In 1528, Cabeza de Vaca, Andrés Dorantes, a few other surviving conquistadors, and the Moroccan slave Esteban the Moor washed ashore on Galveston Island into a coastal prairie wilderness of abundance, life and local tribes.

For 8 years they learned to live with each other and the land. It was a moment in the sun, an example of how civilization might proceed in empathy. But society traveled a different road.

In the new millennium, we have a new chance to rebuild health. The Saltwater Country Prairie Preserve and other Prairie Park & Preserve Initiatives of Great Plains Restoration Council (GPRC) are all accomplished through three GPRC public health programs Restoration Not Incarceration™, Plains Youth InterACTION™ and Your Health Outdoors™.

Restoring America's Endangered Coastal Prairie as a flagship model of Public Health

Greater Houston & Upper Texas Coast, Gulf of Mexico

“Native prairie is one of the most imperiled ecosystems in the world, with a conversion rate faster than that of the Amazon rainforest.” ~ U.S. Fish and Wildlife Service, September 2010

“...[A]ccess to [the natural environment] can modify pathways through which low socioeconomic position can lead to disease.” ~ Mitchell, PhD, Popham, PhD., “Effect of Exposure to Natural Environment on Health Inequalities: an Observational Population Study”, The Lancet, 8 November 2008

“[F]elony convictions or time in prison act independently to lower the employment prospects of ex-offenders. ... The rise in the ex-offender population – and the resulting employment and output losses – overwhelmingly reflects changes in the U.S. criminal justice system, not changes in underlying criminal activity. Instead, dramatic increases in sentencing, especially for drug-related offenses, account for the mushrooming of the ex-offender population...” ~ Center for Economic and Policy Research, November 2010
Great Plains Restoration Council’s Three Programs for Ecological Health:

 Restoration Not Incarceration™, Plains Youth InterACTION™, Your Health Outdoors™

Preservation ~ Teaching ~ Healing

Ecological Health: The interdependent health of people, animals and ecosystems.

Problem Statement: America’s native prairies are severely damaged, with some facing extinction. The native coastal prairie along the Gulf of Mexico exists only in patches, with less than 1% remaining. At the same time, young people are not only more disconnected from wild nature than ever before, but many are struggling with compound challenges that lead to homelessness, despair, crime, recidivism, and poor health. Furthermore, everybody can stand to get outside and benefit from work in nature. Health restoration efforts for both the prairie and people offer tangible hope.

Mechanism: Blend health training and social work with ecological recovery and protection. GPRC applies a Three Tier Ecological Health Certification process through which program participants gain life skills and technical expertise to help themselves through saving and restoring endangered native prairie ecosystems. We intertwine culturally relevant social work and health and wellness training with the latest advances in conservation biology and restoration ecology so that both people and native prairie ecosystems are healed concurrently and holistically from the core. GPRC is building into the program a clinical psychosocial work component to help advance the new medical field of applying work in wild nature as a therapeutic modality for mental and physical health. This includes eco-psychology and eco-therapy, and also direct physiological improvement as noted in advances to address nature-deficit disorder.

Rehabilitation of native ecosystems and individuals through nature-based work therapy

Education, Processing and Adaptation:

a.) Native grassland ecosystems, wildlife, and watersheds,

b.) Integrated health: the way the human body works like a natural ecosystem and similarly functions in a state of “dis-ease” or wellness,

c.) The way humans interact with the land, each other, and self (“community” model/ “Live like a Watershed” theme),

d.) Life skills and tools building: approaches to healing and restoration so that underserved populations, including low-income communities of color, may develop institutional knowledge capable of producing serious conservation/restoration work and concurrent wellness opportunities against human trauma and crisis.

e.) Deep immersion into wild nature; especially the act of protecting and restoring wild nature

e.) Personal action, critical thinking, responsibility and leadership

f.) Social work support where needed.

