Appendix 6: 2004 Conservation Quality Assessment (CQA)

Habitat Assessment

As a part of the Chatfield Basin study, the participants took another step forward in gap analysis. The biological planning team decided that one of the best ways to determine what was important from a wildlife and habitat standpoint was to assess the important habitat and connectivity issues for lands that were unprotected within the Chatfield Basin study area. To this end, the team wrote an assessment form and conducted a 'Bio-Blitz' to uniformly assess some of the unprotected lands. The team established four assessment teams, and split up to assess different portions of the basin. A sample of the results of the Bio-Blitz are recorded in Table 4, pg 75. Full version on website at https://www.douglas.co.us. The biological planning team discussed the best ways to evaluate the habitat quality of unprotected lands. One method considered revolved around assessing properties for important individual species. The team rejected this idea because of its difficulty of implementation. It would require people with expert knowledge of different species. In many cases it would require long periods of observation or trapping to determine the presence or absence of individual species, and in many cases, absence could not be confirmed.

The team selected habitat assessment as the method of choice in determining habitat quality. The philosophy was that if habitat and connections were present, most likely, wildlife would be present as well. If wildlife was not present, land with good habitat and connections could be re-inhabited by populations moving from other areas or transplant efforts. Habitat assessment also lends itself more to ecosystem management. As habitat requirements vary from species to species, assessing the number of plant community types and their quality would give more of an ecosystem quality rating than would a species by species presence or absence survey.

To this end, the team wrote a habitat assessment questionnaire. The questionnaire focused on plant community type, general quality of the plant communities on a site, weed infestation, disturbance factors affecting wildlife usage of the site, and the site's potential as a movement corridor, stepping stone, or buffer area. A copy of the questionnaire is provided in Exhibit 7.1. The questionnaire ranked most issues on an evenly weighted ten-point scale. Based on this rating system, each parcel of land assessed would be given a numerical score; the higher the score, the higher is any given parcel's current value to wildlife. Data collected from this questionnaire is recorded in Table 4 in part and on website.

The most logical uses for this data are as follows. These unmodified scores could be used as a general ranking system that could aid in land use decisions.

Development could be planned away from parcels with higher habitat values, and those higher scoring parcels could be prioritized for protection as part of a regional wildlife habitat and corridor plan. This evaluation system could be used in multiple locations on larger parcels under consideration for development in an effort to identify higher quality portions and to steer development toward the parts that are less significant from a habitat standpoint. The scores could be manipulated to weight for key factors of importance. For example, as part of a regional wildlife plan, local land use planners may try to ensure there is a complete and protected wildlife movement corridor system connecting core habitat areas. From the evaluated lands inventory, planners could select for consideration only parcels that scored high under the corridor potential category. They could then further refine their search by ensuring that the selected parcels were within targeted areas, and could use the other ranking factors to prioritize the parcels in importance to wildlife movement based on their current quality, a plant community type that is lacking in other areas or their potential for restoration. Different needs would suggest evaluated criteria be weighted or considered in different ways. The raw scores and ancillary data collected are conducive to this type of evaluation.

The Bio-Blitz was successful in that it evaluated many unprotected, individual parcels of land within the Chatfield Basin. It would be helpful to do additional evaluations or Bio-Blitzes on all lands within the Chatfield Basin and to construct a database of information gathered. This would be extremely helpful in continued habitat and corridor planning, development planning, and could provide useful information to Comprehensive Master Plan updates. A database would facilitate quick evaluations of development by either developers or planners. Either group could look at the database and get an immediate sense of which portions of a development parcel are better habitat and could plan accordingly. Without such a database, it could take weeks to schedule professional people to conduct evaluations, and there might be expense if private consultants have to be hired. In addition, any evaluation given would be considered on its own merits, and could not be compared to neighboring lands that were evaluated with the same methods.

Habitat Assessment Questionnaire
Exhibit 7.1

EVALUATION CRITERIA:

I. HABITAT TYPES—Chatfield Basin

Coniferous Forest: (Dominated by listed species, may include others. If others are significant, list subsequent species & % composition.)

