

Final Report

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Project Title: To Establish a Wildlife Sanctuary in Santa Fe County: The Planning Phase (Professional Wildlife Services Contract #08-516-0000-00011)

Submitted to: **Share with Wildlife**
New Mexico Department of Game and Fish

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Executive Summary

When I began working on this project a year ago, my vision was to create a 100,000 acre wildlife sanctuary that would serve as a protected refuge for the fauna and flora of Santa Fe County. Over the past several months of interacting with other environmental organizations and individuals who are committed to preserving New Mexico's natural heritage, however, I have come to realize that limiting the scope to 100,000 acres (equivalent to 156 sections) may well serve the purpose for Gunnison's Prairie Dogs and other animals that do not roam but is ill-suited for animals that are wide-ranging.

Because it is the intent of this project to develop a plan that will enhance the populations of all the local species of greatest conservation need, I have joined forces with Lura Brookins to form Wild Prairie Partners WPP, whose vision is "Boundless land, with open vistas of prairie grasslands reaching to our mountains". This is an image that is not limited by fences or restricted in concept; and yet, ironically, although this vision is much larger in scope than the 100,000 acres originally proposed, it may well be much simpler to implement in the final analysis.

- For one thing, several groups that we are now working with (Rewilding Institute, New Mexico Wilderness Alliance, and Pathways) are all committed to preserving wildlife corridors that will eventually extend along the spine of the continent from Mexico to Canada, One of the weakest links in this long chain occurs in the very area we are considering -- the Galisteo Watershed. By joining forces with these organizations, we will make our boundless land vision consistent with their mission of completing the north-south wildlife corridor.
- The second major consideration in enlarging the sanctuary vision is that WPP's close association with Earth Works Institute, Santa Fe Conservation Trust and the Galisteo Watershed Partnership will provide us with the community support we will need get the large landowners involved. The difficulty we were encountering last year when the focus was on the 100,000 acres was that there was virtually no way we could obtain a commitment of this magnitude from a single property owner. This meant that we would have to deal with several smaller tracts from many owners, along with the necessary connections.

And then there is the question of siting. Given the need for good water sources, appropriate land and vegetation, barriers, and so forth, how were the optimal locations to be determined, let alone obtained? As fortune would have it, the answer arrived when we began to look at what other similarly motivated groups were doing, namely working with the concept of corridors rather than fixed tracts of land. Instead of trying to determine where to site the sanctuary ourselves, we will seek the council of the animals themselves. It is the wide-ranging animals (like the mountain lions and the elk) whose innate instincts will determine where the pathways should be; it is the non-roving species (like the prairie dogs and the salamanders) who will determine where the preserves must be. In this example of form following function, it will be up to us humans to make the observations and plan accordingly.

So there we have it. The sanctuary, as presently envisioned, will consist of corridors that do not intersect with roads and highways and that are as free as possible of barbed-wire fences and other artificial obstructions and deterrents. Because these corridors must be able to support the wildlife that use them, ample access to food and water will have to be available. For the deer and elk, this will entail having stands of healthy grasses and other vegetation in relatively wet areas; for the mountain lions there must be an adequate supply of prey animals. In this sense the sanctuary can be viewed as a layer of dynamic corridors superposed on a backdrop of fixed preserves that are comprised of grasses and habitat for those animals that do not roam.

The exciting part is that this concept or vision has an inherent community buy-in. It is because of this larger picture that the Galisteo Watershed Partnership has become such an active player in preserving wildlife in the Galisteo Basin. It is because of this that government representatives and environmentalists and local landowners are becoming involved. Thanks in large part to this grant from the New Mexico Department of Game and Fish, what was once a vaguely defined concept will become a reality. All of the required conditions are in place. All we have to do is make sure they come together.

