

**CITIZEN’S ADVISORY COMMITTEE (“CAC”)  
to the  
Hays County  
Regional Habitat Conservation Plan (“RHCP”)**

**NOTICE OF OPEN MEETING  
(also available at <http://www.havscountyhcp.com>)**

A meeting of the Citizen’s Advisory Committee (CAC) to the Hays County RHCP will be held as follows:

**WHEN: January 10, 2008**

**TIME: 6:00 p.m.**

**WHERE: Wimberley Community Center, 14068 Ranch Road 12, Wimberley, Texas  
78676**

Members of the Hays County Commissioner’s Court may attend, but no action will be taken by the Court.

Members of the Hays County Habitat Conservation Plan Biological Advisory Team (BAT) may attend, but no action will be taken by the BAT.

At this meeting, the following business may be considered and recommended for CAC action:

1. Call to Order
2. Approve Minutes from November 8, 2007 CAC Meeting.
3. Citizens’ Comments.
4. Receive Report from BAT Chair Regarding BAT Activities.
5. Discuss and Take Appropriate Action Regarding Species Coverage Under the RHCP.
6. Receive Presentation Regarding Williamson County, Texas RHCP.
7. Receive Presentation from Joseph Lessard Regarding RHCP Conceptual Options, Potential Cost, and Possible Financing Mechanisms.
8. Discuss and Take Appropriate Action Regarding RHCP Conceptual Options, Potential Cost, and Possible Financing Mechanisms.
9. Discuss and Take Appropriate Action Regarding Agenda Items for Next CAC Meeting
10. Adjourn

**DRAFT November 21, 2007**

**CITIZEN'S ADVISORY COMMITTEE ("CAC")  
to the  
Hays County  
Regional Habitat Conservation Plan ("RHCP")**

**MINUTES**

**(also available at <http://www.hayscountyhcp.com>)**

A meeting of the Citizen's Advisory Committee (CAC) to the Hays County RHCP was held as follows:

**WHEN: November 8, 2007**

**TIME: 6:00 p.m.**

**WHERE: Wimberley Community Center, 14068 Ranch Road 12, Wimberley, Texas  
78676**

**In Attendance:**

**CAC Members:**

- Bill Avera
- David Baker
- Kathy Boydston
- Henry Brooks
- Chris Carson
- David Goodrum
- Catherine Livingston
- Dr. Glenn Longley
- Melinda Mallia
- Dr. Todd Votteler
- Dianne Wassenich

**Hays County Representatives:**

- Commissioner Will Conley
- Commissioner Karen Ford
- Steve Floyd (GIS)

**HCP Consultant Team:**

- Smith|Robertson: Melinda Taylor, Rebecca Hays
- Loomis Austin, Inc.: Clifton Ladd, Amanda Aurora, Jean Krejca and Rob Myers (Zara Environmental)

**Agency Representatives:**

- Kathy Boydston (TPWD)
- Craig Farquhar (TPWD)

1. Call to Order. Chair Melinda Mallia called the meeting to order.
2. Approve Minutes from October 11, 2007, CAC Meeting. Because there was no quorum at the beginning of the meeting, approval of the minutes was tabled.
3. Citizens' Comments. There were no citizens' comments.
4. Receive Report from BAT Chair Regarding BAT Activities. Craig Farquhar reported on BAT activities.
5. Discuss and Take Appropriate Action Regarding Meeting Schedule. Rebecca Hays (Smith|Robertson) reported on CAC member availability for alternate meeting times. Meetings will remain on the second Thursday of the month. No action was taken.
6. Discuss and Take Appropriate Action Regarding Conceptual Options for the RHCP. Melinda Taylor (Smith|Robertson) presented on possible conceptual options for the RHCP. No action was taken.
7. Discuss and Take Appropriate Action Regarding Species Coverage Under the RHCP. CAC members discussed species coverage under the RHCP. No action was taken.
8. Discuss and Take Appropriate Action Regarding Draft RHCP Outline. Clif Ladd (Loomis Austin, Inc.) briefly discussed the draft RHCP Outline. No action was taken.
9. Discuss and Take Appropriate Action Regarding Agenda Items for Next CAC Meeting. Catherine Livingston moved to give Chair Melinda Mallia the authority to set a date and time for the December CAC meeting. Bill Avera seconded the motion. Motion carried unanimously. CAC members discussed various items they would like to discuss at future CAC meetings.
10. Adjourn. Chair Mallia adjourned the meeting.