1. Ponderosa Pine Forest (w/ Douglas Fir, Colorado Blue Spruce, Shrubs)
2. Douglas Fir Forest (w/ Ponderosa, Colorado Blue Spruce, Shrubs)

Grasslands:

3. Shortgrass Prairie (rare)(Dominated by Buffalo grass w/Blue & Sideoats Grama,)
4. Midgrass Prairie (Wheat grasses, Bluestems, Gramas, Switch, Indian, etc.)
5. Tallgrass Areas (rare) (Dominated by Switch, Big Bluestem, Yellow Indian grass, Possibly Prairie Cord grass, Prairie Sand reed)
6. Mixed Grasses of Disturbed Areas (Includes many non-natives: Smooth Brome, Intermediate-Pubescent-Crested Wheatgrass, Barnyard Grass, Fescue, etc.)

Shrublands: (Dominated by one species, but may be significantly mixed w/ others.
If mixed, list subsequent species & % composition.)

7. Scrub Oak
8. Mountain Mahogany
9. Rabbitbrush
10. Other shrubland:
    a. Snowberry
    b. Native Plum
    c. Three-Leaf Sumac
    d. Chokecherry
    e. Hawthorne/Buffaloberry

Riparian:

11. Riparian Lowland (Cottonwood/Willow)
12. Riparian transition (Alder/Rocky Mountain Maple/Aspen/Willow can be mixed with high percent of Cottonwood)

Aquatic:

13. Marsh/Bog/Wet Hummock (Cattail/Bulrush)
14. Wet Meadow (Sedge, Rush, Wetland Grass)
15. Wet Open Ground (rare) (Gravel Beds, Alkali/Mud Flats)
16. Open Water – Streams/Rivers (rare)
17. Open Water – Lakes/Reservoirs/Ponds (rare)

Miscellaneous:

18. Agriculture (Orchards, Tree Farms, Shelter Belts, Dwellings, Barns)

19. Cropland (Annual Crops—e.g.: wheat, oats, barley)
20. Hay/Alfalfa (Alfalfa/Timothy/Grass or combination)
21. Developed (1 unit/5 acres to 1 unit/10 Acres)
22. Urban/Residential (1 unit/2.5 acres or denser, Highway)
23. Other (Cliffs, Steep Banks, Talus Slopes, Caves, Bridges)

II. NATIVE/INTRODUCED VEGETATION

80-100% Native	**10**
50-79% Native	**7**
25-50% Native	**4**
0-25% Native	**2**

Non-native Gaminoids present are beneficial or ≥95% Native **+1**
(Count intermediate & pubescent wheat grasses/Exclude smooth brome & crested wheatgrass)

Non-native forbs present are beneficial (e.g.: leguminous such as vetches & alfalfa) or ≥95% Native **+1**

3 or more species of native grass decreasers or species generally beneficial to wildlife (looking for diversity of beneficial natives) **+1**
(e.g. Decreasers: switch, bluestems, Indiangrass, Indian ricegrass, green needlegrass, slender wheatgrass// Beneficial Increasers: gramas, buffalograss, other wheatgrasses)

3 or more species of non-weedy native forbs (looking for diversity of beneficial natives) **+1**

Detrimental non-native woody plants (e.g., Russian olive, tamarisk, buckthorn) occur on site (note crack willow, but do not discount for it)

5-25% of woody component	**-1**
26-50% of woody component	**-2**
>50% of woody component	**-3**

III. BUFFER POTENTIAL

Large buffer: Large boundary contact with core area, corridor, or protected property, or a wide buffer provides great buffering capability from more intensive use.
8-10

Moderate buffer: Moderate boundary contact with core area, corridor, or

protected property, or a wide buffer provides great buffering capability from more intensive use.

5-7

Small Buffer: Small boundary contact with core area, corridor, or protected property, or a wide buffer provides great buffering capability from more intensive use.

3-4

Not Acting as a Buffer: Does not connect with core area, corridor, or protected
property, or a wide buffer provides great buffering capability from more intensive use.

0

IV. CORRIDOR POTENTIAL

Good Quality Broad Corridor: A broad corridor exists ≥500' within good wildlife cover, little obstruction or disruptions occur to block wildlife movement or plant dispersal, few negative edge effects exist. Wide, grassy corridors, especially over ridges or saddles make good corridors. Wider is better.

8-10

Good Quality Narrow Corridor: A narrow corridor exists <500' within good wildlife cover, little obstruction or disruptions occur to block wildlife movement or plant dispersal, few negative edge effects exist. Score lower for narrower corridor

3-7

Poor Quality Broad Corridor: A broad corridor exists ≥500' within limited wildlife cover, obstructions or disruptions occur which will likely block wildlife movement or plant dispersal, several or more negative edge effects exist. Score higher for more width, restorability, ability to mitigate (such as shrub planting) or night movement potential.

