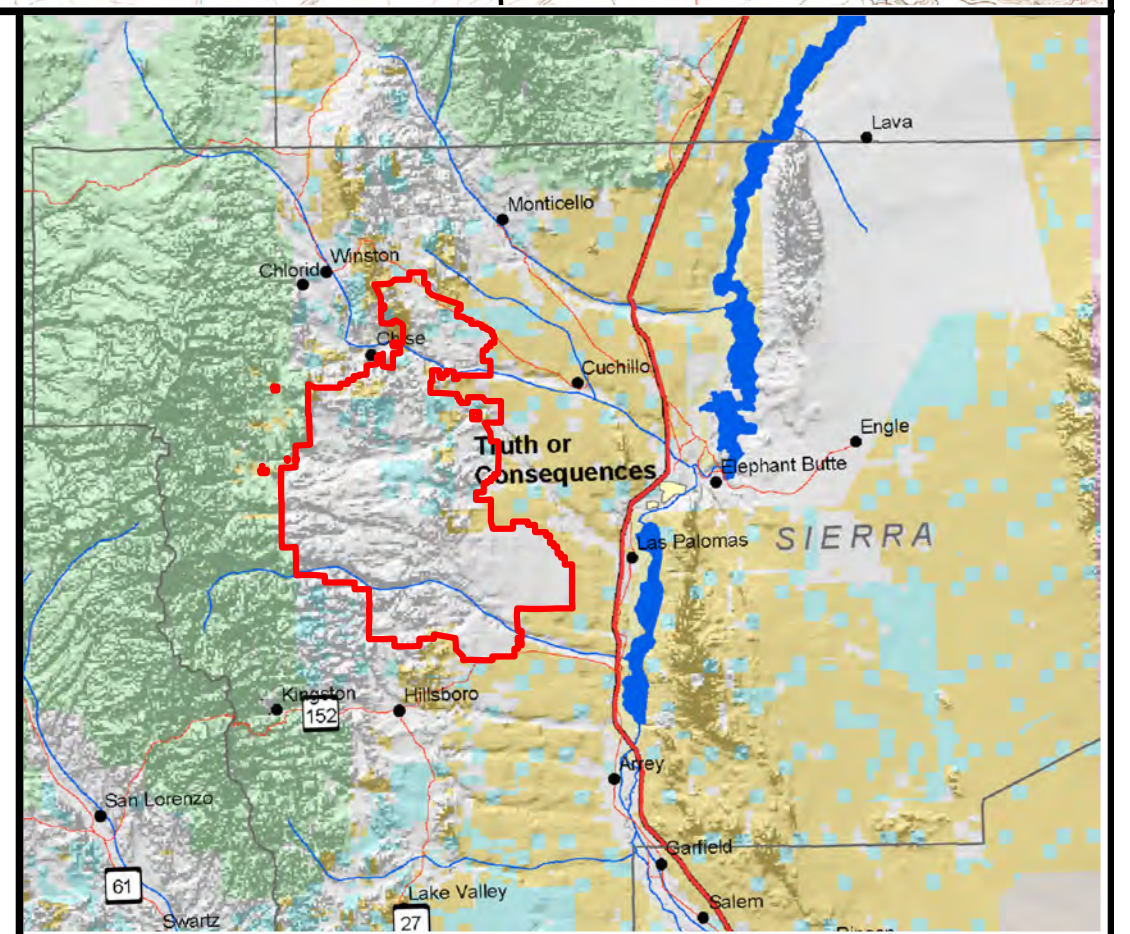
**Ladder Ranch / Sierra County, N.M.
Water Resources Map (preliminary, revised through Nov.27, 2009).**

- Notes:
- 1). Ranch gross boundary is from deed descriptions and owner-provided maps. Land use and ownership within the gross boundary are not shown.
 - 2). Water resource locations are from USGS maps, modern aerial photography, and owner-provided information. USGS map names and dates are given in graphic above. Wells constructed after USGS map dates may not be shown. Distribution systems from diversion points are not shown. This map is preliminary, and may not show existing water resources as of Sept.2009.
 - 3). Sections in T13S, R8W, NMPM are per 1981 BLM 1/100K map.
 - 4). Basin boundaries are per OSE maps dated July 2007.
 - 5). Refer to project spreadsheet dated 11/27/09, for compiled location data of water resources shown.
 - 6). Revisions include waters added, per owner-provided lists and maps, that were not previously identified.