# HAYS COUNTY HABITAT CONSERVATION PLAN

## BIOLOGICAL ADVISORY TEAM

### RECOMMENDATIONS FOR SPECIES INCLUSION IN THE HAYS COUNTY HABITAT CONSERVATION PLAN

**DRAFT JANUARY 8, 2008**

The Biological Advisory Team (BAT) of the Hays County Habitat Conservation Plan (Hays County HCP) was asked to propose a list of species to include in the plan and provide recommendations for the most appropriate type of coverage for included species. This proposal is the BAT's consensus recommendation for consideration by the Citizens Advisory Committee and the Hays County Commissioners Court.

With the assistance of the consultant team, the BAT assembled a comprehensive list of rare or sensitive species known to occur in Hays County based on the following sources:

1. All federal and state listed threatened or endangered species, or designated candidates for such listing;
2. All species tracked by the Texas Parks and Wildlife Department on the Annotated County List of Rare Species for Hays County (as of August 8, 2007) or the Texas Natural Diversity Database (as of October 2, 2006);
3. All species known to occur in Hays County that were included on recent federal listing petitions filed by the Forest Guardians or Karst Waters Institute; and
4. Other species identified by BAT members as rare or sensitive.

This initial comprehensive list of species of concern in Hays County included 112 species, including a number of plants, invertebrates, fish, amphibians, reptiles, and mammals. The BAT refined this comprehensive list of species of concern by selecting species that met the following preliminary criteria:

1. All federally listed species;
2. All state-listed amphibians and reptiles;
3. All species with a NatureServe<sup>1</sup> global rank of G1 through G2G3; and
4. All species endemic to Hays County.

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<sup>1</sup> NatureServe is a non-profit conservation organization whose stated mission is to provide the scientific basis for effective conservation action. NatureServe and its network of natural heritage programs are a leading source for information about rare and endangered species and threatened ecosystems. The NatureServe conservation status of a species or community is designated by a number from 1 to 5, preceded by a letter reflecting the appropriate geographic scale of the assessment (G = Global, N = National, and S = Subnational). The numbers have the following meaning: 1 = critically imperiled; 2 = imperiled; 3 = vulnerable to extirpation or extinction; 4 = apparently secure; 5 = demonstrably widespread, abundant, and secure.

The BAT further reviewed the comprehensive and filtered lists of species of concern to arrive at the recommended list of species of concern to address in the Hays County HCP. Several species meeting the above criterion, after further review from the BAT, were removed from the list based on one or more of the following reasons:

- The species was not likely to occur within the anticipated coverage area of the plan (i.e., the portion of Hays County within the Edwards Plateau ecoregion, generally west of Interstate Highway 35);
- Recent research or known life history characteristics of the species suggest that it is likely to be more common than otherwise indicated by the NatureServe ranking; and/or
- The species would not be likely to benefit from the anticipated conservation actions to be implemented under the plan (i.e., the habitat types used by the species were not compatible with the habitat of the recommended covered species).

This recommended list of species of concern for the Hays County HCP includes 58 species, shown in Table 1.

The BAT identified three levels of coverage for recommended species of concern to be addressed in the Hays County HCP:

1. Covered Species – Hays County should seek incidental take authorization for species in this category. The HCP must adequately describe the expected amount of take and impacts to the species and demonstrate that the benefits provided by mitigation measures in the conservation program satisfy the issuance criteria for an incidental take permit. This option may be appropriate for federally listed species that would experience take by activities covered by the HCP or species that may become listed in the foreseeable future and would likely experience take by covered activities;
2. Evaluation Species of Concern – Incidental take authorization for species of concern in this category may become necessary over the term of the Hays County HCP incidental take permit; however, including these species as “covered” is not justified at this time. Evaluation species of concern may be currently unlisted, but could become listed in the foreseeable future (many have already been petitioned for listing). Sufficient information on these species may also be lacking to support the level of analysis required to meet the issuance criteria for incidental take authorization. Hays County should include conservation measures to benefit evaluation species of concern, where practicable, and support research to help fill existing data gaps on the biology, habitat, distribution, or management of these species. The research supported

by the HCP may help preclude the need to list these species, or help facilitate obtaining incidental take coverage if these species become listed in the future.