3-7

Poor Quality Narrow Corridor: A narrow corridor exists <500' within limited wildlife cover, obstructions or disruptions occur which will likely block wildlife movement or plant dispersal, several or more negative edge effects exist.

1-2

V. STEPPING STONE POTENTIAL

Good Stepping Stone: An isolated property that is moderate to large in size (≥51 acres/1500' square) and has good ability to connect core areas, corridors, or protected areas in a stepping stone fashion, especially for birds or wide-ranging mammals. It has the potential to be linked with others stepping stones, or
functions well on its own as a stepping stone.

7-10

Fair Stepping Stone: An isolated property that is moderate in size (11-50 acres/700' square to 1500' square) yet has the ability to connect core areas, corridors, or protected areas in a stepping stone fashion, especially for birds or wide-ranging mammals.
It may have the potential to be linked with others stepping stones, or functions well on its own as a stepping stone.

4-6

Poor Stepping Stone: This is a very isolated property that is smaller in size (≤ 10 acres/660' X 660') yet has some ability to connect core areas, corridors, or protected areas in a stepping stone fashion, especially for birds or wide-ranging mammals.

0-3

VI. FENCING

(select ratings for appropriate fencing type)

1. No fencing ☐

10

2. Chain link, Field/Hog (mesh), Privacy, Solid fence

—≤40"	**6**
—41-48"	**3**
—49"-5'	**1**
—>5'	**0**

If mesh opening size is 4" x 4" or greater

+1

If there is 16" clearance between ground & bottom of mesh

+2

If two fences run parallel, within 8' of each other, use lowest score & **reduce by 50%**
(Disregard electric single strand if above primary fence's bottom wire/rail but below primary fence's top fence wire/rail and within 18" of the vertical plane of the primary fence) ☐

3. Wire, Western Dowel, Split Rail, etc.

—≤40” **5**
—41”-50” **3**
—51”-5’ **1**
—>5’ **0**

Top & second wire separated by at least 12”
+1
16” gap between ground and lowest wire
+2
If fence is ≥41” and gap between ground & lowest wire is not ≥20”
- 1
Top & bottom wire barbless
+1
If fence is ≥41”, and top wire is flagged or a rigid material is used
+1
If two fences run parallel, within 8’ of each other, use lowest score & **reduce by 50%** (Disregard electric single strand if above primary fence’s bottom wire/rail
but below primary fence’s top fence wire/rail and within 18” of the vertical plane of the primary fence)

4. Electric Fences

Single Strand, 20”-36” from ground **8**
If flagged or highly visible **+1**

Multiple Strand or Mesh
—≤40” **2**
—≥41” **0**
Bottom strand ≥20” above ground **+2**
If two fences run parallel, within 8’ of each other, use lowest score & **reduce by 50%**

VII. THREATENED/ENDANGERED/ SPECIES OF SPECIAL CONCERN

Nest/Den or Mate/Display on site/in immediate area
8-10

Feed/drink on site/in immediate area
4-6

Move across parcel/known to be in area
1-3

Not present—Not known to use site/area
0

Qualifiers:
Federally Endangered (each)
+2

Federally Threatened (each)
+1

State listed/Species of special concern
+0

VIII. DEVELOPMENT

Undeveloped: Property is undeveloped & ground relatively undisturbed.
8-10

Light Development:

- Residential: primary house and minimal outbuildings.
- Industrial: ≤5% of the site is covered with structures, outdoor storage or is denuded.
- Landscaping: well landscaped providing adequate screening and buffering
- Traffic: traffic is light in and out of site and on adjacent roadways.
- Noise: low volume, not distracting as observed off-site, traffic in and out does not contribute to noise levels. **5-7**

Moderate Development: Development is residential (1 unit/5 acres-35 acres) or isolated industrial, roads scattered and lightly traveled.

- Residential, In addition to primary house, additional outbuildings 2-3 (garages, barns, guest houses or other structures).
- Industrial: 6-15% of the site is covered with structures, outdoor storage or is denuded.
- Landscaping: Some supplemental landscaping is provided to screen or buffer activity on the site, but is inadequate.
- Traffic: traffic is moderate in and out of site and on adjacent roadways.
- Noise: moderate, but not distracting as observed off-site, traffic in and out does not contribute significantly to noise levels. **1-4**

Heavy Development: Development is dense (1 unit/<5 acres) or industrial, roadways are dense and some roadways are heavily traveled.