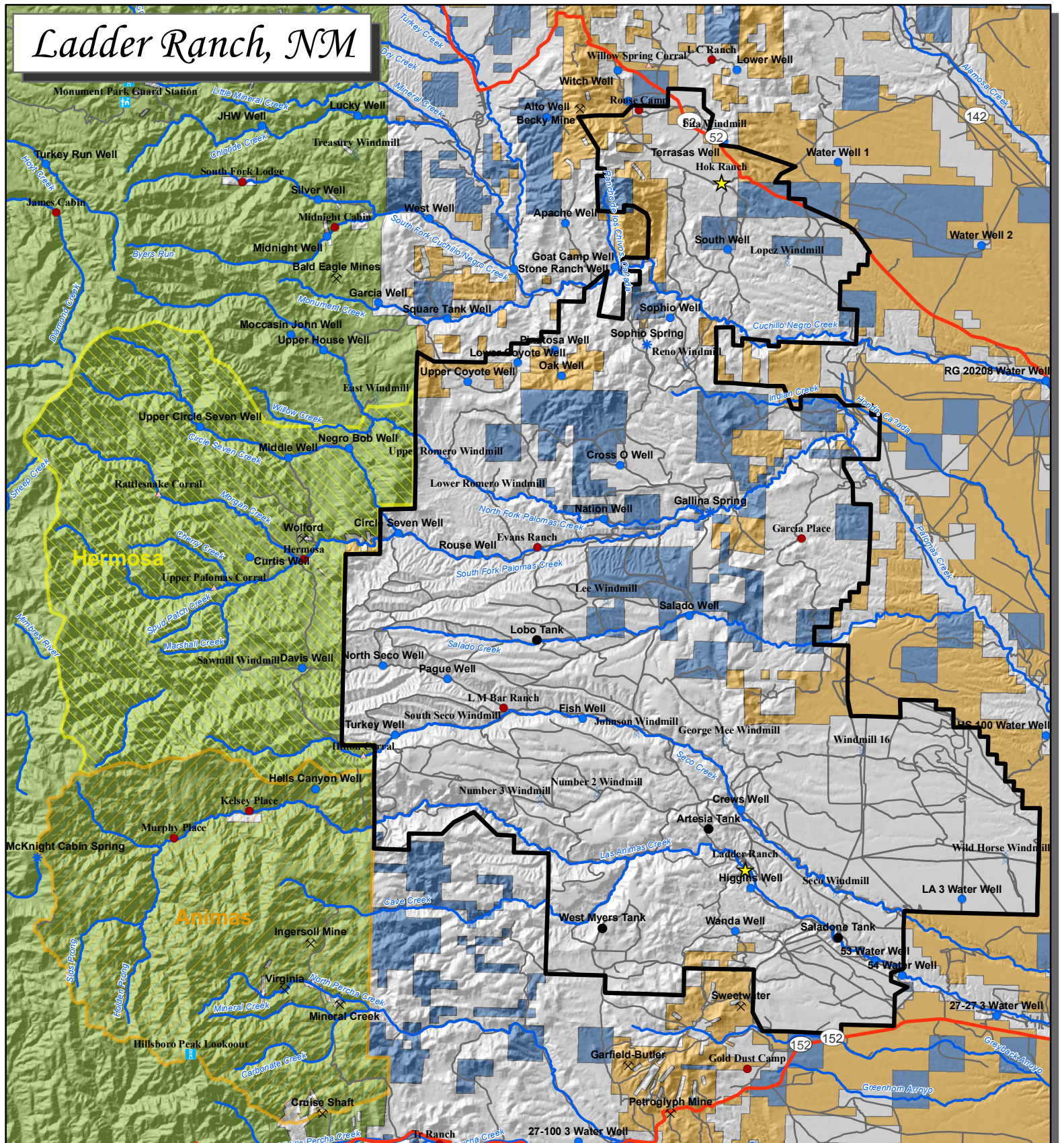
Legend	
	Ranch Boundary
	Section Lines
	Twp/Rng Lines
	Basin boundary
	Water resource
	Water resource added 11/25/09 per owner lists.
	Water resource revised 11/26/09 per owner map markup.



Graphic: Average Annual Evaporation from Shallow Reservoirs, in inches, 1946-1955 (from: Hale, Reiland and Beverage, 1965)
Average annual precipitation: 12.5" per Hillsboro, NM station.



Ladder Ranch, NM



Legend

- | | | | |
|------------|----------|---------------------|--------------------------------|
| ● Camp | ● Wells | — Major Road | NM Ownership 2012 |
| ▲ Corral | * Spring | — Steams and Rivers | □ Private |
| ★ HQ | ● Tank | — Roads | ■ State of New Mexico |
| 🏠 Lookout | ⊗ Mines | ▨ Animas Allotment | ■ US Bureau of Land Management |
| 🚰 Station | | ▨ Hermosa Allotment | ■ USDA Forest Service |
| ⊗ Windmill | | ▭ Ladder Ranch NM | |



Ladder Ranch NM



Mammal Species of the Ladder Ranch

SORICOMORPHA

Notiosorex crawfordi (Desert shrew)

CHIROPTERA

Vespertilionidae

Antrozous pallidus (Pallid bat)

Corynorhinus townsendii (Townsend's bat)

Eptesicus fuscus (Big brown bat)

Lasionycteris noctivagans (Silver-haired bat)

Lasiurus blossevillii (Western red bat)

Lasiurus cinereus (Hoary bat)

Myotis auriculus (Southwestern myotis)

Myotis californicus (California myotis)

Myotis ciliolabrum (Small-footed myotis)

Myotis evotis (Long-eared myotis)

Myotis occultus (Arizona myotis)

Myotis thysanodes (Fringed myotis)

Myotis volans (Long-legged myotis)

Myotis yumanensis (Yuma myotis)

Parastrellus hesperus (Canyon bat)

Mollosidae

Tadarida brasiliensis (Mexican free-tailed bat)

RODENTIA

Cricetidae

Neotoma albigula (White-throated woodrat)

Neotoma mexicana (Mexican woodrat)

Onychomys arenicola (Mearn's grasshopper mouse)

Onychomys leucogaster (Northern grasshopper mouse)

Onychomys torridus (Southern grasshopper mouse)

Peromyscus boylii (Brush mouse)

Peromyscus eremicus (Cactus mouse)

Peromyscus leucopus (White-footed mouse)

Peromyscus maniculatus (North American deer mouse)

Reithrodontomys megalotis (Western harvest mouse)

Sigmodon hispidus (Hispid cotton rat)

Geomyidae

Thomomys bottae (Bottae's pocket gopher)

Heteromyidae

Chaetodipus intermedius (Rock pocket mouse)

Dipodomys merriami (Merriam's kangaroo rat)

Dipodomys ordii (Ord's kangaroo rat)

Dipodomys spectabilis (Banner-tailed kangaroo rat)

Perognathus flavus (Silky pocket mouse)

Perognathus flavescens (Plains pocket mouse)

Sciuruidae

Otospermophilus variegatus (Rock squirrel)

Sciurus arizonensis (Arizona squirrel)*

Tamias dorsalis (Cliff chipmunk)

LAGOMORPHA

Leporidae

Lepus californicus (Black-tailed jackrabbit)

Sylvilagus audubonii (Desert cottontail)

CARNIVORA

Canidae

Canis latrans (Coyote)*

Urocyon cinereoargenteus (Gray fox)*

Felidae

Lynx rufus (Bobcat)*

Puma concolor (Mountain lion)*

Ursidae

Ursus americanus (Black bear)*

Mephitidae

Conepatus leuconotus (Hog-nosed skunk)*

Mephitis macroura (Hooded skunk)*

Mephitis mephitis (Striped skunk)*

Spilogale gracilis (Spotted skunk)*

Mustelidae

Taxidea taxus (American badger)*

Procyonidae

Bassariscus astutus (Ringtail)*

Nasua narica (White-nosed coati)*

Procyon lotor (Raccoon)*

ARTIODACTYLA

Antilocapridae

Antilocapra americana (Pronghorn)*

Cervidae

Cervus elaphus (Elk)*

Odocoileus hemionus (Mule deer)*

Tayassuidae

Pecari tajacu (Javelina)*

*Indicates some or all data has come from Dr. Travis Perry's camera traps

Table 2.

