COLORADO
DEPARTMENT OF NATURAL RESOURCES

COLORADO WATER CONSERVATION BOARD

WATER SUPPLY RESERVE ACCOUNT
2006-2007 GRANT APPLICATION FORM

Lower South Platte Wetland Initiative Phase I South Platte River, CO

Name of Water Activity/Project **River Basin Location**

$278,476		Basin Account		Yes
	X	Statewide Account		No

Amount of Funds Requested | Please Check Applicable Box | Approval Letter Signed By Roundtable Chair and Description of Results of Evaluation and Approval Process

*** For the Basin Account, the Application Deadline is 60 Days Prior to the Bimonthly CWCB meeting. The CWCB meetings are posted at www.cwcb.state.co.us and are generally the third week of the month.**

*** For the Statewide Account, the Application Deadline is 60 Days Prior to the March and September CWCB Board Meetings.**

* In completing the application you may attach additional sheets if the form does not provide adequate space. If additional sheets are attached please be sure to reference the section number of the application that you are addressing (i.e., A.1. etc.).

Instructions: This application form must be submitted in electronic format (Microsoft Word or Original PDF are preferred). The application can be emailed or a disc can be mailed to the address at the end of the application form. The Water Supply Reserve Account Criteria and Guidelines can be found at http://cwcb.state.co.us/IWMD/. **The criteria and guidelines should be reviewed and followed when completing this application.** You may attach additional sheets as necessary to fully answer any question, or to provide additional information that you feel would be helpful in evaluating this application. Include with your application a cover letter summarizing your request for a grant. If you have difficulty with any part of the application, contact Rick Brown of the Intrastate Water Management and Development (Colorado Water Conservation Board) for assistance, at (303) 866-3514 or email Rick at rick.brown@state.co.us. Generally, the applicant is also the prospective owner and sponsor of the proposed water activity. If this is not the case, contact the Rick Brown before completing this application.

Water Supply Reserve Account – Grant Application Form
Form Revised May 2007

Part A. - Description of the Applicant (Project Sponsor or Owner);

1. Applicant Name(s): Ducks Unlimited, Inc.

Mailing address: Great Plains Regional Office
2525 River Road
Bismarck, ND 58503

Taxpayer ID#: FIN 13-5643799 Email address: gkernohan@ducks.org

Phone Numbers: Business: 970-339-5719
Home: 970-481-7793
Fax: 303-484-5543

2. Person to contact regarding this application if different from above:

Name: Greg Kernohan

Position/Title Conservation Program Manager, CO/WY

3. Provide a brief description of your organization below: see "Description of Applicant" in Part 2 of Criteria and Guidance for required information.

Ducks Unlimited, Inc. (DU) is a private not for profit (501 c3) organization whose mission is to "conserve, restore and manage wetlands and associated habitats for North America's waterfowl. These habitats also benefit other wildlife and people". Established in 1937, DU was founded by American engineers traveling to Canada during the dust bowl era to hunt waterfowl. They recognized that human impacts had reduced the planet's ability to mitigate extreme climate changes. Wetlands, being one of the most dynamic natural systems on earth, provide flood mitigation, recharge or discharge water from aquifers, remove contaminants, provide habitat for wildlife, and provide livelihoods and recreation for people. Over our 70 year history, DU has conserved more than 11 million acres of wetlands and associated habitats. In fact, until 20 years ago all conservation work was conducted in Canada. Since that time the organization has focused on important wetlands throughout the United States, including those in Colorado. Since 1997, DU has worked with several organizations focused on wildlife management, open space, and water resource conservation, and management. To date we have conserved, restored and managed nearly 71,000 acres of wetlands and associated habitats in Colorado, including 16,000 acres in the South Platte River Corridor (SPR). To assist in delivering projects, Ducks Unlimited staff includes a full time program manager, a biologist, a professional engineer, a construction manager, and a fundraising director that live in Northern Colorado. As a 501 c3

we have over 10,000 registered members in Colorado.

The SPR is DU's main focus in Colorado. Diverse habitats and geographic isolation from other large western rivers attracts millions of waterfowl and migratory birds each year. The Rocky Mountain Bird Observatory estimates that 74% of all bird species in Colorado are found on the SPR sometime during each year. However, the Platte is losing its diverse habitat and natural features due to impacts on water resources caused by human diversions. Changes in natural flood regimen such as overbank flooding, scouring, and flushing flows have reduced the number of seasonal wetlands, warm-water sloughs, and sandbars. These habitats have been further reduced by agricultural practices, and municipal and industrial enterprises.

River augmentation via wetland recharge has become a viable technology for restoring and creating seasonal wetland habitat. Water applied directly to the recharge basin provides migration and wintering habitat, but return flows through the alluvial aquifer augment flows to warm-water sloughs, raise groundwater tables to supply seasonal wetlands, and supplement flows in the river channel, the latter of which is the main goal of river augmentation projects. Recent studies conducted by the RMBO and Colorado Division of Wildlife (CDOW) demonstrate that recharge wetlands are vital to migratory and wintering birds on the SPR, as more than 20 species of migratory birds and 27 species of waterfowl use these habitats.

Obviously, most recharge projects are conceived to support agricultural, municipal and industrial enterprises. Recharge projects retime water excesses in the river so that additional water returns to the river when natural flows are insufficient to satisfy water rights. However, DU has found a niche in supporting recharge projects with design features that benefit wildlife and has built diverse partnerships to assist in accomplishing this goal. It is a unique and highly successful partnership that has delivered recharge projects on public, private and municipal lands. Partners in the South Platte Wetlands Focus Area (SPFAC) include Ducks Unlimited, USFWS Partners for Wildlife (PFW), CDOW, Colorado Open Lands (COL), Lower South Platte Water Conservancy District (LSPWCD), Northern Colorado Water Conservancy District (NCWCD), RMBO, South Platte Lower River Group (SPLRG), and South Platte Water Related Activities Program (SPWRAP). This partnership was instrumental in developing the Tamarack Phase I recharge project, now central to Colorado's contribution to the Platte River Recovery Program (Program).

For the purposes of this application DU chose three landowners on three tracts of land that would best demonstrate the power of collaboration, and the ability for partnerships to meet the goals and objectives of the SWSI and HB-1177. These tracts are located throughout the lower river from Brush to the stateline. We chose this geographic area because it conforms to the administrative boundries of the LSPWCD, and the project focus area of the SPWRAP, and within the larger project boundary identified by DU.

Brush Prairie Ponds SWA

This 620-acre property's top priority is to provide recharge credits to cover the City of Brush's municipal wells. Owned by the city, wetlands have been developed throughout the property by DU and CDOW to provide waterfowl habitat for public hunting. The Fort Morgan canal delivers recharge water in the spring and early summer to fill the wetlands, which remain flooded through the first part of fall. The City and the Fort Morgan Reservoir and Irrigation Company split the recharge credits, bnefitting both entities.

Survey's conducted by CDOW and RMBO indicate that this is one of the most popular waterfowling destinations in Northern Colorado, and waterfowl harvests are more than double those on other public access properties. However, there is still room to grow. The original decree allowed for 12 diversions along the Fort Morgan Canal as it crosses the property, and although the 12th diversion was installed, it was never used. Concerns

over potential flooding of adjacent neighbors and contamination of groundwater halted the easternmost project from being completed. The city has now settled those disputes through intense groundwater monitoring and adjacent land purchases and is now ready to proceed with the final phase of the project.