Guiding Principle

When I originally envisioned this project and wrote the grant proposal, I was guided in large part by the Comprehensive Wildlife Conservation Strategy (CWCS) and the need to preserve and protect Species of Greatest Conservation Need (SGCN). The CWCS is a formidable document which carefully describes what needs to be done in the various zones throughout the entire state and recommends courses of action. Jan-Willem Jansens, Executive Director of Earth Works and founder of the Galisteo Watershed Partnership, has sifted through all of the information and suggestions in the CWCS and compiled a two page summary that relates specifically to the Galisteo Basin. The plan of action described in this report is in compliance with this summary.

Acknowledgments

I would like to give special thanks to Chuck Hayes and others at the NMDGF who believed in me by providing funding for this project; to Lura Brookins, cofounder of Wild Prairie Partners who helped create the vision and has kept the project going; to Elyse Van Arsdale and Mitch Johnson who introduced us to the concept of wildlife corridors; to Congressman Tom Udall who wrote me a strongly worded letter of support; to Andrew Jandacek of the Santa Fe County Planning Division who has been involved with the project since its inception; to Jan-Willem Jansens who, over the past several months, has emerged as a champion of wildlife in the Galisteo Basin; to Jerry King of the State Land Office whose door was always open to us; to David King of the Public Regulations Commission who has embraced the wildlife corridor concept; to Bill Fleming of the University of New Mexico who needed only to be informed of the project in order to become involved; and to Amy Tremper of Cerro Pelon Ranch whose constant voice of support opened my eyes to the fact this project is larger than any of its components.

I would also like to thank the following individuals, many of them in advance, for the assistance they have provided or are expected to provide: Courtney White, Executive Director of Quivira Coalition; Craig Conley, Deputy Director of Quivira Coalition; Rici Peterson, Executive Director of the Santa Fe Conservation Trust; Ted Harrison, Executive Director of the Commonweal Conservancy; Craig Chapman of the New Mexico Wilderness Alliance; Alan Hamilton, Director of the New Mexico Wildlife Federation; Francois-Marie Patorni of New Mexico Pathways; Brian Miller, Director of the Wind River Ranch Foundation; Stan Hartman, Manager of the Lone Mountain Cattle Company; Grant Mitchell, Ranch Manager of the San Cristobal Ranch; David Foreman, Executive Director of the Rewilding Institute; David Coss, Mayor of the City of Santa Fe; Arnie Valdez of the Santa Fe County Planning Division; Sina Brush, Galisteo area ranch owner; Mike Friggens, University of New Mexico Department of Biology; and my wife Peggy van Hulsteyn who has been my proof-reader and constant source of support.

Scope of Work

David van Hulsteyn, as cofounder of Wild Prairie Partners shall:

“1. Determine the minimum size and a minimum of 3 potential locations necessary for a potential ‘wildlife sanctuary’ in Santa Fe County, based upon a literature review of biological needs for Species of Greatest Conservation Need that may occur within the sanctuary (e.g. Gunnison’s prairie dogs), and site-specific considerations relating to land use, ownership, or other factors. Proposed sanctuary areas will be those designated as having wildlife populations and habitat management consistent with wildlife conservation, but do not necessarily require changes in land ownership or land uses for consideration within the potential sanctuary.”

One of the frustrations that Wild Prairie Partners has encountered in its literature search is that the documented literature regarding wildlife and their habitat in the Galisteo Basin is paltry. Surveys of the general area of northern New Mexico were performed by Bailey (1,2) early in the twentieth century, but these were primarily qualitative in nature. More recent reports by Aldo (3) and Luna (4) Leopold provide some insight and potential guidelines but again do not provide what one could consider to be quantitative data. During the next year, with the help of volunteers who will assist us in obtaining preliminary counts, we will be able to address the question of site-specific considerations.