LADDER RANCH BIRD LIST (as of 3/15)											
SIERRA COUNTY NEW MEXICO											
	SUMMER	TRANSIENT	WINTER	Riparian	Desert	Mesa	Pinyon	Ponderosa	Mixed	Lake	
Species					Grassland	Grassland	Juniper	Oak	Conifer	Marsh	
Greater White-fronted Goose			R							X	
Snow Goose			O	X							
Canada Goose	U	C	C							X	
Wood Duck		O	O							X	
Gadwall		U	U							X	
American Wigeon		U	U							X	
Mallard		C	C	X						X	
Cinnamon Teal		O	O							X	
Northern Shoveler		U	U							X	
Green-winged Teal		C	C							X	
Canvasback		U	U							X	
Redhead		C	C							X	
Ring-necked Duck		C	A							X	
Lesser Scaup		U	U							X	
Bufflehead		C	C							X	
Hooded Merganser		U	U							X	
Common Merganser		O	O							X	
Red-breasted Merganser		R	R							X	
Ruddy Duck		U	U							X	
Pied-billed Grebe		O	O							X	
Eared Grebe		R	R							X	
Double-crested Cormorant		R	R							X	
Great Blue Heron	C	U	C	X						X	
Green Heron	O	O		X						X	
Black-crowned Night-Heron	O	O								X	
Turkey Vulture	C	C		X	X	X	X	X	X	X	
Osprey		O		X						X	
Bald Eagle		U	U	X						X	
Northern Harrier		U	C	X	X	X				X	
Sharp-shinned Hawk		U	U	X			X	X	X		
Cooper's Hawk	U	C	U	X			X	X	X		
Northern Goshawk	R	R	R					X	X		
Common Black-Hawk	U	O		X							
Swainson's Hawk	C	C			X	X					
Zone-tailed Hawk	U	U		X		X	X	X	X		
Red-tailed Hawk	C	A	A	X	X	X	X	X	X	X	
Ferruginous Hawk			O		X	X					
Golden Eagle	U	U	C		X	X	X				
American Kestrel	C	C	C	X	X	X	X	X		X	
Merlin		O	O	X	X	X	X				
Prairie Falcon	U	U	U		X	X	X				
Peregrine Falcon	O	O	O	X						X	
Wild Turkey	C		C	X			X	X			
Scaled Quail	C		C		X	X	X				
Gambel's Quail	A		A	X	X	X	X				
Montezuma Quail	O		O	X			X	X			
Sora			O	X							
Virginia Rail		O	R	X							
American Coot		C	C							X	
Sandhill Crane		O								X	
Killdeer	O	U	U	X							
Spotted Sandpiper		O		X						X	
Wilson's Snipe		R	U	X						X	
Band-tailed Pigeon	U			X				X	X		
Mourning Dove	A	A	A	X	X	X	X	X			
White-winged Dove	A	A	C	X	X	X	X				
Yellow-billed Cuckoo	C			X							
Greater Roadrunner	U		U		X	X	X				
Barn Owl	O	O	O	X	X	X					
Flammulated Owl	U							X	X		
Western Screech-Owl	C		C	X							
Great Horned Owl	U		U	X	X	X	X	X	X		
Northern Pygmy-Owl	U	R	R					X			
Elf Owl	C			X							
Burrowing Owl	U	U	U		X						
Mexican Spotted Owl	O		O	X				X	X		
Long-eared Owl		R	U	X							
Short-eared Owl		R	R		X	X					
Lesser Nighthawk	U	U			X						
Common Nighthawk	U	U		X	X	X	X				
Common Poorwill	C	U			X	X	X	X			
Whip-poor-will	U							X	X		

Table 2.

White-throated Swift	C	U		X	X	X				
Black-chinned Hummingbird	C	C		X			X			
Calliope Hummingbird		O		X			X	X		
Broad-tailed Hummingbird	C	C					X	X	X	
Rufous Hummingbird		C		X			X	X		
<i>Belted Kingfisher</i>	U	U	U	X						X
Acorn Woodpecker	U		U	X				X		
Williamson's Sapsucker		O	O				X	X	X	
Yellow-bellied Sapsucker			O	X						
Red-naped Sapsucker		U	C	X						
Ladder-backed Woodpecker	C		C	X	X		X			
Downy Woodpecker			O	X						
Hairy Woodpecker	U		U	X				X	X	
Northern Flicker	U	C	C	X			X	X	X	
Western Wood-Pewee	U	U		X				X	X	
Gray Flycatcher	U	U		X			X			
Dusky Flycatcher		U		X						
Willow Flycatcher		O		X						
Hammond's Flycatcher		U	R	X						
Cordilleran Flycatcher	U	U		X				X	X	
Black Phoebe	C		C	X						
Eastern Phoebe			O	X						
Say's Phoebe	C		C		X	X	X			
Olive-sided Flycatcher		U		X						
Vermilion Flycatcher	C	U		X						
Dusky-capped Flycatcher	U	U		X				X		
Ash-throated Flycatcher	C	C		X	X	X	X			
Brown-crested Flycatcher	C	U		X						
Cassin's Kingbird	C	C		X		X	X			
Western Kingbird	C	C			X	X				
Loggerhead Shrike	C		C		X					
Bell's Vireo	U	O		X						
Gray Vireo	O	R					X			
Plumbeous Vireo	C	C		X				X		
Cassin's Vireo		U		X						
Hutton's Vireo	U		U	X				X	X	
Warbling Vireo	C	C		X				X	X	
Steller's Jay	C		C	X				X	X	
Western Scrub-Jay	C		C	X			X			
Pinyon Jay	O	O	O				X			
American Crow		R	R	X						
Chihuahuan Raven	C	C	U		X					
Common Raven	C	C	C	X		X	X	X	X	
Horned Lark	C	C	A		X	X				
Tree Swallow		O		X						
Violet-green Swallow	C	C		X				X	X	
Northern Rough-winged Swallow	U	U		X						
Cliff Swallow	C	C		X		X				
Barn Swallow	C	C		X	X					
Mountain Chickadee	U		U	X				X	X	
Bridled Titmouse	C		C	X				X		
Juniper Titmouse	U		U				X			
Verdin	U		U	X	X					
Bushtit	U		U	X			X	X		
Pygmy Nuthatch	U		U					X	X	
Red-breasted Nuthatch			O	X				X	X	
White-breasted Nuthatch	U		U	X				X	X	
Brown Creeper			O	X				X	X	
Cactus Wren	C		C		X					
Rock Wren	C		C	X		X	X			
Canyon Wren	C		C	X						
Bewick's Wren	C		C	X	X	X	X			
House Wren		U		X						
Winter Wren			O	X						
Marsh Wren		O	O							X
Golden-crowned Kinglet	R		R						X	
Ruby-crowned Kinglet		C	C	X						
Blue-gray Gnatcatcher	U	U		X			X	X		
Black-tailed Gnatcatcher	U		U		X					
Eastern Bluebird			O	X						
Western Bluebird	C		C	X			X	X		
Mountain Bluebird	U		C			X	X	X		
Townsend's Solitaire	U	C					X	X	X	
Hermit Thrush	U	U	U	X				X	X	
American Robin	U	C	U	X				X	X	
Swainson's Thrush		R		X						