Social Entrepreneurism: The rapidly emerging sectors of the green economy are expected to be the largest growth areas of the overall economy in the next few decades. Restoration Not Incarceration not only provides second chance on-the-job training for formerly incarcerated, often homeless ex-offenders who have “hit a brick wall” in their early 20s, but offers pathways out of poverty to green employment or other areas of the economy.
Three Tiers of Ecological Health Certification

1.) Retention: Basic knowledge of Ecological Health principles
2.) Application and teamwork: Utilizing Ecological Health practices and principles in the field
3.) Leadership and Teaching: Field leader and teacher of Ecological Health practices and principles

The key ingredient to Ecological Health success is not being a visitor to wild nature or our own lives, but rather inhabiting the health of both through decisive daily action naturally interwoven into every aspect of daily life.

Combating Nature Deficit Disorder: Recent studies show that children who interact with Nature develop better in all ways. They score higher on tests, they get sick less often, and their concentration, motor skills, self-discipline, coordination, balance and agility, reasoning and observational skills, social interaction, and ability to handle stress are all markedly greater. GPRC ensures youth not only interact with Nature, but help lead the recovery of prairie wilderness areas.

Ecological Health work through Great Plains Restoration Council prairie projects has stabilized public health problems associated with:

- Anger
- Apathy
- Communication
- Conflict
- Depression and despair
- Desperation leading to criminal behavior
- Domestic violence
- Ecological & social belonging
- Education deficit
- Grief
- Health and wellness
- HIV/AIDS
- Injury
- Personal responsibility
- Self-confidence and esteem
- Trauma

Great Plains Restoration Council has reduced recidivism, improved health, stabilized the lives of youth and young adults, provided a track way to employment, GEDs, and/or college, and helped save thousands of acres of America’s native prairies.

Ecological Health Programs through which GPRC creates its Prairie Parks and Preserves:

Restoration Not Incarceration™ (RNI): Ages 17-25(+/-). Restoration Not Incarceration is a three-tiered Ecological Health initiative that utilizes nature-based work therapy to target the restoration of the Upper Texas Coast’s endangered native coastal prairie ecosystem in conjunction with recovery, rehabilitation and recidivism reduction of young adults and juveniles who have been incarcerated. The Upper Texas Coastal Prairie Ecosystem includes not only tallgrass prairie grasslands but bayous, marshes, and wetlands of Greater Houston and along the Gulf of Mexico to the Louisiana border.
RNI is a prairies-and-people recovery effort and Green Jobs training initiative being designed to ultimately train hundreds of ex-offenders, probationers, and inmates in working groups. Future replication of Restoration Not Incarceration is planned for other locations in target grassland regions of Texas and New Mexico. RNI may also be eventually available for replication in other U.S. locations.

**Recidivism Study 1:** “ST [Skills Training] proved more cost effective than MEN [Mentoring], achieving a 14% relative reduction in recidivism at a savings of $33,600 per hundred youths. In ST, 37% were rearrested 2 years or more after intake, compared to 51% in MEN and 46% in JD [Juvenile Diversion]. In two of five propensity subclasses, time to first rearrest was longer in ST \( M = 767 \) days than in MEN \( M = 638 \) days or JD \( M = 619 \) days.” (Elaine A. Blechman1, Araya Maurice1, Betsy Buecker1 and Clay Helberg, Department of Psychology, University of Colorado at, Boulder “Can Mentoring or Skill Training Reduce Recidivism? Observational Study with Propensity Analysis”, *Prevention Science*, Sept. 2000.)

**Recidivism Study 2:** “Most important, unlike 30 years ago, there is today an enormous body of sophisticated research proving that **unlike incarceration, which actually increases offender recidivism, properly designed and operated recidivism-reduction programs can significantly reduce offender recidivism.** Such programs are more effective, and more cost-effective, than incarceration in reducing crime rates.” “Roger K. Warren, Primary Author, “Evidence-Based Practice to Reduce Recidivism: Implications for State Judiciaries”; prepared for the Crime and Justice Institute, National Institute of Corrections, and National Center for State Courts, 30 August 2007.)