Ducks Unlimited will refurbish the existing diversion structure and construct laterals to deliver water from the canal to the wetland basins. Four wetland basins will be developed and connected through open ditches and pipelines. A total of 20 new acres of wetlands will be developed capable of holding 20 acft at full service level. These wetlands will be topped off several times throughout the recharge season to introduce several hundred acft into the alluvial aquifer annually.

Golden Eagle Ranch

This property is quickly becoming the centerpiece of DU's private lands projects. The 2,000-acre property located near Proctor, Colorado straddles both sides of the river. In 2003, the landowners donated a conservation easement to Ducks Unlimited, protecting the land and water rights in perpetuity. DU has been working with the landowners to develop recharge facilities that will increase recreational hunting opportunities while maintaining an agricultural enterprise.

The LSPWCD recently recieved a small North American Wetlands Conservation Act (NAWCA) grant ($75,000) to construct wetlands on the property for the purposes of recharge, and to provide habitat for waterfowl. Funds will be used to construct 8 wetlands on marginal irrigated cropland. NAWCA funds will pay for survey and design, levee construction, and water level control structures. However, as part of the restoration, funds are required to improve the water delivery infrastructure. Upgrades are required at most ditch crossings and over half of one mile of pipe is required to line the laterals, which will assure water infiltrates the groundwater table in wetlands, not in the laterals. Engineering and legal documents are being drafted now and should be filed before funds from this grant application are awarded.

Recharge credits from the project will be used by landowners, agricultural well districts, and SPWRAP. The landowners are interested in having the water to flood wetlands for recreational opportunities. This will require water from both flooding recharge wetlands with recharge water and out-of priority water covered by credits. The Lower Logan Wells Users will benefit directly from the recharge credits to cover subsistrict members, mostly agricultural producers. SPWRAP has agreed to lease any excess credits from the subdistrict. Current engineering estimates indicate that there should be at least 120 acft of water available to the SPWRAP for PRRP.

Heyborne Recharge Project Phase I

The Heyborne project, as it has become known, includes approximately 650 acres located along the river at Ovid. Several property owners are in negotiations with our partnership DU, PFW, LSPWCD, NCWECD, SPWRAP to develop unappropriated water at the stateline for purposes of agricultural, municipal, and endangered species needs. Preliminary investigations indicate that substantial water is available at the Nebraska stateline during winter months. These waters could be retimed through recharge to meet the needs of the PRRP and surrounding agricultural and municipal needs. Ducks Unlimited and SPLRG have conducted core samples of the properties involved and found that deep soils (>65 ft) and soil conditions are advantageous for aquifer recharge projects.

The SPWRAP has agreed to lease any and all credits from the project for the PRRP. DU has also been approached by local agricultural producers to lease credits to cover several tributary wells that are currently operating out of priority. The landowners' interest are purely for waterfowl. These properties have been purchased

as duck clubs and as long as there is water during hunting seasons, which we've proven recharge projects can provide, the landowners will release almost all credits for use to support area and state priorities.

This application seeks funds to further our feasability study and construct test sites. Core samples conducted by SPLRG indicated that the project sites are viable for recharge. DU will need additional funds to conduct the survey and design aspect of this project. NCWCD and LSPWCD request funds to assist in developing recharge models based off State CU and SDF. As some of these tasks are already underway, it will be important to recognize the need to construct test sites and perform pumping tests to assure enough water can be delivered.

4. If the Contracting Entity is different then the Applicant (Project Sponsor or Owner) please describe the Contracting Entity here.

Not Applicable

Part B. - Description of the Water Activity – Please Refer to Criteria and Guidance Document for Eligibly Requirements

1. **Name of water activity/project:**

Lower South Platte Wetland Initiative Phase I

What is the purpose of this grant application?

[X] Environmental compliance and feasibility study

[X] Technical Assistance regarding permitting, feasibility studies, and environmental compliance

[X] Studies or analysis of structural, nonstructural, consumptive, nonconsumptive water needs, projects

Study or Analysis of:

- [X] Structural project or activity
- [ ] Nonstructural project or activity
- [X] Consumptive project or activity
- [ ] Nonconsumptive project or activity

[X] Structural and/ or nonstructural water project or activity

2. Describe how the water activity meets these Threshold Criteria.

1. The water activity meets the eligibility requirements outlined in Part 2 of the Criteria and Guidelines.

The water activity meets the eligibility requirements outline in Part 2 of the Criteria and Guideline. As a private non-government organization, Ducks Unlimited is eligible to apply for the SB-179 grant funds. The grant provided by SB-179 will be used to deliver capital construction projects of a structural nature by purchasing materials and equipment, contracting construction work, etc. However, there will be a need to conduct small survey and design studies to determine feasibility and pursue permits for environmental compliance. Most projects outlined in the application are already approved for NEPA Section 7 through the SPWRAP. However, Section 404 permits of the Clean Water Act will need to be attained.

2. The water activity is consistent with Section 37-75-102 Colorado Revised Statutes.

The requirements/language from the statute is provided in Part 3 of the Criteria and Guidelines. This project shall conform to the requirements/language of the above Statute. Projects delivered with funds provided as part of this application possess or will file for recharge rights according to the laws and statutes of Colorado. Most rights have been filed. However, some filings are being engineered at this time. As most project tracts, to be discussed later, are located within a few miles of the state border there appears to be opportunity to file new water rights (2007) that will still be effective. In fact, at this time there are no other direct diversions for recharge filed below the property boundary.

3. The water activity underwent an evaluation and approval process and was approved by the Basin Roundtable (BRT) and the application includes a description of the results of the BRTs evaluation and approval of the activity. At a minimum, the description must include the level of agreement reached by the roundtable, including any minority opinion(s) if there was not general agreement for the activity. The description must also include reasons why general agreement was not reached (if it was not), including who opposed the activity and why they opposed it. Note- If this information is included in the letter from the roundtable chair simply reference that letter.

The Project was presented to the South Platte Roundtable on July 9th, 2007in a manner following all by-laws and rules set by the roundtable. The South Platte Roundtable unanimously passed a motion of support for the project. Bruce Gerk, Harold Evans and Joe Frank made positive and supporting comments in favor of the agreement. A letter from the roundtable chairman will support this grant application

4. The water activity meets the provisions of Section 37-75-104(2), Colorado Revised Statutes. The requirements/language from the statute is provided in Part 3 of the Criteria and Guidelines.

Given the status of many requirements under this threshold, the project proponent has exceeded most expectations. Although many of the requirements outlined in this statute are being pursued by each roundtable, none of them are complete. The Statewide Water Supply Initiative (SWSI) states that the counties involved, Morgan, Logan, and Sedgwick will provide 8,900 acft of water toward the M&I gap. This will be conducted specifically via wetland recharge projects. Additionally, the State is required to deliver 10,000 acft for the PRRP, an additional gap that the SWSI neglected to account for, but must be met as part of the overall gap in future water needs. This project will build significant capacity toward meeting those gaps. Ducks

Unlimited has sought the advice of local stakeholders in developing this project. Most stakeholders are members of the SPFAC, and are included as match providers in this application. Stakeholders currently providing input include private landowners, NCWCD, LSPWCD, SPLRG, DU, USFWS, City of Brush, Julesburg irrigation District and many more.