Table 2.

Northern Mockingbird	U	U	O	X	X	X	X			
Sage Thrasher		U	U	X	X	X	X			
Brown Thrasher			O	X						
Curve-billed Thrasher	C		C	X	X	X	X			
Crissal Thrasher	C		C	X	X		X			
American Pipit			O	X						X
Sprague's Pipit		O	O		X	X				
Cedar Waxwing		O	O	X						
Phainopepla	U	U	U	X						
European Starling			R	X						
Olive Warbler	O		R					X	X	
Orange-crowned Warbler	U	C		X				X	X	
Northern Parula		R		X						
Nashville Warbler		O		X						
Virginia's Warbler	C	U		X				X		
Lucy's Warbler	C	C		X						
Yellow Warbler	C	C		X						
Yellow-rumped Warbler	U	C	U	X				X	X	
Black-throated Gray Warbler	C	U		X			X	X		
Townsend's Warbler		U		X						
Black and White Warbler			R	X						
Northern Waterthrush		O		X						
Grace's Warbler	C	O						X		
American Redstart		R		X						
MacGillivray's Warbler		C		X						
Common Yellowthroat	U	U								X
Hooded Warbler		R		X						
Wilson's Warbler		C		X						
Painted Redstart	U	O						X		
Yellow-breasted Chat	C	U		X						
Hepatic Tanager	C	U						X		
Summer Tanager	C	C		X						
Western Tanager	C	C		X				X	X	
Green-tailed Towhee		U	C	X			X			
Spotted Towhee	C		C	X			X	X		
Canyon Towhee	A		A	X	X		X			
Cassin's Sparrow	U	O	O		X	X				
Rufous-crowned Sparrow	C		C		X	X				
Chipping Sparrow	O	C	A	X	X		X	X		
Clay-colored Sparrow		U			X					
Brewer's Sparrow		C	C		X					
Black-chinned Sparrow	U		U		X		X			
Vesper Sparrow		U	U		X					
Lark Sparrow	C	C	R		X	X	X			
Black-throated Sparrow	C		C		X					
Sage Sparrow		U	C		X					
Lark Bunting			U		X					
Savannah Sparrow		U	U		X					
Grasshopper Sparrow		O	O		X	X				
Baird's Sparrow		O	O		X	X				
Fox Sparrow		O	U	X						
Song Sparrow		C	C	X						
Lincoln's Sparrow		C	C	X						
White-throated Sparrow			O	X						
Harris' Sparrow			R	X						
White-crowned Sparrow		A	A	X	X		X			
Dark-eyed Junco	U	A	A	X	X		X	X	X	
McCown's Longspur		O	R		X	X				
Chestnut-collared Longspur		U	C		X	X				
Northern Cardinal		O		X						
Pyrrhuloxia		U	U	X	X					
Rose-breasted Grosbeak		O		X						
Black-headed Grosbeak	C	C		X			X	X		
Blue Grosbeak	C	C		X	X					
Lazuli Bunting	U	U		X						
Indigo Bunting	U	O		X						
Dickcissel		R		X	X					
Red-winged Blackbird	U	U	U							X
Eastern Meadowlark	C		C		X					
Western Meadowlark	C		C		X					
Yellow-headed Blackbird		U	R							X
Rusty Blackbird			R	X						
Brewer's Blackbird		U	U	X	X					
Bronzed Cowbird	R			X						
Brown-headed Cowbird	C	C		X	X		X	X		X
Hooded Oriole	U			X						
Bullock's Oriole	U	U		X						

Ladder Plant List Rough

Family	Genus	species	subspecies	variety
Agavaceae	Agave	parryi		
Agavaceae	Yucca	baccata		
Agavaceae	Yucca	elata		
Alliaceae	Allium	cernuum		
Alliaceae	Allium	macropetalum		
Amarantha	Amaranthus	palmeri		
Amarantha	Froelichia	arizonica		
Amarantha	Gomphrena	caespitosa		
Amarantha	Guilleminea	densa		aggregata
Amarantha	Guilleminea	densa		
Amarantha	Tidestromia	lanuginosa		
Amaryllida	Zepiranthes	longifolia		
Anacardiacae	Rhus	microphylla		
Anacardiacae	Rhus	trilobata		
Anacardiacae	Rhus	microphylla		
Anacardiacae	Rhus	trilobata		
Anacardiacae	Toxicodendron	rydbergii		
Apiaceae	Berula	erecta		
Asclepiadaceae	Asclepias	asperula	asperula	
Asclepiadaceae	Asclepias	asperula		
Asclepiadaceae	Asclepias	latifolia		
Asclepiadaceae	Asclepias	nummularia		
Asclepiadaceae	Asclepias	subverticillata		
Asclepiadaceae	Funastrum	cynanchoides		
Asteraceae	Achillea	millefolium		
Asteraceae	Acourtia	nana		
Asteraceae	Acourtia	wrightii		
Asteraceae	Aldama	cordifolia		
Asteraceae	Ambrosia	acanthicarpa		
Asteraceae	Ambrosia	monogyra		
Asteraceae	Ambrosia	psilostachya		
Asteraceae	Aphanostephus	ramosissimus		humilis
Asteraceae	Artemisia	campestris	caudata	
Asteraceae	Artemisia	campestris	pacifica	
Asteraceae	Artemisia	caruthii		
Asteraceae	Artemisia	dracunculus		
Asteraceae	Artemisia	filifolia		
Asteraceae	Artemisia	franserioides		
Asteraceae	Artemisia	ludoviciana		redolens
Asteraceae	Artemisia	ludoviciana		
Asteraceae	Baccharis	pteronioides		
Asteraceae	Baccharis	salicifolia		
Asteraceae	Baccharis	salicina		
Asteraceae	Bahia	absinthifolia		
Asteraceae	Baileya	multiradiata		
Asteraceae	Berlandiera	lyrata		