3. Additional Species of Concern – Hays County should not seek incidental take authorization for species in this category because the species is not currently listed as threatened or endangered, the species is not likely to experience take from covered activities, or insufficient information is available to adequately evaluate take and mitigation. However, recognizing the rarity or sensitivity of these species, the HCP should include conservation measures to benefit additional species of concern, where practicable;

The BAT assigned each of the species of concern recommended for inclusion in the Hays County HCP to one of the three coverage categories. The BAT recommends that the current body of knowledge and expected regulatory needs justify including the golden-cheeked warbler and black-capped vireo as covered species under the plan. The County should seek incidental take coverage for these two species.

The BAT assigned the remaining 56 species of concern to a coverage category considering the likelihood of future listing, the current body of knowledge on the species, and potential overlaps with expected conservation measures for covered species.

The BAT recommends that unlisted karst species (both terrestrial and aquatic) be considered as a group as “evaluation species of concern.” The specific list of karst species included in the plan under this category is less important if the plan focuses on the karst environment itself. Little is known about karst habitats in Hays County in general, but the possibility for future listing of one or more of these species is high. Supporting research on karst habitats and the distribution of rare karst species across the County would provide valuable information that would support conservation and planning efforts in the county. The BAT also recommends that the Cagle’s map turtle be included as an evaluation species of concern, since it has been petitioned for listing in the past. Needed research could include additional surveys to define its distribution in Hays County and the effectiveness of conservation/management practices. The proposed list of evaluation species of concern includes 40 species (39 terrestrial or aquatic karst species and the Cagle’s map turtle).

The BAT recommends that the species not classified as “covered” or “evaluation species of concern” be included in the Hays County HCP as “additional species of concern.” These species include several of the currently listed aquatic species, as well as unlisted plants and surface aquatic species. Conservation measures likely to be included in the plan, such as habitat protection for the golden-cheeked warbler and black-capped vireo, could provide secondary conservation benefits for these additional species by protecting similar habitats. The proposed list of additional species of concern includes 16 species (three listed aquatic species, three unlisted plants, and nine unlisted surface aquatic species).

The complete list of recommended species of concern to include in the Hays County HCP and the recommended type of coverage for these species is shown in the attached table.

**Table 1. Recommended Species of Concern for the Hays County Habitat Conservation Plan and Recommended Coverage Categories.**