3. For Applications that include a request for funds from the Statewide Account, describe how the water activity meets the Evaluation Criteria. See Part 3 of Criteria and Guidelines.

Promote Collaboration & Cooperation

The water activity addresses multiple needs or issues as outlined in SWSI Phase I and in the PRRP. This project includes several partners that provide match in the form of land, cash, and in-kind services. As stated above, DU works through a cooperative partnership of wildlife, open space and water interests and has been highly successful in the past. Almost all of our work centers on providing river augmentation through wetland recharge projects, which benefit many of the partners in our SPFAC. As SWSI recommended water needs to meet several growing demands, of which our projects meet several including agricultural, municipal, industrial, environmental, recreational, and public access to lands for recreation. Through this partnership DU has lead the way with match funds to secure North American Wetlands Conservation Act Grants (NAWCA). These grants represent the pinnacle of cooperation as they require significant match and diverse partnerships to secure. We have received two $1-million grants in the past to protect land and water through conservation easements, and restore wetlands, mostly recharge wetlands. Match requirements for NAWCA grants are $1 nonfederal to $1 federal, however higher match ratios make proposals much more competitive in the scoring process. Our partnership has raised nearly $10 million to secure the two NAWCA grants, which have now been completed. The partnership will apply for another NAWCA grant if the CWCB grants this application funding.

Millions of dollars have been spent to secure land and water for the purposes now identified for SWSI. In the past 10 years DU and its partners have conserved over 16,000 acres. Contributing partners have included numerous private landowners, CDOW, SPLRG, LSPWCD, NCWCD, DU, USFWS, COL, Centennial Land Trust (CLT), RMBO, City of Brush, City of Fort Morgan, Julesburg Irrigation District, Union Mutual Ditch Company, Box Elder Ditch Company, Lower Latham Reservoir & Irrigation Co., and many more. This represents about 18 partners in total with all in agreement that we have diverse needs and goals that can be satisfied by cooperating without compromising our core values. Only through this cooperation are we able to raise the match required to access NAWCA grants. This project will include two private landowners ($75,800), SPWRAP ($240,000), SPLRG ($57,026), LSPWCD ($104,203), DU ($94,937), and the City of Brush.

The PRRP requires substantial water to be delivered to the Central Platte in Nebraska. Colorado is participating by dedicating 10,000 acft annually to the first phase of this 13 year program. Water users will be covered for future depletions and negate the need to conduct individual NEPA studies as members of the SPWRAP. This program is already conducting interbasin compacts by providing water coverage for members associated with the Metro, South Platte, and North Platte basins. Members from all three basins will benefit directly from this project as SPWRAP and the PRRP will be the main beneficiary of developed water. Although DU and SPWRAP are developing language to assure recharge credits will be available for the PRRP, we are confident this detail can be worked out. In fact, the Heyborne tract could have all water credits diverted to the program.

Facilitating Water Activity Implementation

Funding from this activity will allow the project to proceed and without it the project is in jeopardy. As part of the partnership, many partners and stakeholders have stepped forward to provide matching funds. For the most part match has been provided as incentive to pursue the SB-179 grant funds. The partnership believes that this project is a perfect fit for the HB-1177 process. Without the SB-179 funds the partnership will be unable to raise the match required to successfully apply additional grants including federal NAWCA grants, which would bring $1M for projects along the South Platte. This grant would also add to the partnership and bring additional State level expertise to our focus area.

There is an urgency associated with this project from a number of perspectives. Water rights on the South Platte have been under threat from purchase and removal of consumptive water units, "buy and dry". This effect, although not new, has escalated over the past several years resulting in reduced water allocations or whole scale dry-up. While we don't believe this project will solve all problems, we hope that it will be an example of the power of partnerships to other basins in the state.

Additionally, NAWCA grants applications compete nationally for about $50 million. These grants are ranked by Joint Ventures. In Colorado, the Playa Lakes Joint Venture would rank the South Platte NAWCA application. They have informed DU that there would not be a competing grant application. As a rule of thumb all joint ventures are awarded at least one NAWCA application per round. Therefore, this NAWCA application would have a high probability of being funded this round.

Most of the projects identified in the proposal can be completed by July, 2009. Ducks Unlimited, and many of its partners have set annual budgets that will be implemented by July 2008. Although most of the design and permitting phase can be completed by July 2008, most of the construction phase will take place the following fiscal year. Budgeting time and funds in this manner may seem long, but supposing grant application awards, followed by contracting time, it usually takes 6-8 months just to get funding contracts in place before any work can commence.

Ducks Unlimited and its partners have demonstrated the ability to implement the project in the proposed timeframe. We have a long a respected history of delivering these types of project in a timely manner and have the experience to understand all the nuances associated with delivering recharge type projects. Through our partnership, DU and PFW will deliver the survey and design and construct projects. The LSPWCD, NCWCD, SPWRAP, and SPLRG will assist landowners with water engineering and accounting through the project and beyond. Water rights filings will be pursued and maintained by the landowner. Currently, DU and PFW have never delivered a recharge project that hasn't eventually delivered the expected water either through decreed rights or through temporary substitute supply plans. This is due largely to working with dedicated and knowledgeable partners.

Meeting Water Management Goals and Objectives and Identified Water Needs

The water activity helps complete a needs assessment, including consumptive and/or non-consumptive needs, that was not fully funded from other sources.

Not applicable.

The water activity meets one or more of the water management objectives identified in the Statewide Water Supply Initiative,[3] helps implement projects and processes identified as helping meet Colorado's future water needs, and/or addresses the gap areas between available water supply and future need as identified in the Statewide Water Supply Initiative or a roundtable's basin-wide water needs assessment done in accordance with the Colorado Water for the 21st Century Act.

As outlined in the SWSI water management objectives, the project addresses several of the nine objectives adopted by SWSI, which were in turn adopted by the South Platte Roundtable.

Sustainably meet municipal and industrial demands:

All tracts will provide water for the PRRP through SPWRAP. Given that SPWRAP membership consists mostly of Front Range municipalities which will benefit directly from project water. These projects are meant to act as a demonstration of the larger capability of our partnership, but will also build significant capacity toward the goals of the PRRP. However, the Brush Prairie Ponds enhancement will directly impact municipal water supplies by adding capacity and introducing new recharge water sources to assure sustainability.

Sustainably meet agricultural demands:

Project tracts located in the lower river counties of Logan, and particularly Sedgwick will provide recharge credits for agricultural producers. At this time there are several entities that will be part of the water court filing whom must remain anonymous until the documents are filed in water court. Recharge credits from these projects will be used by agricultural interests, but excess credits will be leased to SPWRAP to satisfy PRRP commitments.

Optimize existing and future water supplies:

Project tracts will take advantage of existing and unappropriated water supplies. Brush Prairie Ponds operates in cooperation with the Morgan County Irrigation District. Funds from the grant will be used to complete the final phase of restoration of wetland basins associated with diversion 12, a diversion structure that was installed, but never used. Lower river private tracts will take advantage of unappropriated winter flows in the river near the state line. Discussions with Colorado Department of Water Resources, CDOW, The US Army Corps of Engineers and the South Platte Decision Support Systems have indicated that substantial water passes the state line during winter months without being used for beneficial uses before exiting the state. Ducks Unlimited proposes retiming this water through recharge projects in the area for use during summer months for agriculture, and the PRRP, and use in the fall, winter and spring as habitat for wildlife.