Ladder Plant List Rough

Asteraceae Bidens	bipinnata	
Asteraceae Brickellia	brachyphylla	
Asteraceae Brickellia	californica	
Asteraceae Brickellia	laciniata	
Asteraceae Chaetopappa	ericoides	
Asteraceae Cirsium	neomexicanum	
Asteraceae Cirsium	ochrocentrum	
Asteraceae Conyza	canadensis	
Asteraceae Dieteria	asteroides	asteroides
Asteraceae Dieteria	asteroides	glandulosa
Asteraceae Dyssodia	papposa	
Asteraceae Eclipta	prostrata	
Asteraceae Ericameria	nauseosa	
Asteraceae Erigeron	divergens	
Asteraceae Erigeron	neomexicanus	
Asteraceae Erigeron	oreophilus	
Asteraceae Erigeron	tracyi	
Asteraceae Flourensia	cernua	
Asteraceae Gaillardia	pinnatifida	
Asteraceae Grindelia	squarrosa	
Asteraceae Gutierrezia	microcephala	
Asteraceae Gutierrezia	sarothrae	
Asteraceae Gutierrezia	sphaerocephala	
Asteraceae Gutierrezia	wrightii	
Asteraceae Gymnosperma	glutinosum	
Asteraceae Helianthus	annuus	
Asteraceae Helianthus	ciliaris	
Asteraceae Heliomeris	longifolia	annua
Asteraceae Heliomeris	multiflora	
Asteraceae Heterosperma	pinnatum	
Asteraceae Hymenopappus	filifolius	polycephalus
Asteraceae Hymenopappus	filifolius	
Asteraceae Hymenopappus	flavescens	
Asteraceae Hymenopappus	flavescens	canotomentosus
Asteraceae Hymenoxys	brachyactis	
Asteraceae Hymenoxys	odorata	
Asteraceae Lactuca	sativa	
Asteraceae Lactuca	serriola	
Asteraceae Laennecia	coulteri	
Asteraceae Leuciva	dealbata	
Asteraceae Machaeranthera	tanacetifolia	
Asteraceae Malacothrix	fendleri	
Asteraceae Melampodium	leucanthum	
Asteraceae Packeria	neomexicana	neomexicana
Asteraceae Parthenium	confertum	lyratum
Asteraceae Parthenium	incanum	
Asteraceae Pectis	angustifolia	

Ladder Plant List Rough

Asteraceae	Pseudognaphalium	canescens	
Asteraceae	Psilostrophe	tagetina	
Asteraceae	Sanvitalia	abertii	
Asteraceae	Senecio	flaccidus	flaccidus
Asteraceae	Solidago	altissima	gilvocanescens
Asteraceae	Solidago	wrightii	wrightii
Asteraceae	Solidago	wrightii	
Asteraceae	Sonchus	asper	
Asteraceae	Stephanomeria	pauciflora	
Asteraceae	Stephanomeria	tenuifolia	
Asteraceae	Stephanomeria	thurberi	
Asteraceae	Stevia	micrantha	
Asteraceae	Symphotrichum	ascendens	
Asteraceae	Symphotrichum	lanceolatum	hesperium
Asteraceae	Symphotrichum	subulatum	parviflorum
Asteraceae	Symphotrichum	subulatum	
Asteraceae	Tetranuris	argentea	
Asteraceae	Thelesperma	longipes	
Asteraceae	Thelesperma	megapotamicum	
Asteraceae	Thymophylla	acerosa	
Asteraceae	Thymophylla	pentachaeta	belenidium
Asteraceae	Townsendia	annua	
Asteraceae	Tragopogon	dubius	
Asteraceae	Trixis	californica	
Asteraceae	Verbesina	encelioides	encelioides
Asteraceae	Verbesina	encelioides	
Asteraceae	Viguiera	dentata	
Asteraceae	Xanthisma	spinulosum	chihuahuanum
Asteraceae	Xanthisma	spinulosum	
Asteraceae	Xanthium	spinosum	
Asteraceae	Xanthium	strumarium	
Asteraceae	Zinnia	grandiflora	
Betulaceae	Alnus	oblongifolia	
Bignoniaceae	Chilopsis	linearis	linearis
Boraginaceae	Cryptantha	cinerea	cinera
Boraginaceae	Cryptantha	cinerea	
Boraginaceae	Cryptantha	crassisepala	elachantha
Boraginaceae	Cryptantha	crassisepala	
Boraginaceae	Lappula	occidentalis	cupulata
Boraginaceae	Lappula	occidentalis	
Boraginaceae	Lithospermum	cobrense	
Boraginaceae	Tiquilia	canescens	
Brassicaceae	Boechera	perennans	
Brassicaceae	Descurainia	adenophora	
Brassicaceae	Descurainia	obtusa	
Brassicaceae	Descurainia	pinnata	ochroleuca
Brassicaceae	Descurainia	pinnata	