In addition, Wild Prairie Partners has enlisted the aid of William Fleming (5) to perform a GIS study of the appropriate lands within the Galisteo Basin in order to determine which areas are presently inhabited and which ones would be appropriate for wildlife introduction. The first product of this project is the an overlay analysis for determining the suitability of the terrain in the Basin for pronghorn antelope (6). A more detailed study of the area will be conducted as soon as Professor Fleming secures the funding necessary to support a student. It is anticipated that he will be coordinating his research with a related project [proposed by Kris Johnson (7)], whose objective will be to create wildlife habitat and wetlands map overlays. She is presently seeking funding from the Santa Fe County Land Use Department. These two projects of Fleming and Johnson will support the County’s overall plan to document the current status of all of the lands within the County and to identify specific zones that are in critical need of protection.

Because all of this information will be essential in determining the optimal design for our proposed sanctuary, WPP will remain in close communication with these parties. In addition, through our close association with Jerry (8) and David (9) King, whose families have been involved in ranching in and around the Basin area for generations, as well as with other prominent members of the Galisteo community, we are in the process of creating a general picture of what life in the area was like several years ago, with particular emphasis on learning the history and present status of species of greatest conservation need.

In order to optimize the planning process for the sanctuary, WPP has joined forces with the Galisteo Watershed Partnership, a coalition of government organizations and private entities whose mission is to maintain as much of the rural nature of life within the 730 sq. mile Basin. The GWP, which meets quarterly to discuss critical issues, will focus its attention during the regularly scheduled session on May 9, 2008, on learning from the owners of the large tracts of land what their concerns are regarding wildlife on their property. In a very real sense, this meeting represents the first major coming together of individuals who are committed to preserving animals and their habitat.

From this meeting, those of us who are planning the sanctuary will determine what the status of wildlife in the Basin, what the threats are to the wildlife, how these threats can be successfully addressed, and what the information gaps are in our knowledge and understanding. A preliminary list of these criteria, based upon the responses from several landowners, is contained in Appendix A. From presentations and discussions at the meeting, this list will be refined and reviewed by the attendees. The final output will be what we on the Working Group have titled a “common vision”. This vision will essentially answer the question “What needs to be done in order to protect and preserve wildlife and its habitat in the Galisteo Basin.

Following the May 9 meeting, the Partnership working group will spend the next several weeks preparing a draft of an Action Plan that will address the complementary question “How will this common vision be realized”. This Plan, which will be put into final form at a special GWP session on June 20, 2008, will represent the culmination of WPP’s efforts [in conjunction with the Galisteo Watershed Partnership] to address just how our wildlife sanctuary concept will be put into place!

It is clear from this discussion that WPP’s image of a sanctuary has undergone a metamorphosis. Initially, when the grant proposal was written, we tended to view the proposed 100,000 acres as a preserve in a fixed place or set of places with some sort of connectivity between

the sites. This type of arrangement would clearly be appropriate for Gunnison's Prairie Dogs, salamanders, and other species that tend to remain in one general location for their entire lives. An obvious problem with this concept, however, is that this would require the active participation of land owners willing to set large chunks of their lands aside to be preserved under conservation easements or some other legal arrangement that would protect the land in perpetuity. In addition, we had to ask ourselves if the sanctuary would be fenced or open or perhaps be area-zoned or formally managed for open space; each scenario presents its own set of complications and limitations.

During the past year WPP has steadily increased the number of its partners and its interactions with organizations in other locales involved in similar efforts. In the process, WPP has come to recognize that if the sanctuary is designed to preserve wildlife, particularly the SGCN (Species of Greatest Conservation Need) in the Galisteo Basin, we must allow for the inter-mountain movements of large animals such as the elk, deer, bears and mountain lions. With this expanded image, the sanctuary can no longer be viewed simply as a large isolated preserve but rather as an array of wildlife corridors of unknown width (pathways) for the moving animals, with sets of relatively permanent sites with grasses and/or water (preserves) to serve as habitat for non-migrating species such as the Gunnison's Prairie Dogs.