- Residential: In addition to primary house, significant outbuildings 3+ (garages, barns and other structures) and outdoor storage of vehicles or equipment.
- Industrial: 16%+ of the property is covered with structures, outdoor storage, or is denuded.
- Landscaping: No additional landscaping is provided to screen or buffer, especially adjacent to any drainages or riparian areas.
- Traffic: Heavy traffic is observed on roadways nearby or in and out of site.
- Noise: Activity on site produces excessive noise either from activities or from traffic in and out of site that are easily observed off-site. **0**

IX. AGRICULTURE

Free of Agriculture:

10

Area with no apparent agricultural use in recent times, except light or short duration grazing. Limited grazing can benefit or stimulate beneficial flora. Beneficial plant communities are intact.

Lightly Dominated:

7-9

Area is moderately overgrazed, but beneficial plant community generally intact, increasers may occur—yucca, squirreltail, 3-awn, annual weeds, etc. Count tree farm or orchard here.

Moderately Dominated:

Heavily overgrazed, mowed hayfield, most of beneficial

4-6

plant community not discernable, increasers prevalent—yucca, squirreltail, 3-awn, annual weeds, etc.)

Heavily Dominated:

1-3

Bare dirt, plowed field, few remnant beneficial plants/communities

X. WEEDS

Relatively Weed Free:

9-10

- Knapweed, various thistles, toadflax, leafy spurge, purple loosestrife, etc. do not occur over more than 5% of site and/or

- Kochia, mullein, cheat grass, pigweed, bindweed etc. do not occur over more than 10% of site and/or
- No leafy spurge, purple loosestrife, toadflax, or Canada thistle in the riparian areas.

Light Infestation:

7-8

- Knapweed, various thistles, toadflax, leafy spurge, purple loosestrife, etc. do not occur over more than 20% of site and/or
- Kochia, mullein, cheat grass, pigweed, bindweed etc. do not occur over more than 25% of site and/or
- Leafy spurge, purple loosestrife, toadflax, and Canada thistle cover no more than 10% riparian areas.

Moderate Infestation:

4-6

- Knapweed, various thistles, toadflax, leafy spurge, purple loosestrife, etc. do not occur over more than 40% of site and/or
- Kochia, mullein, cheat grass, pigweed, bindweed etc. do not occur over more than 45% of site and/or
- Leafy spurge, purple loosestrife, toadflax, and Canada thistle cover no more than 25% riparian areas.

Heavy Infestation:

0-3

- Knapweed, various thistles, toadflax, leafy spurge, purple loosestrife, etc. occur over more than 40% of site and/or
- Kochia, mullein, cheat grass, pigweed, bindweed, etc. occur over more than 45% of site and/or
- Leafy spurge, purple loosestrife, toadflax, and Canada thistle cover more than 25% riparian areas.

XI. RESTORABILITY

Easily Restorable: All functional components of the ecosystem are present or could be restored with little management inputs. Generally, if integrated weed
control is conducted most of the site will become healthy with limited reseeding
or replanting with low cost.

10

Moderately Restorable: Composition, structure and function may have been altered to various degrees but the area is restorable to a sustainable, desirable,

and diverse target community. Will require moderate inputs including integrated
pest management, reseeding and possibly replanting. Moderate cost and time is required.

7

Difficult to Restore: Area may have some structural and compositional components but most are severely altered. Functional processes and groups may or may not be present. May be restorable to a less desirable, less diverse target community. Expensive.

3

Not Feasible to Restore: Composition, structure and function of ecosystem have
been impacted severely or are largely absent. Very expensive to restore.

0

XII. MAP

Sketch map of terrain and significant features—fences, weed patches, alternate habitat types, buildings, etc.

Exhibit 6: CHATFIELD BASIN CONSERVATION QUALITY ASSESSMENT FORM

PARCEL NAME:
_____*SCORE*_____

PARCEL LOCATION:
_____

OBSERVATION LOCATION:
_____

UTM COORDINATES: _____E_____N

ASSESSOR(S):
_____

_____**DATE:**
_____

PARCEL ACCESS _____ **INTERIOR** _____ **ROADSIDE ONLY**

VISIBILITY:
WEATHER/LIGHTING_____
TERRAIN/VEG:
_____

TYPE OF OPTICS USED:
_____

See packets for evaluation criteria explanations.