Ladder Plant List Rough

Brassicaceae	Descurainia	sophia	
Brassicaceae	Erysimum	capitatum	capitatum
Brassicaceae	Erysimum	capitatum	
Brassicaceae	Erysimum	repandum	
Brassicaceae	Halimolobos	diffusa	
Brassicaceae	Hesperidanthus	linearifolius	
Brassicaceae	Lepidium	alyssoides	
Brassicaceae	Lepidium	densiflorum	
Brassicaceae	Nasturtium	officinale	
Brassicaceae	Physaria	fendleri	
Brassicaceae	Physaria	gooddingii	
Brassicaceae	Physaria	gordonii	
Brassicaceae	Streptanthus	carinatus	arizonicus
Cactaceae	Coryphantha	vivipara	
Cactaceae	Cylindropuntia	imbricata	
Cactaceae	Cylindropuntia	leptocaulis	
Cactaceae	Echinocereus	coccinius	
Cactaceae	Echinocereus	fendleri	
Cactaceae	Mammillaria	heyderi	
Cactaceae	Opuntia	chlorotica	
Cactaceae	Opuntia	engelmannii	
Cactaceae	Opuntia	macrocentra	
Cactaceae	Opuntia	phaeacantha	
Cactaceae	Opuntia	polyacantha	
Campanula	Lobelia	cardinalis	
Cannabace	Celtis	reticulata	
Caryophylli	Silene	laciniata	gregii
Chenopodi	Atriplex	canescens	
Chenopodi	Chenopodium	desiccatum	leptophylloides
Chenopodi	Chenopodium	incanum	
Chenopodi	Chenopodium	leptophyllum	
Chenopodi	Chenopodium	neomexicanum	
Chenopodi	Chenopodium	sp.	
Chenopodi	Chenopodium	watsonii	
Chenopodi	Dysphania	graveolens	
Chenopodi	Krascheninnikovia	lanata	
Chenopodi	Salsola	tragus	
Cleomaceae	Polanisia	dodecandra	trachysperma
Convolvula	Convolvulus	arvensis	
Convolvula	Convolvulus	equitans	
Convolvula	Cuscuta	umbellata	
Convolvula	Evolvulus	nuttallianus	
Convolvula	Evolvulus	sericeus	sericeus
Convolvula	Evolvulus	sericeus	
Convolvula	Ipomoea	costellata	
Convolvula	Ipomoea	cristulata	
Convolvula	Ipomoea	purpurea	

Ladder Plant List Rough

Cucurbitac	Cucurbita	foetidissima	
Cupressace	Juniperus	deppeana	
Cupressace	Juniperus	monosperma	
Cyperaceae	Carex	hystericina	
Cyperaceae	Carex	thurberi	
Cyperaceae	Cyperus	esculentus	
Cyperaceae	Eleocharis	parishii	
Cyperaceae	Schoenoplectus	tabernaemontani	
Cyperaceae	Scirpus	microcarpus	
Ephedrace	Ephedra	trifurca	
Equisetace	Equisetum	laevigatum	
Euphorbiac	Chamaesyce	albomarginata	
Euphorbiac	Chamaesyce	fendleri	chaetocalyx
Euphorbiac	Chamaesyce	missurica	
Euphorbiac	Chamaesyce	serpyllifolia	
Euphorbiac	Croton	dioicus	
Euphorbiac	Croton	pottsii	
Euphorbiac	Ditaxis	neomexicana	
Euphorbiac	Euphorbia	bilobata	
Euphorbiac	Euphorbia	davidii	
Euphorbiac	Tragia	amblyodonta	
Euphorbiac	Tragia	ramosa	
Fabaceae	Acaciella	angustissima	texensis
Fabaceae	Acaciella	angustissima	
Fabaceae	Amorpha	fruticosa	
Fabaceae	Astragalus	allochrous	allochrous
Fabaceae	Astragalus	allochrous	playanus
Fabaceae	Astragalus	missouriensis	mimetes
Fabaceae	Astragalus	mollissimus	bigelovii
Fabaceae	Astragalus	mollissimus	mollissimus
Fabaceae	Astragalus	mollissimus	
Fabaceae	Astragalus	tephrodes	tephrodes
Fabaceae	Caesalpinia	gilliesii	
Fabaceae	Calliandra	eriophylla	
Fabaceae	Dalea	candida	
Fabaceae	Dalea	formosa	
Fabaceae	Dalea	jamesii	
Fabaceae	Dalea	lachnostachya	
Fabaceae	Dalea	neomexicana	
Fabaceae	Dalea	pagonathera	
Fabaceae	Dalea	albiflora	
Fabaceae	Hoffmannseggia	drepanocarpa	
Fabaceae	Hoffmannseggia	glauca	
Fabaceae	Lotus	wrightii	
Fabaceae	Lupinus	brevicaulis	
Fabaceae	Medicago	lupulina	
Fabaceae	Melilotus	albus	

Ladder Plant List Rough

Fabaceae	Phaseolus	acutifolius	
Fabaceae	Prosopis	glandulosa	
Fabaceae	Psoralidium	tenuiflorum	
Fabaceae	Senna	bauhinioides	
Fabaceae	Sophora	nuttalliana	
Fabaceae	Vachellia	constricta	
Fabaceae	Vachellia	vernica	
Fabaceae	Vicia	ludoviciana	
Fabaceae	Dalea	formosa	
Fagaceae	Quercus	gambelii	
Fagaceae	Quercus	grisea	
Fagaceae	Quercus	turbinella	
Fagaceae	Quercus	undulata	
Fouquieria	Fouquieria	splendens	
Fumariaceae	Corydalis	aurea	occidentalis
Garryaceae	Garrya	wrightii	
Geraniaceae	Geranium	caespitosum	
Hydrangea	Fendlera	rupicola	
Hydrangea	Philadelphus	microphyllus	
Hydrophyll	Nama	hispidum	
Hydrophyll	Phacelia	integrifolia	integrifolia
Hydrophyll	Phacelia	integrifolia	
Juglandaceae	Juglans	major	
Juncaceae	Juncus	arcticus	balticus
Juncaceae	Juncus	arcticus	mexicanus
Juncaceae	Juncus	bufonius	
Juncaceae	Juncus	confusus	
Juncaceae	Juncus	ensifolius	montanus
Juncaceae	Juncus	filiformis	
Juncaceae	Juncus	interior	
Juncaceae	Juncus	intermedia	
Juncaceae	Juncus	torreyi	
Lamiaceae	Agastache	pallidiflora	
Lamiaceae	Hedeoma	nana	nana
Lamiaceae	Hedeoma	nana	
Lamiaceae	Marrubium	vulgare	
Lamiaceae	Mentha	spicata	
Lamiaceae	Monarda	citriodora	austromontana
Lamiaceae	Monarda	pectinata	
Lamiaceae	Salvia	henryi	
Lamiaceae	Salvia	subincisa	
Lamiaceae	Teucrium	laciniatum	
Linaceae	Linum	lewisii	
Linaceae	Linum	neomexicanum	
Linaceae	Linum	puberulum	
Linaceae	Linum	vernale	
Loasaceae	Cevallia	sinuata	