Enhance recreational opportunities:

Brush Prairie Ponds is owned by the City of Brush and leased to the CDOW for public hunting access. Originally constructed as the city's recharge program to retime water and protect their municipal wells, the city opened Brush Prairie Ponds to the public through the CDOW. This became one of DU's first wetland restoration / creation projects in the state. Presently, the property is one of the best waterfowling properties owned by the State, harvesting more almost double the number of waterfowl than any other public access property. Ducks Unlimited was awarded a separate grant from Xcel Energy to construct a wildlife viewing platform on the property.

Other tracts included in this grant will remain private access for the foreseeable future, but are being enhanced to provide waterfowl hunting opportunities. Most tracts are managed as duck clubs with portions of the river channel and warm-water sloughs providing hunting opportunities. Recreational enhancements will be provided by construction of recharge wetlands designed to provide seasonal wetland habitat in early fall. Return flows from the project will enhance warm-water sloughs, and the river channel during winter months.

Provide for environmental enhancements:

Project tracts will provide for environmental enhancements. Wetlands are well documented for their ability to remove suspended solids, dissolved solids, and chemicals from water. The lower South Platte River is well known for its nitrogen and salinity loads. Recharge wetlands offer opportunity to remove water from the river and filter it through the wetlands basins before returning to the aquifer. Most information regarding wetland water treatment is derived from several studies conducted over the last 20 years. There is relatively little water quality data been collected from established recharge projects along the South Platte. The City of Brush conducted several years of monitoring along the property boundary to determine groundwater contaminant changes that may be caused by the recharge project. The results showed that contaminants, such as nitrogens and salts, were reduced. Visual inspections of these wetlands also demonstrate suspended solids are removed due to settling as the water enters the aquifer.

Wetlands habitats also provide direct benefit to adjacent uplands. Studies have shown that adjacent uplands up to 6 times the area of the wetland can be influenced by the wetland. Increased species richness and diversity in both plant and animal species is often observed.

Promote cost effectiveness:

Most partners involved in this project are non-profit organizations or state and federal agencies. With a diverse partnership each interest brings valuable expertise capable of developing projects from conception to delivery. Most upfront costs are kept low due to the nature of contributing partners and delivery is completed via federal regulations to promote competitive bids to assure the best contractors at the lowest price. Projects are also developed to promote cost efficiency to facilitate long term management (i.e., gravity feed vs. pumping).

Protect cultural values:

All tract lands have been cleared or are being reviewed for National Cultural Heritage Program clearances. Preliminary verbal clearance has been provided for all tracts.

Provide for operational flexibility:

Most projects will provide operational flexibility. The Heyborne project will likely be operated by SPWRAP or LSPWCD or the District 64 Water District to assure that the best combination of water recharge, storage, irrigation, and wildlife needs are met. The projects will be operated in cooperation with several partners to meet the goals of this proposal and the long term goals of the Platte Recovery Program and SWSI.

Comply with all applicable laws, regulations, and water rights:

Ducks Unlimited will assure that all applicable laws, regulations, and water rights are followed as the project progresses.

The water activity promotes water conservation and efficiency:

T he project promotes water conservation by putting water to beneficial use and thereby increasing efficiency of water rights associated with the tracts.

The applicant has an existing water conservation plan:

Ducks Unlimited unveiled a ten year conservation plan for Colorado in 2003. Water originating from the mountaintops in Colorado eventually reaches the Platte River in Nebraska, the Colorado River Delta in Mexico, the Arkansas River Bottoms in Arkansas, and the Rio Grande Delta in Texas. This water nourishes wetlands of these systems and provides stream flow critical to fish and wildlife. While many events and decisions along the course of these flows determine the ultimate quantity and quality of water

that nourish downstream wetlands, the health of the headwaters is the first link in the chain. Seasonal wetlands created by overbank flooding during spring runoff were one of the most common types of wetlands in the Colorado prior to settlement. Seasonal wetlands purify melt water as it moves through wetland soils and plant roots, recharge aquifers that provide base flow for rivers and streams, and attenuate flood events by retaining runoff from snowmelt and thunderstorms. Ducks Unlimited's conservation efforts with seasonal wetlands help insure that the headwaters of the state continue to flow and provide high quality water.

Although DU goals are measured in acres conserved, the pivotal ingredient is water. By definition, wetlands depend on water, which is seasonally scarce in Colorado and the rest of the arid west. DU must strengthen water rights to existing wetlands and purchase new water rights to ensure our investments in wetland conservation do not dry up due to water extractions, diversions, or consumptions. DU's Colorado Conservation Plan bridges the gap between traditional water users and the conservation community by pro-actively developing wetland restoration and protection projects that benefit both interests. Unless sufficient water is secured for maintaining viable populations of waterfowl over the next decade, staggering wetland losses could occur as the price of water continues to escalate. DU has been successful in acquiring water rights for use on state-owned lands. DU is also one of the only land trusts in Colorado that requires conservation easement donors donate water rights to the easement, thereby securing them in perpetuity. Ensuring that restoration projects comply with all applicable state water laws and that these projects make the most efficient use of water is imperative to a successful and long-term program.

Ducks Unlimited's objectives for the SPR focus on protection, restoration, and management of the public and private wetlands and associated uplands in this critical wetlands corridor. Although the corridor encompasses 425,310 acres it includes 71,000 acres of wetlands, 66% of which have been lost.

The water activity will make new water available for use:

Project tracts near the state line will be operated using new water appropriations. Preliminary discussions with LSPWCD, SPLRG, the CDWR, and local water interests indicate that there is substantial unappropriated water crossing the state line during winter months. The project will allow DU to further explore this opportunity and put excess water to beneficial use through recharge. Funds from this grant will help DU further explore this opportunity and proceed with survey and design of the recharge facilities.

The water activity involves reoperation, enlargement, or rehabilitation of existing facilities:

Brush Prairie Ponds will be enlarged to facilitate the original recharge decree and maximize the efficiency of the operation. Other project tracts such as Golden Eagle Ranch will be operated different from historic operations to make use of existing water rights in recharge and augmentation scenarios that benefit waterfowl in addition to agriculture.

The Water Activity Addresses Issues of Statewide Value

The water activity helps sustain agriculture, and open space, or meets environmental or recreational needs:

Answered above.

The water activity assists in the administration of compact-entitled waters or addresses problems related to compact entitled waters and compact compliance and the degree to which the activity promotes maximum utilization of state waters:

The project will assist in addressing the shortfall in compact entitled waters on the South Platte. Generally, summer flows have been insufficient to meet compact requirements of 120 cfs during summer months. It is generally agreed that retiming of water throughout the corridor during times of excess or recharge calls will level off flows to meet the compact. Project tracts located near the state line are best situated to retime excess water for the PRRP and the compact. Water for these tracts would have a 2007 water right only capable of taking water during periods of high flows, mostly non-irrigation months.

The water activity assists in the recovery of threatened and endangered wildlife species or Colorado state species of concern:

Project water will be used to directly address Colorado water contributions to the PRRP which will benefit endangered species in Nebraska. The PRRP identifies that habitat for piping plover, interior least tern, and whooping crane depends on increased water flows. Colorado has agreed as part of the program to build the capacity to deliver 10,000 acft annually. Project tracts will provide water toward this effort.