The contract calls for a minimum size and a minimum of three potential locations, but with the new concept described above, it will be the animals themselves, with the cooperation of appropriate landowners, that will define the boundaries of the sanctuary. This clearly will be more complicated in some regards in that it may require the participation of a large number of landowners. This difficulty, however, should be more than offset by the potential advantages, namely that:

- The sanctuary will be more consistent with what nature intended and less like a man-made park;
- The animal traffic into and out of the basin will enhance the gene pool;
- Wildlife that may once have been indigenous to the area will have a chance to become reestablished;
- The opportunity to study a healthy ecosystem will be significantly improved;
- There should be fewer restrictions involved in setting up the conservation easements;
- This project will dovetail nicely with similar efforts by the Rewilding Institute, the New Mexico Wilderness Alliance and Pathways to create animal corridors along the Rocky Mountain chain from Mexico to Canada.

“2. Identify land owners and managers within the area of the potential wildlife sanctuary, and evaluate the degree of willingness of these land managers to conduct stewardship that would be consistent with the designation of the wildlife sanctuary.”

WPP, by joining forces with the Galisteo Watershed Partnership, has formed close working relationships with:

- Steve and Amy Tremper, Managers of the Cerro Pelon Ranch
- Ted Harrison, Executive Director of the Commonweal Conservancy,
- Jerry King, Assistant Director of the New Mexico State Land Office, and
- David King, elected member of the New Mexico Public Regulation Commission

All of these individuals have been extremely supportive of the sanctuary concept and of the need for protecting and preserving native wildlife. Both Jerry and David King, in addition to being in prominent figures in the State Government, are members of ranching families who are on close contact with most of the other major landowners in the Galisteo Basin. Both men have agreed to participate in the May 9 and/or June 20 meeting of the GWP. David King will also be working with WPP and Earth Works Institute to arrange meetings with landowners who are receptive to the idea of having wildlife corridors on their property.

It is further anticipated that the May 9 and June 20 meetings of the GWP will provide an Action Plan that will set forth the guidelines and recommendations for defining which areas in the Galisteo Basin are appropriate for pathways and preserves and will provide landowners with the opportunity to participate in the sanctuary effort. Obtaining their participation will be of vital concern because many of these ranches are immense (the San Cristobal Ranch alone comprises approximately 90,000 acres). Without the involvement of these key landowners, it will be extremely difficult if not impossible to make the sanctuary a reality. One of the exciting but frustrating challenges I encountered in my attempt to define and begin the planning phase for a realistic wildlife sanctuary in the Galisteo Basin has been to determine which plants and animals are truly native to this area. I was surprised to find that much of the information that is available on this subject is either anecdotal or based on lore that has been passed from one generation to the next but not quantitatively documented.

“3. Work with federal, state, local agencies, and private organizations to obtain data and analyses of variable such as soil type or condition, hydrology, terrain, natural boundaries, and vegetation as they pertain to a potential wildlife sanctuary.”

As has already been mentioned in section 1 above, WPP has formed a good working relationship with representatives of the Santa Fe County Land Use Planning Division. Both Arnie Valdez and Andrew Jandacek have been enthusiastic supporters of the sanctuary and are in the process of developing overlay maps that will display all of the information requested in this work statement. To this end, they hope to be able to fund the proposal from the Natural Heritage New Mexico to produce maps that will display the wildlife habitat and wetlands locations.

In the academic sector, WPP has requested the assistance of William Fleming to create an inventory of those portions of the Galisteo Basin that are deemed to be appropriate sites for wildlife habitat. This inventory, which will be based on acquiring GIS images coupled with a limited amount of ground-truthing, will produce overlay displays showing the soil type or condition, hydrology, terrain, natural boundaries, and vegetation in this area. Conversations with Prof. Fleming indicate that his work will dovetail nicely with the Natural Heritage New Mexico project and provide the information needed to identify appropriate wildlife habitat. Because Fleming’s project will require a great deal of field work on the part of one or more students, the work will commence as soon as the funding required to support these students has been secured

“4. Convene a group of biologists, educators, fund-raisers, and private landowners to provide guidance in implementing the strategy for establishing a wildlife sanctuary. Notify the Agency of anticipated participants and meeting dates prior to meeting(s)”

It has already been established in section 1 above, that Fleming (and, by extension, his students) at the University of New Mexico are deeply committed to this project, WPP will also be working, upon occasion, with David Henkel, a colleague of Fleming. Professor Henkel, as a result of research his students performed several years ago, is very familiar with the the topography and topology of the Galisteo Basin.