Ladder Plant List Rough

Loasaceae	Mentzelia	albicaulis	
Loasaceae	Mentzelia	multiflora	
Lythraceae	Lythrum	californicum	
Malvaceae	Anoda	cristata	
Malvaceae	Sida	abutilifolia	
Malvaceae	Sida	neomexicana	
Malvaceae	Sphaeralcia	angustifolia	
Malvaceae	Sphaeralcia	digitata	digitata
Malvaceae	Sphaeralcia	digitata	
Malvaceae	Sphaeralcia	fendleri	
Malvaceae	Sphaeralcia	grossulariifolia	
Malvaceae	Sphaeralcia	hastulata	
Malvaceae	Sphaeralcia	incana	
Malvaceae	Sphaeralcia	laxa	
Malvaceae	Sphaeralcia	polychroma	
Malvaceae	Sphaeralcia	procera	
Nolinaceae	Dasyilirion	wheeleri	
Nolinaceae	Nolina	sp.	
Nyctaginac	Acleisanthes	chenopodioides	
Nyctaginac	Allionia	choisyi	
Nyctaginac	Allionia	incarnata	
Nyctaginac	Boerhavia	coccinea	
Nyctaginac	Boerhavia	erecta	
Nyctaginac	Boerhavia	torreyana	
Nyctaginac	Boerhavia	triquetra	
Nyctaginac	Boerhavia	wrightii	
Nyctaginac	Cyphomeris	gypsophiloides	
Nyctaginac	Mirabilis	albida	
Nyctaginac	Mirabilis	coccinea	
Nyctaginac	Mirabilis	linearis	linearis
Nyctaginac	Mirabilis	linearis	
Nyctaginac	Mirabilis	longiflora	
Nyctaginac	Mirabilis	multiflora	multiflora
Oleaceae	Fraxinus	velutina	
Oleaceae	Menodora	scabra	
Onagraceae	Epilobium	ciliatum	
Onagraceae	Oenothera	albicaulis	
Onagraceae	Oenothera	berlandieri	
Onagraceae	Oenothera	brachycarpa	
Onagraceae	Oenothera	caespitosa	
Onagraceae	Oenothera	curtiflora	
Onagraceae	Oenothera	elata	hirsutissima
Onagraceae	Oenothera	flava	flava
Onagraceae	Oenothera	hartwegii	fendleri
Onagraceae	Oenothera	hartwegii	pubescens
Onagraceae	Oenothera	hexandra	gracilis
Onagraceae	Oenothera	pallida	trichocalyx

Ladder Plant List Rough

Onagraceae	Oenothera	pubescens	
Onagraceae	Oenothera	suffrutescens	
Orchidaceae	Epipactis	gigantea	
Orobancha	Castilleja	intergra	
Orobancha	Castilleja	linariifolia	
Orobancha	Castilleja	sessiliflora	
Papaveraceae	Argemone	pleiacantha	
Pedaliaceae	Proboscidea	parviflora	
Pinaceae	Pinus	edulis	edulis
Pinaceae	Pinus	scopulorum	
Plantaginaceae	Maurandya	antirrhiniflora	
Plantaginaceae	Mimulus	geyeri	
Plantaginaceae	Mimulus	guttatus	
Plantaginaceae	Penstemon	barbatus	torreyi
Plantaginaceae	Penstemon	eatonii	eatonii
Plantaginaceae	Penstemon	fendleri	
Plantaginaceae	Penstemon	linarioides	linarioides
Plantaginaceae	Penstemon	rydbergii	
Plantaginaceae	Plantago	major	
Plantaginaceae	Plantago	patagonica	
Plantaginaceae	Veronica	americana	
Plantaginaceae	Veronica	anagallis-aquatica	
Plantaginaceae	Veronica	peregrina	xalapensis
Platanaceae	Platanus	wrightii	
Poaceae	Agrostis	exarata	
Poaceae	Agrostis	scabra	
Poaceae	Agrostis	stolonifera	
Poaceae	Aristida	adscensionis	
Poaceae	Aristida	arizonica	
Poaceae	Aristida	purpurea	nealleyi
Poaceae	Aristida	purpurea	purpurea
Poaceae	Aristida	purpurea	
Poaceae	Aristida	ternipes	ternipes
Poaceae	Bothriochloa	barbinodes	
Poaceae	Bothriochloa	laguroides	
Poaceae	Bothriochloa	springfieldii	
Poaceae	Bouteloua	aristidoides	
Poaceae	Bouteloua	barbata	
Poaceae	Bouteloua	curtipendula	
Poaceae	Bouteloua	eriopoda	
Poaceae	Bouteloua	gracilis	
Poaceae	Bouteloua	hirsuta	
Poaceae	Bromus	carinatus	
Poaceae	Bromus	catharticus	
Poaceae	Bromus	inermis	
Poaceae	Chloris	virgata	
Poaceae	Cynodon	dactylon	