Additionally, restored, created, or enhanced wetlands derived from this project will benefit several species of concern. Project wetlands will benefit 52 bird species of national, regional, and local priority. Approximately 12 species breed in the area, 3 over winter, and all migrate through the project area.

Several fish species of state concern will also benefit from improved flows through warm-water sloughs and the river channel, including brassy minnow and top minnow.

The water activity provides a high level of benefit to Colorado in relationship to the amount of funds requested:

The CWCB is will be contributing about 35% of the funds toward this project. Considering the benefits outlined in previous sections, the benefit to Colorado is substantial compared to the funding request. The CWCB has the opportunity to join a highly successful partnership capable of delivering on the objectives outlined in SWSI and directed by HB-1177, a true interbasin project.

The water activity is complimentary to or assists in the implementation of other CWCB programs.

The water activity helps support the State's economic vitality and competitiveness in national and international markets:

This is really a question of scale. Although the project proposal seems small compared to constructing large reservoirs or storage facilities, the project meets all of the requirements of a project that could assist in the States economic vitality. Recharge projects are required and have become the main technology to assist in keeping many water rights viable. Such water rights allow for agricultural, municipal, and industrial activities to proceed. Without recharge projects in the lower river and without the SPWRAP most all water projects would be subject to individual ESA's and permitting requirements, which would surely handicap most operations.

4. **Please provide an overview of the water project or activity to be funded including – type of activity, statement of what the activity is intended to accomplish, the need for the activity, the problems and opportunities to be addressed, expectations of the participants, why the activity is important, the service area or geographic location, and any relevant issues etc. Please include any relevant TABOR issues that may affect the Contracting Entity. Please refer to Part 2 of Criteria and Guidance document for additional detail on information to include.**

This project proposal will focus on delivering high quality recharge wetlands in the lower SPR corridor. Recharge projects as part of a program to augment SPR flows through the alluvial aquifer have become a widely accepted and dependable technique for meeting the demands of water users along the river. In fact, our program has become the standard for recharge projects with wildlife and wetlands funds invested in the majority of recharge projects on the Platte. Proposal participants will provide direct diversion rights designated specifically for recharge to meet a variety of beneficial uses corresponding to the objectives and recommendations as outlined by SWSI.

Water has been diverted from the SPR for anthropocentric needs since colonization more than 140 years ago. Surface rights were developed and applied via the Doctrine of Prior Appropriation. However, as technology changed and water demands grew, new systems for water storage and diversion were developed, resulting in an overappropriation of water resources for irrigation and summer time water. Over the last 40 years, a river augmentation program that retimes river flows from times of excess to times of shortage has developed and become the mainstay for addressing water shortfalls in the river.

River augmentation is a complicated system that utilizes wetland recharge principles to retime water and recharge the alluvial aquifer. By diverting water from the river during spring freshets or winter runs when recharge rights or free river water is available, the water can be moved to recharge basins located off stream. The recharge basins allow water to infiltrate the alluvial aquifer, where it will slowly return underground to the river channel. Return times have been thoroughly modeled and continuously updated to assure that recharge water returns to the river at the required time. By operating in this fashion, less senior water rights can operate out of priority without causing injury to senior right holders. River management under this system has permitted several junior water rights holders to continue operating legally. Without river augmentation municipal, industrial, and agricultural operations would be severely and negatively impacted.

Recharge projects are expensive undertakings for any entitiy. Ducks Unlimited and our partners have always understood that recharge wetlands provided significant benefit to migrating and wintering birds, but only recently had evidence from scientific studies. Although a few enterprises and landowners have built projects on their own, most have some wildlife funds associated with them. The vast majority of projects in the lower SPR have been built by DU, PFW, or the NRCS' Wetland Reserve Program. Recent studies conducted by the RMBO and CDOW underline the value of recharge projects for wildlife. Winter surveys of sites in the project area indicated that older recharge projects regularly hosted 10,000-16,000 waterfowl daily (CDOW, 2005). Spring surveys conducted by RMBO indicated that over 10,000 waterfowl and nearly 6,000 shorebirds were observed. Even more compelling is that over 20 species of waterfowl and 27 species of shorebirds were observed, making the species richness found on recharge wetlands attractive on a national scale (RMBO, 2006).

Early in DU's program efforts, we joined NCWCD, LSPWCD, and SPLRG to develop the Tamarack Recharge Project. This project is the centerpiece of Colorado's contribution to the PRRP. Seven years after

completing Tamarack Phase I, the PRRP was signed by all three states and the federal government, making Tamarack a much needed project. But, it is only part of the solution. Much more work is need to built the required capacity to meet 10,000 acft/yr. With the introduction of SWSI there became a need to contribute an additional 8,900 acft toward the M&I gap through recharge.

For the purposes of this application DU chose three landowners on three tracts of land that would best demonstrate the power of collaboration, and the ability for partnerships to meet the goals and objectives of the SWSI and HB-1177. These tracts are located throughout the lower river from Brush to the stateline. We chose this geographic area because it conforms to the administrative boundries of the LSPWCD, and the project focus area of the SPWRAP, and within the larger project boundary identified by DU.

Brush Prairie Ponds SWA

This 620-acre property's top priority is to provide recharge credits to cover the City of Brush's municipal wells. Owned by the city, wetlands have been developed throughout the property by DU and CDOW to provide waterfowl habitat for public hunting. The Fort Morgan canal delivers recharge water in the spring and early summer to fill the wetlands, which remain flooded through the first part of fall. The City and the Fort Morgan Reservoir and Irrigation Company split the recharge credits, benefiting both entities.

Survey's conducted by CDOW and RMBO indicate that this is one of the most popular waterfowling destination in Northern Colorado, and harvests more than double the birds than most any other public access property.

However, there is still room to grow. The original decree allowed for 12 diversions along the Fort Morgan Canal as it crosses the property, and although the 12th diversion was installed, it was never used. Concerns over potential flooding of adjacent neighbors and contamination of groundwater halted the easternmost project from being completed. The city has now settled those disputes through intense groundwater monitoring and adjacent land purchases and is now ready to proceed witht he final phase of the project.

Ducks Unlimited will refurbish the existing diversion structure and construct laterals to deliver water from the canal to the wetland basins. Four wetland basins will be developed and connected through open ditches and pipelines. A total of 20 new acres of wetlands will be developed capable of holding 20 acft at full service level. These wetlands will be topped off several times throughout the recharge season to introduce several hundred acft annually.

Golden Eagle Ranch

This property is quickly becoming the centerpiece of DU's projects on private lands. The 2,000 acre property located near Proctor, Colorado straddles both sides of the river. In 2003 the landowners donated a conservation easement to Ducks Unlimited, protecting the land and water rights in perpetuity. DU has been working with the landowners to develop recharge facilities that will increase recreational hunting opportunities while maintaining an agricultural enterprise.

The LSPWCD recently recieved a small NAWCA grant ($75,000) to construct wetlands on the property for the purposes of recharge, and to provide habitat for waterfowl. Funds will be used to construct 8 wetlands on marginal irrigated land. NAWCA funds will pay for survey and design, levee construction, and water level control structurtes. However, as part of the restoration, funds are required to improve the water delivery infrastructure. Upgrades are required at most ditch crossings and over half of one mile of pipe is required to

line the laterals, which will assure water infiltrates the groundwater table in wetlands, not in the laterals. Engineering and legal documents are being drafted now and should be filed before funds from this grant application are awarded.