WPP has also discussed the wildlife corridor/preserve effort with Mike Friggens, Sevilleta Long-Term Ecological Research Project Director, and Ana Davidson, a research biologist with the University of New Mexico. Among their accomplishments, Mr. Friggens and Dr. Davidson have overseen the successful relocation of Gunnison's Prairie Dogs from the Santa Fe Railyard Park to the Sevilleta Wildlife Refuge just north of Socorro. Relocation of these animals is a very complicated and sensitive process which, until recently, has been only relatively successful.

Because Gunnison's are a Species of Greatest Conservation Need (SGCN) and because they are a keystone species in the local ecosystem, it may evolve that some colonies may have to be relocated from the City of Santa Fe to the wildlife sanctuary in the Galisteo Basin if the existing populations in this area are insufficient. To ensure that the process is performed with an optimal survival rate, WPP will seek the support of Friggens and Davidson, as well as from local relocators who have been certified by the City.

In this respect, it is appropriate to mention that Wild Earth Guardians has prepared a draft of a Gunnison's Prairie Dog Management Plan for the City of Santa Fe which will require, among other things, that there be a series of preserves in the County for those prairie dogs that need to be relocated from sites within the City that are scheduled for development or are otherwise threatened. This document, which contains input from members of People for Native Ecosystems and Paula Martin (10), has yet to be introduced to the City Council. Assuming that the Plan is eventually adopted, it would be beneficial to all parties if the preserve sites in the the WPP sanctuary were to serve this purpose.

With regard to Agency notification, WPP is indeed fortunate that, in conjunction with the Galisteo Watershed, Chuck Hayes, the contract monitor, has participated in several sessions of the working group and will play a crucial role in helping the GWP define its common vision for wildlife preservation at the May 9 meeting.

“5. Pursue partnerships with private and public landowners as necessary of inclusion within the wildlife sanctuary area.”

To WPP, the partnering with local landowners will be the key element in making the sanctuary a reality. As discussed in previous sections, we are already working with the ranch managers of Cerro Pelon Ranch as well as with members of the King family. We have also had many discussions with Ted Harrison, Executive Director of the Commonwealth Conservancy. It is our plan to use the May 9 and June 20 meetings of the Galisteo Watershed Partnership as opportunities to meet with the managers (and perhaps the owners) of several of the other large ranches in the Basin.

WPP is fortunate that an ally, Santa Fe Conservation Trust (11), is an active member of the Galisteo Watershed Partnership. This is an organization that has worked extensively with property owners in the Galisteo Basin in setting up conservation easements. Their assistance will be an invaluable component when the pathways and preserves have been selected and the details for acquiring these lands have to be arranged.

“6. Pursue funding opportunities with local foundations and other sources for short- and long-term support of the sanctuary.”

WPP has delayed taking any significant action along these lines until we have a better picture as to just what will be required. We have had preliminary discussions with the Executive Directors of the Thaw Family Trust and the Messenger of Healing Winds to make them aware of the sanctuary project but have had no discussions regarding proposals.

“7. Initiate a public outreach effort to inform local citizens of planning efforts, and to solicit public input regarding desires for sanctuary uses, facilities, etc. The public outreach effort will include written information to describe the purpose and options being considered for a potential wildlife sanctuary, plus contact person(s) for more information and ways to participate in the planning process. At a minimum, the information will be accessible via a web page or local newspaper notice, plus at least one in-person mechanism (e.g., public talk, exhibits at local events, etc.)”.