Ladder Plant List Rough

Poaceae	Dasyochloa	pulchella	
Poaceae	Echinochloa	crus-galli	
Poaceae	Echinochloa	muricata	macrostachya
Poaceae	Echinochloa	muricata	muricata
Poaceae	Elymus	elymoides	
Poaceae	Elymus	longifolius	
Poaceae	Elymus	smithii	
Poaceae	Eragrostis	barrelieri	
Poaceae	Eragrostis	cilianensis	
Poaceae	Eragrostis	erosa	
Poaceae	Eragrostis	intermedia	
Poaceae	Eragrostis	lehmanniana	
Poaceae	Eragrostis	mexicana	
Poaceae	Eragrostis	pectinaceae	miserrima
Poaceae	Eragrostis	pectinaceae	
Poaceae	Festuca	arundinaceae	
Poaceae	Hesperostipa	comata	
Poaceae	Hesperostipa	neomexicana	
Poaceae	Hopia	obtusa	
Poaceae	Hordeum	jubatum	
Poaceae	Koeleria	macrantha	
Poaceae	Leptochloa	dubia	
Poaceae	Lycurus	setosus	
Poaceae	Muhlenbergia	emersleyi	
Poaceae	Muhlenbergia	longiligula	
Poaceae	Muhlenbergia	metcalfei	
Poaceae	Muhlenbergia	pauciflora	
Poaceae	Muhlenbergia	polycaulis	
Poaceae	Muhlenbergia	porteri	
Poaceae	Muhlenbergia	repens	
Poaceae	Muhlenbergia	sinuosa	
Poaceae	Muhlenbergia	sp.	
Poaceae	Muhlenbergia	torreyi	
Poaceae	Muhlenbergia	wrightii	
Poaceae	Munroa	squarrosa	
Poaceae	Panicum	capillare	
Poaceae	Panicum	virgatum	
Poaceae	Paspalum	distichum	
Poaceae	Pleuraphis	mutica	
Poaceae	Poa	arida	
Poaceae	Poa	fendleriana	fendleriana
Poaceae	Poa	pratensis	
Poaceae	Polypogon	interruptus	
Poaceae	Polypogon	monspeliensis	
Poaceae	Polypogon	viridis	
Poaceae	Scleropogon	brevifolius	
Poaceae	Setaria	grisebachii	

Ladder Plant List Rough

Poaceae	Setaria	leucopila	
Poaceae	Sorghum	bicolor	bicolor
Poaceae	Sorghum	halepense	
Poaceae	Sporobolus	airoides	
Poaceae	Sporobolus	contractus	
Poaceae	Sporobolus	cryptandrus	
Poaceae	Sporobolus	giganteus	
Poaceae	Tragus	berteronianus	
Poaceae	Triticum	aestivum	
Poaceae	Urochloa	arizonica	
Poaceae	Vulpia	octoflora	
Polemonia	Eriastrum	diffusum	
Polemonia	Gilia	mexicana	
Polemonia	Ipomopsis	aggregata	formosissima
Polemonia	Ipomopsis	longiflora	
Polemonia	Ipomopsis	multiflora	
Polemonia	Phlox	nana	
Polemonia	Phlox	triovulata	
Polygalaceae	Polygala	alba	
Polygonaceae	Eriogonum	abertianum	
Polygonaceae	Eriogonum	effusum	
Polygonaceae	Eriogonum	jamesii	jamesii
Polygonaceae	Eriogonum	jamesii	
Polygonaceae	Eriogonum	polycladon	
Polygonaceae	Eriogonum	rotundifolium	
Polygonaceae	Eriogonum	wrightii	wrightii
Polygonaceae	Persicaria	lapathifolia	
Polygonaceae	Polygonum	aviculare	
Polygonaceae	Rumex	crispus	
Polygonaceae	Rumex	hymenosepalus	
Polygonaceae	Rumex	pulcher	
Portulacaceae	Portulaca	oleracea	
Portulacaceae	Portulaca	suffrutescens	
Portulacaceae	Talinum	aurantiacum	
Portulacaceae	Talinum	polygaloides	
Primulaceae	Androsace	occidentalis	
Pteridaceae	Bommeria	hispida	
Pteridaceae	Cheilanthes	feei	
Pteridaceae	Cheilanthes	villosa	
Pteridaceae	Notholaena	grayi	
Pteridaceae	Notholaena	standleyi	
Ranunculaeae	Clematis	ligusticifolia	
Ranunculaeae	Ranunculus	scleratus	
Rosaceae	Cercocarpus	breviflorus	breviflorus
Rosaceae	Cercocarpus	montanus	
Rosaceae	Fallugia	paradoxa	
Rosaceae	Prunus	serotina	virens

Ladder Plant List Rough

Rubiaceae	Galium	microphyllum	
Rubiaceae	Houstonia	rubra	
Rutaceae	Thamnosma	texana	
Salicaceae	Populus	angustifolia	
Salicaceae	Populus	deltoides	wislizeni
Salicaceae	Salix	exigua	
Salicaceae	Salix	gooddingii	
Salicaceae	Salix	lasiolepis	
Santalaceae	Phoradendron	coryae	
Santalaceae	Phoradendron	juniperinum	
Sapindaceae	Acer	negundo	
Sapindaceae	Sapindus	drummondii	
Scrophular	Verbascum	thapsus	
Simarouba	Ailanthus	altissima	
Solanaceae	Calibrachoa	parviflora	
Solanaceae	Chamaesaracha	coniodes	
Solanaceae	Chamaesaracha	sordida	
Solanaceae	Datura	quercifolia	
Solanaceae	Datura	wrightii	
Solanaceae	Lycium	berlandieri	
Solanaceae	Lycium	pallidum	
Solanaceae	Nicotiana	obtusifolia	
Solanaceae	Physalis	foetens	neomexicana
Solanaceae	Physalis	hederifolia	fendleri
Solanaceae	Physalis	solanacea	
Solanaceae	Solanum	douglasii	
Solanaceae	Solanum	elaeagnifolium	
Solanaceae	Solanum	heterodoxum	setigeroides
Solanaceae	Solanum	rostratum	
Tamaricaceae	Tamarix	chinensis	
Typhaceae	Typha	latifolia	
Ulmaceae	Ulmus	pumila	
Urticaceae	Urtica	gracilentata	
Verbenaceae	Aloysia	wrightii	
Verbenaceae	Glandularia	bipinnatifida	
Verbenaceae	Verbena	bracteata	
Vitaceae	Vitis	arizonica	
Zygophylla	Kallstroemia	parviflora	
Zygophylla	Larrea	tridentata	
Zygophylla	Tribulus	terrestris	