**Plains Youth InterACTION™ (PYIA):** Ages 8-18. Struggling youth heal and strengthen themselves with Ecological Health education and leadership development through their efforts to save and protect native prairies. PYIA’s therapeutic approach inspired the birth of Restoration Not Incarceration. PYIA is designed for small groups, and focused on long-term intensive Ecological Health recovery and leadership for individual troubled youth. PYIA often works surrogate-family style with a young teen for several years. Available for replication.

**Your Health Outdoors™:** A new program available to the general public, volunteers, students, interns, and hospitals and other places of care where Ecological Health practices, principles, and hands-on volunteer work opportunities can now be experienced and learned by all. **UT-Chattanooga students just finished a visit to Houston, working side by side with our Restoration Not Incarceration crew. Morehouse & Spelman Colleges are planning for an Alternate Spring Break here in March 2013.**

**Empowerment and healing through producing positive change for others:** Many young people have no idea that anything they do has any real cause or effect good or bad. “Things just happen.” “The world just is.” We treat our bodies and the planet as if they’re “just there”. And certainly, few damaged young people have any understanding that their own lives could ever make any positive change or difference to the world. When a young person produces a positive ripple effect of health by their own hands and mind for the very first time, a whole new world opens.

**Serious conservation work:** Not just involved in ‘busy work” at a generic location, GPRC participants produce targeted high value ecological benefits helping save some of North America’s rarest and most threatened or
damaged ecosystems while simultaneously healing their own conflicts, threats and damage. The Greater Houston/Upper Texas Gulf Coast, Fort Worth, and the Southern High Plains hold some of these most threatened prairies.

Participants are supported by adult mentors, counselors and social workers.

**Partners** include the Harris County Attorney’s Office, SER-Jobs for Progress, the US Army Corps of Engineers, St. John’s Downtown United Methodist Church, Bread of Life Homeless Shelter, Katy Prairie Conservancy, Fifth Ward Enrichment Program, Bayou Preservation Association, Texas Parks and Wildlife, Dr. Christine Norton, Ph.D., LCSW, Assistant Professor at Texas State University in San Marcos, a pioneer in the field of eco-psychotherapy, Lady Bird Johnson Wildflower Center, the Nature Conservancy, and others.

**Seed funders** included Houston Endowment, Powell Foundation, Hamman Foundation, Hershey Foundation, Trull Foundation, and private individuals. Rockefeller Philanthropy Advisors/Gulf Coast Fund in New York City has just made a $15,000 grant to help expand the work and commence the landscape-level Saltwater Country preserve project 45 miles east of Houston.

Each of GPRC’s programs is evidence-based, and has at its core the emerging medical concept of people having the ability to help heal violence, illness, depression, despair, conflict and apathy through personal participation in the protection and recovery of wild nature. This is a new field for medical science, and studies in mental health, physical health, and the advancement of eco-psychotherapy are developed through GPRC’s on-the-ground work to protect our prairies and the health and future of young people.

**Saltwater Country Prairie Preserve (Flagship), 45 miles east of Houston**

A 20,000 acre restoration park of endangered native coastal prairie, wetlands and marshes on the legendary Trinity River delta as it empties into Galveston Bay and the Gulf of Mexico. (America has less than 1% of her native coastal prairie left.)

The Gulf Coast Prairie was once a tallgrass paradise of unimaginable health and abundance. Wild bison, pronghorn antelope, red wolves, Attwater’s prairie chickens, whooping cranes, giant fresh and saltwater shrimp, fish, crabs, oysters, and a multitude of other life filled the pristine land, skies, and waters. Most of the life is now gone. The original Karankawa people were killed to extinction. In the last couple centuries many cultures have had a part in the coastal prairie; now people from all colors, cultures and communities are coming together to bring health back to Earth and ourselves.