Recharge credits from the project will be used by landowners, agricultural well districts, and SPWRAP. The landowners are interested in having the water to flood wetlands for recreational opportunities. This will require water from both flooding recharge wetlands with recharge water and out-of priority water covered by credits. The Lower Logan Wells Users will benefit directly from the recharge credits to cover subsistrict members, mostly agricultural producers. SPWRAP has agreed to lease any excess credits from the subdistrict. Current engineering estimates indicate that there should be at least 120 acft of water available to the SPWRAP for PRRP.

Heyborne Recharge Project Phase I

The Heyborne project as it has become known includes approximately 650 acres located along the river at Ovid.

Several property owners are in negotiations with our partnership DU, PFW, LSPWCD, NCWECD, SPWRAP to develop unappropriated water at the stateline for purposes of agricultural, municipal, and endangered species needs. Preliminary investigations indicate that substantial water is available at the Nebraska stateline during winter months. These waters could be retimed through recharge to meet the needs of the PRRP and surrounding agricultural and municipal needs. Ducks Unlimited and SPLRG have conducted core samples of the properties involved and found that deep soils (>65 ft) and soil conditions are advantageous for aquifer recharge projects.

The SPWRAP has agreed to lease any and all credits from the project for the PRRP. DU has also been approached by local agricultural producers to lease credits to cover several tributary wells that are currently operating out of priority. The landowners' interest are purely for waterfowl. These properties have been purchased as duck clubs and as long as there is water during hunting seasons, which we've proven recharge projects can provide, the landowners will release alomst all credits for use to support area and state priorities.

This application seeks funds to further our feasability study and construct test sites. Core samples conducted by SPLRG indicated that the project sites are viable for recharge. DU will need additional funds to conduct the survey and design aspect of this project. NCWCD and LSPWCD request funds to assist in developing recharge models based off State CU and SDF. As some of these tasks are already underway, it will be important to recognize the need to construct test sites and perform pumping tests to assure enough water can be delivered.

5. **Please summarize the proposed scope of work. Please refer to Part 2 of the Criteria and Guidance document for detailed requirements. On the following page there is an example format for the Scope of Work. You can use the example format or your own format, provided that comparable information is included.**

The scope of work should outline by task how the water activity will be accomplished. It is important that the scope of work detail the specific steps, activities/procedures that will be followed to accomplish the water activity and the specific products/deliverables that will be accomplished. The scope of work should include but not be limited to: task description, key personnel, budget, schedule and deliverables and the final report/project documentation upon completion of the water activity.

Brush Prairie Ponds

I. Task 1

- Description of task: Conduct and complete a survey and design

- Method or procedure that will be used or followed to accomplish the task and identify who will undertake the task:
  Ducks Unlimited surveyors will conduct a survey of the impacted area, identified on the attached map. A topographic survey using Trimble GPS technology will be developed. From the survey a map using AutoCAD 2007, will be produced which will illustrate the 6" contours of the micro topography. DU's professional engineers will work with City of Brush officials to provide a detailed design of wetland impoundments, water level control structures, and water delivery infrastructure.

- Description of the major deliverables/products that will be produced upon successful completion of the task:

  - Deliverables will include a detailed survey and design of the wetland project for the area illustrated in the conceptual plan.

  - Provide a detailed bid package including all plans and specifications, and quantities for materials and equipment.

II. Personnel

City of Brush
City Manager – Monty Torres
Fort Morgan Canal & Irrigation Company
Manager – Ken Bohl
Ducks Unlimited, Inc.
Program Manager –Greg Kernohan
Regional Engineer – Richard Vail, P.E.

Ducks Unlimited will submit a complete statement of qualifications to accompany this application upon

submission to the CWCB.

III. Budget

Total Grant Costs				
	Labor	Other Direct Costs	Matching Funds (If Applicable)	Total Grant Costs
Task 1 - (Specify name of task)	$12,067	$11,639	-$13,659	$10,147
In-Kind Contributions			-$1,097	-$1,097
Total Costs:				**$9,050**

Personnel							
Example Project Personnel:	Project Manager	Project Engineer	Biologist	Surveyor	Drafting	Administration	Total
Hourly Rate:	$71	$67	$67	$59	$59	$47	
Task 1 -	16	50	32	24	40	12	174
Total Hours:	16	50	32	24	40	12	174
Cost:	$1,136	$3,350	$2,144	$1,416	$2,360	$564	$10,970
Indirects 10%							$1,097
Total							**$12,067**

Other Direct Costs						
Item:	Copies	Materials	Survey Equipment	Mileage		Total
Units:	ea.	LS	LS	Miles		
Unit Cost:	85	200	10,200	$0.49		
Task 1 -	$425	$200	$10,200	$815		$11,639
Total Units:	**5**	**1**	**1**	**1,680**		
Total Cost:	**$425**	**$200**	**$10,200**	**$815**		**$11,639**

	Contribution Sources					
Project Task	Grant $$	Match $$	Source	Match In-kind	Source	Total
Task 1	$9,050	$3,359	Brush			$12,409
		$10,200	DU	$1,097	DU	$11,297
Total	**$9,050**	**$13,559**		**$1,097**		**$23,706**

IV. Schedule

Project Timeline				
	July 1, 2007 - July 1, 2008			
Project Component	Summer	Fall	Winter	Spring
Survey	X	X		
Design			X X	
Bid Package				X X

Golden Eagle Ranch

I. Task 1

- Description of task: Conduct and complete a survey and design

- Method or procedure that will be used or followed to accomplish the task and identify who will undertake the task: Ducks Unlimited surveyors will conduct a survey of the impacted area, identified on the attached map. A topographic survey will be developed from the survey using AutoCAD2007 which will illustrate the 6" to 12" contours of the micro topography. DU's professional engineers will work with landowners, and the contracted professional water engineers to provide a detailed design of wetland impoundments, water level control structures, and water delivery infrastructure, including pipeline.

- Description of the major deliverables/products that will be produced upon successful completion of the task:

    - Deliverables will include a detailed survey and design of the wetland project for the area illustrated in the conceptual plan.

    - Provide a detailed bid package including all plans and specifications, and quantities for materials and equipment.

Task 2

- Description of task: Complete water engineering and water court filings

Method or procedure that will be used or followed to accomplish the task and identify who will undertake

the task: The landowner has hired Leonard Rice Engineers, Inc. and Bernard, Lyons, Gaddis & Kahn, P.C. to develop the required engineering and legal documents to complete the water rights. Ducks Unlimited will assist the landowner to assure that water rights are structured to benefit migrating and wintering waterfowl in addition to providing recharge credits for use by the PRRP and agricultural interests.

- Description of the major deliverables/products that will be produced upon successful completion of the task:
    - Complete engineering details associated with the recharge plan.
    - Copy of water court filings and substitute supply plan.

Task 3

Description of task: Construct wetland impoundments via contour levees, and install water level control structures. Contract construction components to eligible parties. Provide construction management oversight through to project completion.