I. HABITAT TYPES:

Habitat Type	**Mosaiced/ % of Site**	**Solid Stand**	**Weighted Value**
_____			
_____			
_____			

_____

_____

_____

_____

II. ☐ **NATIVE/INTRODUCED GRASSES/FORBS**

III. ☐ **BUFFER POTENTIAL:**

IV. ☐ **CORRIDOR POTENTIAL:**

V. ☐ **STEPPING STONE POTENTIAL:**

VI. ☐ **FENCING: (Passability)**

Type_____ **Height**_____

Bottom clearance_____ **Top & bottom barbless** _____

Top rigid or flagged_____ **Mesh opening size** _____

Electrified_____ **Single/Multi strand**_____

Second fence within 6'_____

VII. ☐ **THREATENED/ENDANGERED/ Species of Special Concern:**

Species	**Status**	*Activity* **on Parcel**	*Observed/Report-* **ed/Assumed**

_____

_____

_____

_____

_____

_____

VIII. ☐ **DEVELOPMENT: (Type/Density/#Units/etc.)**

IX. ☐ **AGRICULTURE:**

Weed Type % of Site Density Riparian? Patch Size

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

X. ☐ **WEEDS:**

XI. ☐ **RESTORABILITY:**

XII. MAP: Sketch map of terrain and significant features—fences, weed patches, alternate habitat types, buildings, etc.

Table 4: Chatfield Basin Conservation Quality Assessment

This document is provided as a sample of the data collected and reviewed as part of the Conservation Quality Assessment. A complete electronic copy of this data can be obtained by contacting Douglas County Community Development 303-660-7460.