The Saltwater County Preserve site is public land owned by the U.S. Army Corps of Engineers and, as of March 2011, a Memorandum of Understanding (MOU) for restoration and public education was jointly signed by Great Plains Restoration Council and the USACE. This public land tract is in close proximity to over 100,000 acres of additional public land (primarily US Fish and Wildlife Service National Wildlife Refuges (Texas Chenier Plain Complex), and in the middle of the Central Flyway neo-tropical bird migration, so it could eventually be the wild core of a landscape-level restoration. The Preserve is also at the forefront of the nation’s battle against climate change and race to prevent extinction of America’s native coastal prairie, while helping people heal themselves and reduce social ills (including recidivism) at the same time.
Three phases to Saltwater Country (10-15 year plan):

- Ecologically restore the 20,000 acres to produce maximum Ecological Health viability so it flourishes as a **wild coastal prairie paradise much as it did in 1528** before the first conquistadors (Cabeza de Vaca, Andres de Dorantes, and others, and their Moroccan slave Esteban the Moor) washed ashore on the Upper Texas Coast.

- Acquire ecological land corridors northeastward to facilitate inland migration of plants, marshes, wildlife etc. if sea levels start to rise.

- Buy and restore at least 10,000 acres of new acquisition (primarily old rice fields) above 23 feet elevation to complete rescue, revival, and hundreds of years of sustainability of America’s endangered coastal prairie.

- Build a national headquarters green building (in town at the demonstration Esteban Park) that will serve as the gateway visitor center and Ecological Health training center, including service learning for pre-college and college tours.

Encompassing personal health, sustainability, the jails problem, the extinction crisis, climate change, the Green Economy, and America’s renewing identity, Great Plains Restoration Council’s Saltwater County project is at the nexus of all the social and ecological issues facing the country, and allows America to tell its own story going forward in the new millennium.

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**Esteban Park – urban southeast Houston**

A 3 acre urban Ecological Health demonstration park comprised of a small coastal prairie nature preserve with meditation trail and organic farm in the underserved Sunnyside neighborhood. Goal: acquire additional land and expand to Sims Bayou to make a miles-long linear Ecological Health trail threading through many Houston communities. This easily accessible site is an excellent job training and skills building facilitator at the same time it is a demonstration park for the general public to learn about Houston’s endangered coastal prairie and Ecological Health tools, practices and principles, which can help everybody get healthier in a holistic manner.

**Galisteo Basin Preserve, Santa Fe County, New Mexico**

A 12,000 acre High Plains shortgrass prairie reintroduction site for bison and 2 species of prairie dogs at 7,000 feet elevation, owned by Commonweal Conservancy. Through a GPRC-Commonweal partnership, GPRC operates the Preserves ecological restoration and wildlife restoration program. Short term success: A Gunnison’s prairie dog colony has successfully been reintroduced and established, with a very high survival rate. Current work is to reintroduce a black-tailed prairie dog colony, remove hazardous old barbed wire fencing across the internal property, and prepare for historic bison reintroduction. Long-term goal: to expand to 80,000 acres in partnership with local, state, and federal partners (public, private, & non-profit). Restore wild populations of bison, pronghorn antelope, prairie dogs and others while protecting remaining indigenous wildlife like black bears and mountain lions throughout.

**Fort Worth Prairie Park**

A rare 2,000 acre tallgrass prairie preserve on the backdoor of 5 million people living in the DFW Metroplex that was threatened with destruction. The first 235 acres and mile of riparian area of Rock Creek have been purchased.
and protected. Goal: finish out acquisition of remaining high-quality prairie and connect to USACE Rock Creek park downstream, opening an ecological corridor all the way to Lake Benbrook. 2 bison have already been reintroduced.

**Oglala Prairie Preserve**

A 4,600 acre expansion of Badlands National Park (North Unit), north of Pine Ridge Indian Reservation, South Dakota. Property was in danger of being bought by a prairie dog killing club and GPRC was able to locate a funder to purchase it and hold it until the National Park Service can acquire it for permanent protection. A satellite of GPRC’s Plains Youth InterACTION program was operated by Oglala Lakota members of the Pine Ridge Indian Reservation from 2002-2009 until that effort was able to spin off and operate on its own as part of the new Thunder Valley Community Development Corporation.

**Great Plains Restoration Council’s Body and Earth, Soul and Soil approach:**

“We take care of body and Earth as one and know that, by taking care of others, we take care of ourselves.”