To date, WPP's public outreach has been focused on residents and large landowners in the Galisteo Basin. In addition to our membership in the Galisteo Watershed Partnership, we have attended functions in the community of Galisteo and have had detailed discussions with local celebrities including author Lucy Lippard and gallery manager Sina Brush. This will be an ongoing effort as we learn more about the concerns and interests of the locals with regard to wildlife patterns in the area.

The best vehicle for public outreach to date will be the two meetings on May 9 and June 20, at which all of those in attendance will have an opportunity to participate in the sanctuary process. Representatives from the local media have been invited; it is anticipated that they will favorably describe the efforts of WPP, in conjunction with the Galisteo Watershed Partnership, to create a sanctuary for indigenous wildlife and their habitat. This will be our first step in informing the residents of Santa Fe County about the Action Plan for the sanctuary.

WPP has contracted with Websnare of Boulder, Colorado to design a website. Much of the artwork and most of the wording have been submitted. We expect the site <wildprairie.org> to be up and running within the next several weeks.

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11. Peterson, Rici; Executive Director, Santa Fe Conservation Trust

Appendix A
Wildlife in the Galisteo
Watershed

Treasures	Threats	Solutions	Information Gaps
<p>The space, grasslands, vegetation for animals</p> <p>Scenic beauty of grasslands and ridgelines</p> <p>Good place to live and work</p> <p>Good traditional ranching opportunities</p> <p>Spectacular cultural resources; petroglyph sites</p> <p>Mule deer, mountain lions, elk, water fowl, pheasants, turkeys, quail, bears, pronghorns, bluebirds, prairie dogs, raptors, bobcats, hummingbirds</p> <p>Natural springs, water holes, wetlands</p> <p>Mining history associated with settlements & pueblos</p> <p>Geology, scenery</p>	<p>Land fragmentation due to development. inappropriate, piecemeal development and subdivisions, ranches, roads, population, fencing, inadequate road-water crossings</p> <p>Wildcat development, e.g. oil/gas, mining</p> <p>Heavy trucks, highway projects, road kill</p> <p>Drought, climate change, lack of forage, isolation of herds</p> <p>Desiccation of land because of headcuts and stream degradation</p> <p>Water extraction, especially on smaller parcels</p> <p>Lack of prescribed fire to control woody plants</p> <p>Impact on land of humans and dogs</p> <p>Hunting, extermination programs</p> <p>Lack of understanding between large and small landowners regarding specific financial and development needs</p> <p>Trash</p> <p>Movie set impacts</p> <hr/> <p>Combined cumulative effect of all the of the above</p>	<p>Leave large open space areas if development is inevitable</p> <p>Development managed to allow for corridors</p> <p>Good grazing management practices, leave forage for wildlife</p> <p>Slow water flow; allow it to percolate into grasslands; control erosion</p> <p>Ongoing riparian restoration</p> <p>Mobilize people as stewards</p> <p>Wildlife-friendly fencing</p> <p>Education about wildlife corridors across I-25 to Jemez and Sangres</p> <p>Managed hunting to maintain healthy populations</p> <p>Prescribed fire, where possible for management of encroaching woody plants</p> <p>Tax credit programs; conservation easements</p> <p>Management efforts to maintain pronghorn herds and habitat</p> <p>Prairie dog reintroduction, where possible</p> <p>Monitoring of wildlife</p> <p>Mountain lion and bobcat habitat restoration</p> <p>Provide water for wildlife</p> <p>Education of community and leaders</p> <p>Finance public ownership of large tracts of land</p> <hr/> <p>Respect Mother Nature</p>	<p>What wildlife resources are there in the watershed? What ecological benefits do they provide?</p> <p>What is the proper timing of certain land uses to minimize the impact on specific wildlife species?</p> <p>How can ranchers and small landowners provide each other with accurate information?</p> <p>How can we tell which information to trust?</p> <p>What landowner incentives are there?</p> <p>What is the impact of equestrians upon wildlife?</p> <p>What is the long-term impact of prairie dogs on grassland health?</p>