Method or procedure that will be used or followed to accomplish the task and identify who will undertake the task: Levee construction: Ducks Unlimited and USFWS have already surveyed and staked the levee locations for these projects using in-kind services. The landowner is constructing the levees using funds as part of a small grant secured by LSPWCD. Water Level Control Structures: Funds from LSPWCD – NAWCA grant will be used to install agridrains, T-boxes and check structures, following a full survey by Ducks Unlimited. Open lateral ditches will be replaced with pipelines to reduce the amount of water lost in the laterals and assure water can be placed in recharge and storage facilities on the property.

Description of the major deliverables/products that will be produced upon successful completion of the task: Ducks Unlimited will deliver a completed project with 32 acres of seasonal wetlands.

II. Personnel

Golden Eagle Ranch
Manager – Chuck Woods
LSPWCD
Manager – Joe Frank
SPWRAP
Acting Executive Director – Kevin Urie
SPLRG
President – Steve Treadway
Lower Logan Well Users
President –
Bernard, Lyons, Gaddis & Kahn, P.C.
Attorney – Steven P. Jeffers
Qualifications found at - http://pview.findlaw.com/view/2094569_1?noconfirm=0
Leonard Rice Engineers, Inc.
Civil Engineer – Edward J. Armbruster

Specialty – Civil / Water Resources and Hydrology

Ducks Unlimited, Inc.

Program Manager –Greg Kernohan

Regional Engineer – Richard Vail, P.E.

Qualifications - Ducks Unlimited will submit a complete statement of qualifications to accompany this application upon submission to the CWCB.

III. Budget

Total Grant Request				
	Labor	Other Direct Costs	Matching Funds (If Applicable)	Total Grant Costs
Task 1 - (Specify name of task)	$58,408	$297,047	$195,003	$160,452
In-Kind Contributions			$39,718	-$39,718
Total Costs:				**$120,734**

Personnel									
Example Project Personnel:	Project Manager	Project Engineer	Water Engineer	Attorney	Biologist	Surveyor Construction Manager	Drafter	Administration	Total
Hourly Rate:	$71	$67	$180	$250	$67	$59	$59	$47	
Task 1 -	16	50			32	64	40	12	214
	$1,136	$3,350	$0	$0	$2,144	$3,776	$2,360	$564	13330
Task 2 -	12	16	60	80			6	6	180
	$852	$1,072	$10,800	$20,000	$0	$0	$354	$282	33360
Task 3 -	12	32			8	120	6	16	194
	$852	$2,144	$0	$0	$536	$7,080	$354	$752	11718
Total Hours:	40	98	60	80	40	184	52	34	588
Cost:	**$2,840**	**$6,566**	**$10,800**	**$20,000**	**$2,680**	**$10,856**	**$3,068**	**$1,598**	**$58,408**
Total									**$58,408**

	Other Direct Expenses					
	ITEM	DESCRIPTION	EST. QUANT.	UNIT	UNIT PRICE	TOTAL
Task 1	1	Survey	1	L.S.	$10,000	10,000.00
	2	Mileage	1800	ea	0.485	873.00
Task 2	1	Mileage	360	ea	0.485	174.00
Task 3	1	Mobilization	1	L.S.	5,000.00	5,000.00
	2	Riprap installation	100	C.Y.	60.00	6,000.00
	3	Backfill transport	12,000	C.Y.	3.75	45,000.00
	4	Pipe Installation 24"	xxx	C.Y.	xxx	xxxx
	4a	Materials	3,500	L.F.	28.00	98,000.00
	4b	installation	3,500	L.F.	17.00	59,500.00
	5	Control Structures	xxx		xxx	xxxx
	5a	Agridrains 24"	9	EA.	2,400.00	21,600.00
	5b	T Boxes	4	EA.	3,200.00	12,800.00
	5c	Splitter Boxes	6	EA.	2,900.00	17,400.00
	5d	installation	1	LS	5,700.00	5,700.00
	6	Levees	12000	C.Y.	1.25	15,000.00
				TOTAL PRICE		**$ 297,047.00**

		Contribution	**Sources**			
Project Task	Grant $$	Match $$	Source	Match In-kind	Source	Total
Task 1	$18,000	$4,203	LSPWCD	$2,000	DU	$24,203
Task 2	$2,734	$30,800	Landowner			$33,534
Task 3	$100,000	$25,000	Landowner	$7,718	DU	$132,718
		$30,000	LSPWCD			$30,000
		$65,000	SPWRAP			$65,000
		$40,000	DU	$30,000	DU	$70,000
Total	**$120,734**	**$195,003**		**$39,718**		**$355,455**

Project Timeline			
	April 1, 2007 - Dec. 31, 2008		
Project Component	FY07	FY08	FY09
Task 1		XX	
Task 2	XX		
Task 3			XX

Heyborne Recharge Project Phase I

Task 1

- Description of task: Conduct preliminary investigations into feasibility

- Method or procedure that will be used or followed to accomplish the task and identify who will undertake the task: Ducks Unlimited has contacted landowners, the state engineer, LSPWCD, SPLRG, and SPWRAP to determine interest and potential project feasibility. SPLRG has conducted soil core samples to determine suitability of sites for recharge. Ducks Unlimited will pursue agreements with landowners to proceed with project.

- Description of the major deliverables/products that will be produced upon successful completion of the task:

    - Core sample locations and report will be delivered by SPLRG

    - A detailed preliminary report of findings for water availability in the lower river

    - Conservation Agreements signed with landowners

Task 2

- Description of task: Conduct and complete a survey and design

- Method or procedure that will be used or followed to accomplish the task and identify who will undertake the task: Ducks Unlimited surveyors will conduct a survey of the impacted area, identified on the attached map. A topographic survey will be developed using Trimble GPS technology. From the survey, maps will be produced using AutoCAD 2007 which will illustrate the 6" or 12" contours of the micro topography. DU's professional engineers will work with landowners, and the contracted professional water engineers to provide a detailed design of wetland impoundments, water level control structures, and water delivery infrastructure, including pipeline.

- Description of the major deliverables/products that will be produced upon successful completion of the task:

    - Deliverables will include a detailed survey and design of the wetland project for the area illustrated in the conceptual plan.

    - Provide a detailed bid package including all plans and specifications, and quantities for materials and equipment.

Task 3

- Description of task: Complete water engineering and water court filings

- Method or procedure that will be used or followed to accomplish the task and identify who will undertake the task: Ducks Unlimited, SPWRAP, SPLRG, and LSPWCD will assist the landowner in developing engineering and legal documents required to complete water court filing to develop a new water right.

- Description of the major deliverables/products that will be produced upon successful completion of the task:

    - Complete engineering details associated with the recharge plan.

    - Copy of water court filings and substitute supply plan.

Task 4

- Description of task: Construct wetland impoundments via contour levees, and install water level control structures. Contract construction components to eligible parties. Provide construction management oversight through to project completion.

- Method or procedure that will be used or followed to accomplish the task and identify who will undertake the task: Levee construction: Ducks Unlimited will oversee project delivery through completion of the project. Contractors will be selected through competitive bid processes as directed by federal guidelines. All permits and clearances will be attained prior to construction.

- Description of the major deliverables/products that will be produced upon successful completion of the task: Ducks Unlimited will deliver a completed project capable of delivering 400 acft of recharge credits annually.