**Organizational Description:** Great Plains Restoration Council (GPRC) is headquartered in Houston, TX, and was founded in May of 1997 by Jarid Manos during prairie dog rescues while simultaneously working in physical therapy and exercise physiology to help people heal trauma, injury, and illness through holistic recovery approaches. **GPRC became a formal 501(c) 3 in October 1999.**

**Mission Statement:** Great Plains Restoration Council works to restore and protect our shattered prairies and plains through developing youth and young adult leaders in Ecological Health. Protecting wild nature is a matter of public health, and participating in its hands-on recovery offers therapeutic modalities for many social and physical ills.

**Physical Health from Nature:** “...Acess to [the natural environment] can modify pathways through which low socioeconomic position can lead to disease. ... Health inequalities related to income deprivation in all-cause mortality and mortality from circulatory diseases were lower in populations living in the greenest areas.” (Mitchell, PhD, Popham, PhD., “Effect of Exposure to Natural Environment on Health Inequalities: an Observational Population Study”, The Lancet, 8 November 2008).

**Mental Health from Nature:** University of Michigan psychologist Michael Berman and colleagues completed a study that found “**Interacting with nature shifts the mind to a more relaxed and passive mode, allowing the more analytical powers to recover themselves** ... the kind of attention we need to study for exams, make financial decisions, and so forth—the business of daily life”, and that this ability to focus and concentrate is depleted in the constant noise and overstimulation of modern urban life. (“In Our Nature”, Newsweek, February 2009.)

**A Harris County, TX (Houston) Corrections pilot project, “The Conservation Work Probation Program (Conservation Camp) – Phase II:** The Conservation Work Probation Program had trainees performing wetlands and prairie restoration out at Sheldon Lake had an Effectiveness Rating of “77.2% graduates with no new arrest after up to 24 months.” (Harris County Attorney’s Office). Phase II of the program will build upon our progress.

**Future Destination Management for the General Public as earned income and expansion of teaching:** GPRC will develop a Destination Management Platform to elevate any traveler’s vacation into a service learning trip with a contributing purpose toward sustainability and ecological health. The Destination Management Platform will create a broad market for GPRC to address the world’s ecological crisis by providing people with greater health opportunities, especially those who desire to get outside and work outdoors and no longer be passive “visitors to nature or our own lives”. Participants will actively engage in restoration, preservation, teaching, and healing while investors will be introduced to strong social entrepreneurship opportunities through eco- and wellness-based tourism (including new green jobs in wildland restoration).
Examples of GPRC programs and services will include:

- Special workshops (two hour duration)
- Customizable training sessions indoors and outdoors
- Half day and day long nature-based work therapy
- Full Scale Retreats (partner with vegan (including raw food) wellness chefs at Living Life Fresh, LLC or Paradise Wellness, LLC.)
- College Tours, including HBCUs. Week or two week service learning add-ons.
- Hospitals and other places of care programming specifically designed for the medical community and patients
- Contract with County and State agencies to provide recidivism reduction treatment, training, and community service options for low level offenders through nature-based work therapy
- Team building outdoor work opportunities for businesses, agencies etc. and their employees, staff, executive management, etc.

“For 50 years I have been on the battlefield and in the trenches fighting for civil rights, human rights, voting rights, housing and transportation rights to provide parity among all of God’s people, but what good is it if all those rights were enacted and a polluted environment destroys us with disease and death. The timing is perfect for science and religion to assume its rightful, ordained leadership position – confronting aggressively any and all fears which would seek to destroy a perfect gift to us – THE ENVIRONMENT.”

~ the Rev. Dr. Gerald Durley, pastor of the historic Providence Baptist Church in Atlanta.

Most of Texas was once wilderness prairie:
Extent of native coastal prairie on Upper Texas Coast and of other Texas prairies ((all painted in yellow),
Stephen F. Austin map, 1822
Great Plains Restoration Council Project Areas in the Greater Houston/Upper Texas Coast Region

There is less than 1% of the original native coastal prairie left.