TOTAL SCORE	STUDY AREA	PARCEL NAME	PARCEL LOCATION	UTM COORDINATES	ACRES/ AREA ASSESSED	TERRAIN/ VEGETATION	I. HABITAT TYPE	% of Site	Mosaic/ Solid Stand	Density of Woody Habitat	Associated Species	Associated Species %	II. NATIVE/ INTRO VEG	VEGETATION	III. BUFFER POTENTIAL	Core Area	Disturbance/ Influence to be buffered	Buffer Width
42	4	G	Hwy. 67, 1.6 mi.-Rainbow Creek Rd.	13-499275E 4360772N	40-50	Ridges, all sides	Dist. Mixed grasses	80	solid	moderate to dense	3 leaf sumac		2	crested wheat & western wheat-on road only, yucca, weeds.	8	Penley	Hwy. 67, houses	1/2 mi +
							Oak brush	20	mosaic									
68	4	E	Hwy. 67, 0.7 mi.-W of Rainbow Creek Rd.	13-500206E 4361839N	80	Ridges in bowl/all sides	Oak brush	30	solid	Dense			6	Int. or Western Blue Grama, Gambel Oak-smooth brome-roadside, Western wheat & Canada wild rye, Pasture too grazed near fence to determine some wheat grass & brome.	7	Penley	Hwy. 67--Indian Creek Ranch	1/4-3/4 mi
							Midgrass	70	solid	N/A								
72	4	F		13-499955E 4361565N	60	Ridges on all sides	Oak brush	20	solid	Dense	3 leaf sumac	5	8	Diversity!! Blue Grama, Big Bluestem, Little Bluestem, Sand dropseed, Orchard grass, cheatgrass, jointed goat grass.	8	Penley	Hwy. 67--Indian Creek subdivision	1/4-3/4 mi
67	1	#13	Sunshine Acres	(Andy has coords.)	400	grassland	6. Grassland	95	solid	low	Rabbitbrush	<5	4	Intermediate & crested wheat,	9	Chatfield State Park	development	large >500
																Platte	Sunshine Acres	large >500
65.5	1	#2	S. of Titan, N. of Wildlife	39o30'20.88"N 105o4'13.31.'W	15 acres	drainage/Highline C.	4	40				Rabbitbrush	9	Russian olive, sandbar willow, peachleaf & lanceleaf willow, plains cottonwood, Western Virgin's bower, plum, goldenrod, Green needle, wild rose, snowberry, Rabbitbrush, scorpion weed, Aster E., asparagus	4	Chatfield		small
							6	40			Rabbitbrush							
							10a	10			peachleaf & sandbar willows, plains cottonwood, associated plum							
							11	10										
67	1	#3	Highline Canal & Shea Property	105o3'16.277"E 39o31'43.812"N	300-400	flat grassy, borders south of Highline Canal	Grassland	99.9	solid		Rabbitbrush	1	3	riparian cottonwood, lanceleaf willow, chokecherry, few forbs over 400 ac. Site	10	Chatfield	residential development	1/2 mi
							riparian-cottonwood	0.1			plum, chokecherry	5		cereal rye, kochia, sand dropseed, wild tarragon, Prairie sunflower, cheatgrass				
80	1	#4	State Land Board	(Ray has?)	?	fairly flat, drainage	4 Grasslands	95	solid				10		10			
							14 Meadow	2			willows, snowberry			Native				1 sq mi
73	2	#2a--See Map	Roxborough Park Road & drainage	495321.85E 4370502.56N		rolling grassland	Midgrass Prairie	95	solid			<5	10	80-100% Native, Western wheat, Blue Grama, Sanddrop seed	8	Willow Creek	little	>50 acres
							Riparian	5			cottonwood, willow, Rabbitbrush, wild rose, yucca	<5						
72	2	2b	Willow Creek & Roxborough Park Road-looking west	495297.65E 4369284.61N	200		Mid Grassland	90	solid		Western wheat, crested wheat, Rabbitbrush, sand dropseed, brome, Grama		8	Hay, brome,Rabbitbrush Grama, healthy riparian & wetlands, one Russian olive.	10	Willow Creek	Roxborough Village	>500'
							Riparian lowland	8			cottonwood, willow, plum							
							Wetlands-marsh	two			reed canary, cattails							
52	2	2c	Titan & Moore intersection 360o	497709.05E 4373037.95N			Lowland Riparian-SE		mosaic	low	cottonwoods, willows, choke cherry, plum, Rabbitbrush		7	Disturbance, esp. NW & NE corners, good riparian habitat	6	Plum Creek	Hwy. 85, stables, Moore Road	>500'
							Mid Grassland-SW			<5	Sand dropseed, 3-leaf sumac, Rabbitbrush, chokecherry, plum,							
							Grassland-NW				yucca, Blue Grama							
							Riparian-NW			moderate	cottonwoods willows choke cherry plum Rabbitbrush							
							Riparian-NE			high	cottonwoods, willows, Siberian elm							
62	2	2d	Moore Rd. across from Lawrence Ind.	497700.40E 4371609.45N			Mid Grassland	100	solid		Western wheat, Blue Grama	80	10	90% not best natives	8		Industry to east, south	large
											Sand dropseed, Rabbitbrush							
											Shrubby buckwheat	<1						
											Needle & Thread							
											Sunflower, Gayfeather							
15	2	2e	directly across street	same as 2d			Mid Grass	10	mosaic		Western wheat, Blue Grama, Sandseed		2	Mostly industrial	0			
							Native Plum	1	mosaic		3-leaf sumac, maybe currant							
							Urban-Industrial	79			chokecherry, Ponderosa, spruce, deciduous-pear?							
68	2	2f	Furthest west road in Louviers looking west	499179.02E 4369621.93N			Mid Grass	100			Western wheat, snowberry, Blue Grama, sand dropseed Canada wild rye, Rabbit brush		10		9	Louviers, Dupont OS		large >500'
											Int. wheat	<1				Sharp-tail to west		