II. Personnel

Heyborne Landowner
Landowner – Kent Heyborne
LSPWCD
Manager – Joe Frank
SPWRAP
Acting Executive Director – Kevin Urie
SPLRG
President – Steve Treadway
NCWCD
Engineer – Jon Altenhoffen
Ducks Unlimited, Inc.
Program Manager –Greg Kernohan
Regional Engineer – Richard Vail, P.E.
Qualifications - Ducks Unlimited will submit a complete statement of qualifications to accompany this application upon submission to the CWCB.

III. Budget

Total Grant Request				
	Labor	Other Direct Costs	Matching Funds (If Applicable)	Total Grant Costs
Task 1 - (Specify name of task)	$83,544	$316,096	-$246,440	$153,200
In-Kind Contributions			-$4,508	-$4,508
Total Costs:				**$148,692**

Personnel									
Example Project Personnel:	Project Manager	Project Engineer	Water Engineer	Attorney	Biologist	Surveyor Construction Manager	Drafting	Administration	Total
Hourly Rate:	$71	$67	$180	$250	$67	$59	$59	$47	
Task 1 -	10	8	8	3	16	0	0	0	45
	$710	$536	$1,440	$750	$1,072	$0	$0	$0	$4,508
Task 2 -	8	32	28	14	8	120	40	12	262
	$568	$2,144	$5,040	$3,500	$536	$7,080	$2,360	$564	$21,792
Task 3 -	24	16	80	110	0	0	0	8	238
	$1,704	$1,072	$14,400	$27,500	$0	$0	$0	$376	$45,052
Task 4 -	16	16	20	0	8	80	0	24	164
	$1,136	$1,072	$3,600	$0	$536	$4,720	$0	$1,128	$12,192
Total Hours:	58	72	136	127	32	200	40	44	709
Cost:	$4,118	$4,824	$24,480	$31,750	$2,144	$11,800	$2,360	$2,068	$83,544
Total									**$83,544**

Other Direct Expenses

	ITEM	DESCRIPTION	EST. QUANT.	UNIT	UNIT PRICE	TOTAL
Task 1	1	Core Samples	1	L.S.	$3,500	$3,500
	2	Mileage	1,900	ea	$0	$922
Task 2	1	Mileage	360	ea	$0	$175
	2	Equipment	1	L.S.	$10,000	$10,000
Task 4	1	Mobilization	1	L.S.	$3,500	$3,500
	2	Riprap installation	15	C.Y.	$60	$900
	3	Backfill transport	6,000	C.Y.	$4	$22,500
	4	Pipe Installation 24"	xxx	C.Y.	xxx	xxxx
	4a	Materials	4,280	L.F.	$28	$119,840
	4b	installation	4,280	L.F.	$17	$72,760
	5	Control Structures	xxx		xxx	xxxx
	5a	Agridrains 24"	1	EA.	$2,400	$2,400
	5b	T Boxes	2	EA.	$3,200	$6,400
	5c	installation	1	LS	$5,700	$5,700
	6	Levees	6,000	C.Y.	$1	$7,500
	7	Well	1	L.S.	$35,000	$35,000
	7a	Pump	1	L.S.	$25,000	$25,000
				TOTAL PRICE		**$316,096**

		Contribution Sources				
Project Task	Grant $$	Match $$	Source	Match In-kind	Source	Total
Task 1		$922	DU	$3,000	DU	$3,922
		$3,500	SPLRG	$1,508	SPLRG	$5,008
Task 2	$20,000	$11,966	SPLRG			$31,966
Task 3	$15,000	$20,000	Landowner			$35,000
		$10,052	SPLRG			$10,052
Task 4	$113,692	$30,000	SPLRG			$143,692
		$70,000	LSPWCD			$70,000
		$100,000	SPWRAP			$100,000
Total	**$148,692**	**$246,440**		**$4,508**		**$399,640**

Project Timeline

		Nov, 2006 - July, 2008		
		FY07		FY08
Project Component	Fall / Winter	Spring / Summer	Fall / Winter	Spring/ Summer
Task 1	XX	XX		
Task 2		XX	XX	
Task 3		XX	XX	
Task 4			XX	XXXXXX

6. **Water Availability and Sustainability – this information is needed to assess the viability and effectiveness of the water project or activity. Please provide a description of each water supply source to be utilized for, or the water body to be affected by, the water activity. For water supply sources being utilized, describe its location, yield, extent of development, and water right status. For water bodies being affected, describe its location, extent of development, and the expected effect of the water activity on the water body, in either case, the analysis should take into consideration a reasonable range of hydrologic variation.**

All water for this project will be taken from the South Platte River as direct diversions. Although the river appears to be over appropriated there are opportunities to develop new water rights at the lower river near Ovid. Both BPPSWA and Golden Eagle Ranch will be using existing recharge rights or irrigation rights that will seek a change of use in water court. There will not be any new net negative impact on the river due to these projects.

Brush Prairie Ponds

Water for the project is provided by the Fort Morgan Irrigation and Reservoir Company through a recharge decree developed in the 1980's. The project has been the platform for protecting the city's municipal water supply since that time. With a five year return time from the project to the river, the wells are protected over the long term. However, since the drought year in 2002, the project has received little water as the decree date has rarely come into priority. The last two years have finally returned water to the project and generating recharge credits, but the drought highlighted the need to provide more space for water when it's available.

Golden Eagle Ranch

The Golden Eagle Ranch is adjacent to the South Platte River, downstream of the City of Sterling. It consists of river bottom and nearly 500 acres of irrigated land which has been planted over time in various crops such as corn, alfalfa, and beets. Formal investigations of water rights associated with the property have revealed 29 shares of the Iliff and Platte Valley Ditch, 370 shares of the Proctor Water Company, and 130 acre-rights in the Iliff Irrigation District. Other water rights include the Powell Ditch. The landowner plans to execute a change of rights to use water for recharge, storage (for augmentation), and wildlife. Engineering accomplishments are preliminary, but should be completed by September with a filing in water court. The project will use existing water allocations which will not result in new or negative impacts to the river.

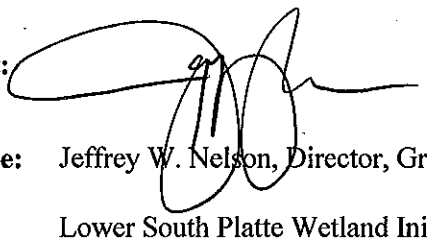
Heyborne Project

A new water right will be filed to put unallocated winter water to use for recharge. The amount of water is yet to be determined, but will range from 6-35 acft diverted from the river for recharge. Ducks Unlimited has discussed this plan with several adjacent landowners and water districts and all have committed their support for the project. Most will actually benefit from the project. With the property being located less than 9 miles from the State border, there are not any other compacts or water rights that would be impacted downstream of the project.

7. Please provide a brief narrative of any related or relevant previous studies.

8. Additional Information – If you feel you would like to add any additional pertinent information please feel free to do so here.

The above statements are true to the best of my knowledge:

Signature of Applicant: 

Print Applicant's Name: Jeffrey W. Nelson, Director, Great Plains Region

Project Title: Lower South Platte Wetland Initiative Phase I

Return this application to:

Mr. Rick Brown
Intrastate Water Management and Development Section
COLORADO WATER CONSERVATION BOARD
1580 Logan Street, Suite 600
Denver, CO 80203

To submit applications by Email, send to: rick.brown@state.co.us