67	1	Shea Homes	Wildlife Way	494069.14E 4374743.52N			Mixed Grass	100	solid	<5	Rabbitbrush		4	Rye crested, Smooth, Intermediate	9	Adj. to Chatfield, S. Platte, Plum	development, Sunshine Acres	>500'
							Disturbed Area-dropseed				cottonwood-couple							
											willow-couple							
78	3	1-Upper Sutton	w. Sutton, N. Horseshoe Trail	39o26'07.22"N 104o39'37.36"W	1 square mile	grass/oak	4-Midgrass	90			Ponderosa, yucca	5	7		9	Belfield	development	3/4-1 mi
							7-Scrub oak	10	mosaic	dense						Plum Creek	development	3/4-1 mi
							6-Mixed grass	95								Lambert Ranch	development	3/4-1 mi
							7-Oak	5	mosaic							connecting to Woodhouse	development	3/4-1 mi
85	3	Lower Sutton (eastern)	Horseshoe Trl Rd-west side bridge/w. of Sedalia	39o26'18.87"N 104o59'02.22"W	350 acres	creek lowland riparian, uplands, gulch	Ponderosa (N)	5	mosaic	moderate			10	Big Bluestem, Blue Grama (N), Grassland, oak, riparian (S), 75% native	10			1 mi
							Oak (N)	70	mosaic	high	Mtn. Mahogany, plum, Chokecherry <5							
							Mixed grasses (N)	25	mosaic	N/A	yucca, skunk brush, 3-leaf sumac <5							
							Lowland riparian (S)	33	mosaic	moderate	hawthorn, peachleaf							
							Oak (S)	33	zonation	high	cottonwood, Russian olive, willow shrub							
							Mixed grasses (S)	33	mosaic									
3	3	Petie's	small triangle including Petie's RV & Boat storage to ridge by RR	39o26'33.31"N 104o58'25.56"W	17 acres	level/small hill	22. urban	50	N/A				1		0	connects core area/barrier		
							business, storage, gravel, weeds											
	3	(4) S. of Forington's driveway	between tracks on frontage paved road, Santa Fe to east		320 acres	riparian to upland scrub/pine	11. Low riparian	25		high	cottonwood, willow, pine		7	Oak talus? 90%, knapweed, hoary alyssum, mustard, kochia, cheatgrass, flix weed, disturbed grass/riparian = 75% native	10	between Cherokee		3/4 mi x 3/4 mi
							2. disturbed grass	25		N/A	Knapweed, mustard, hoary alyssum, intermediate wheat					Dupont, Woodhouse and Belfield-key buffers		
							3. Scrub oak, ponderosa / talus slopes	25		high (75%)	Mtn. Mahogany <5, 3-leaf sumac, skunk brush <5							
							4. mowed hayfield											
86	4	A & B-Indian Creek		13 4976651E 4363304N	10 (1 mile far off)	high ground in front	Midgrass Prairie	25	solid		Mtn. Mahogany	5	9	Mostly Blue Grama, some ?grass, Needle&Thread	9	Forest	Indian Creek devel.	1 mi
							Oakbrush	10	mosaic		Juniper	few				Roxborough Park	Indian Creek devel.	1 mi
							Coniferous Ponderosa	5	solid							Nelson OS	Indian Creek devel.	1 mi
							Rabbitbrush	1	solid									
81	4	C-Indian Creek	Piute Drive	13 497717E 4362332N	200-300	ridges to west	Midgrass Prairie	85	solid	N/A	Rabbitbrush, 3-leaf sumac, Mtn. Mahogany	1	9	Western wheat (50%), sand drop 5%, Blue Grama 15%, Needle & Thread 30%, Alyssum	10	Forest	Indian Creek devel.	>500 yds.
							Oakbrush	8	solid	moderate-to-dense	Mtn. Mahogany, 3-leaf sumac	1				Nelson OS	Indian Creek devel.	>500 yds.
							Ponderosa Pine	5	solid	moderate		1				Roxborough Park	Indian Creek devel.	>500 yds.
							Mtn. Mahogany	2	solid	moderate	Oakbrush, 3-leaf sumac	25						
80.5	4	D-Indian Creek	Indian Creek	13 497785E 4362228N	20 acres	blocked by trees	Lowland riparian		solid				7		6			
							Disturbed Grasses	15	solid									
							Oakbrush	35	solid		chokecherry	5		Native: oak, plains cottonwood, chokecherry, narrowleaf cottonwood willows, 15% introduced: grasses (brome), weeds, intermediate wheat		Penley Open Area	Indian Creek devel.	500 yds.
79	3	Woodhouse to Pleasant Creek (5 on map)	S. of Louviers, E. of Woodhouse Property		640 acres	rolling grasslands, 2 riparian corridors	grassland	80	solid in flats, slightly mosaic	3 percent	indeterminate grasses, yucca		7	Need closer look-- San dropseed, Prairie Baby's Breath, cottonwoods, hawthorne, willows, wild plum, Rabbitbrush, yucca, oak, grasses undetermined, knapweed	10	Woodhouse	RR, hwy, development	1 mi
							riparian	15-20								Lambert Ranch/Indian Creek		1 mi
							shrubland	3-5	mosaic		Mtn. Mahogany (hilltop), plum, oak, 3-leaf sumac					Dupont OS		one-half mi
							cropland	6								OSCA, Cherokee Ranch		
							developed	4										