Common Name	Scientific Name	Taxa	Habitat
<b>COVERED SPECIES OF CONCERN</b>			
Golden-cheeked warbler**	<i>Dendroica chrysoparia</i>	Birds	Juniper-Oak Woodland
Black-capped vireo**	<i>Vireo atricapilla</i>	Birds	Deciduous Shrubland
<b>EVALUATION SPECIES OF CONCERN</b>			
Aquifer flatworm	<i>Sphalloplana mobri</i>	Turbellarians	Aquatic / Karst
a cave-obligate spider	<i>Cicurina ezelli</i>	Arachnids	Karst
a cave-obligate spider	<i>Cicurina russelli</i>	Arachnids	Karst
a cave-obligate spider	<i>Cicurina ubicki</i>	Arachnids	Karst
undescribed cave-obligate spider	<i>Eidmannella n. sp.</i>	Arachnids	Karst
undescribed cave-obligate spider	<i>Neoleptoneta n. sp. 1</i>	Arachnids	Karst
undescribed cave-obligate spider	<i>Neoleptoneta n. sp. 2</i>	Arachnids	Karst
undescribed cave-obligate spider	<i>Neoleptoneta n. sp. eyeless</i>	Arachnids	Karst
a pseudoscorpion	<i>Tartarocreagris grubbsi</i>	Arachnids	Karst
a cave-obligate harvestman	<i>Texella diplospina</i>	Arachnids	Karst
a cave-obligate harvestman	<i>Texella grubbsi</i>	Arachnids	Karst
a cave-obligate harvestman	<i>Texella mulaiki</i>	Arachnids	Karst
a cave-obligate harvestman	<i>Texella renkesae</i>	Arachnids	Karst
a cave-obligate amphipod	<i>Allotexineckelia hirsute</i>	Crustaceans	Aquatic/Karst
a cave-obligate amphipod	<i>Artesia subterranean</i>	Crustaceans	Aquatic/Karst
a cave-obligate amphipod	<i>Holsingerius samacos</i>	Crustaceans	Aquatic/Karst
Texas troglobitic water slater	<i>Lirceolus smithii</i>	Crustaceans	Aquatic/Karst
a cave-obligate crustacean	<i>Tethysbaena texana</i>	Crustaceans	Aquatic/Karst
Balcones cave shrimp	<i>Palaemonetes antrorum</i>	Crustaceans	Aquatic/Karst
a cave-obligate decapod	<i>Calatbaemon holtbuisi</i>	Crustaceans	Aquatic/Karst
a cave-obligate amphipod	<i>Seborgia relicta</i>	Crustaceans	Aquatic/Karst
Balcones cave amphipod	<i>Stygobromus balconis</i>	Crustaceans	Aquatic/Karst
Ezell's cave amphipod	<i>Stygobromus flagellates</i>	Crustaceans	Aquatic/Karst
a cave-obligate amphipod	<i>Texineckelia texensis</i>	Crustaceans	Aquatic/Karst
a cave-obligate amphipod	<i>Texineckeliopsis insolita</i>	Crustaceans	Aquatic/Karst
a cave-obligate springtail	<i>Arrhopalites texensis</i>	Hexapods	Karst
an ant-like litter beetle	<i>Batrisodes grubbsi</i>	Insects	Karst
Comal Springs diving beetle	<i>Comaldessus stygius</i>	Insects	Aquatic/Karst
Edwards Aquifer diving beetle	<i>Haideoporus texanus</i>	Insects	Aquatic/Karst
a cave-obligate beetle	<i>Rhadine austinica</i>	Insects	Karst
a cave-obligate beetle	<i>Rhadine insolita</i>	Insects	Karst
undescribed beetle	<i>Rhadine n. sp. 2 (subterranea group)</i>	Insects	Karst
undescribed beetle	<i>Rhadine n. sp. (subterranea group Boyett's)</i>	Insects	Karst
Flattened cavesnail	<i>Phreatodrobia micra</i>	Mollusks	Aquatic/Karst

Common Name	Scientific Name	Taxa	Habitat
Disc cavesnail	<i>Phreatodrobia plana</i>	Mollusks	Aquatic/Karst
High-hat cavesnail	<i>Phreatodrobia punctata</i>	Mollusks	Aquatic/Karst
Beaked cavesnail	<i>Phreatodrobia rotunda</i>	Mollusks	Aquatic/Karst
Blanco River springs salamander	<i>Eurycea pterophila</i>	Amphibians	Aquatic/Karst
Blanco blind salamander	<i>Eurycea robusta</i>	Amphibians	Aquatic/Karst
Cagle's map turtle	<i>Graptemys caglei</i>	Reptiles	Aquatic

#### ADDITIONAL SPECIES OF CONCERN

Hill Country wild-mercury	<i>Argythamnia aphoroides</i>	Plants	Terrestrial
Warnock's coral-root	<i>Hexalectris warnockii</i>	Plants	Terrestrial
Canyon mock-orange	<i>Philadelphus ernestii</i>	Plants	Terrestrial
Texas wild-rice**	<i>Zizania texana</i>	Plants	Aquatic
Texas austrotinodes caddisfly	<i>Austrotinodes texensis</i>	Insects	Aquatic
Comal Springs riffle beetle**	<i>Heterelmis comalensis</i>	Insects	Aquatic
a mayfly	<i>Proclleon distinctum</i>	Insects	Aquatic
San Marcos saddle-case caddisfly	<i>Protoptila arca</i>	Insects	Aquatic
Comal Springs dryopid beetle**	<i>Stygoparnus comalensis</i>	Insects	Aquatic
Texas fatmucket	<i>Lampsilis bracteata</i>	Mollusks	Aquatic
Golden orb	<i>Quadrula aurea</i>	Mollusks	Aquatic
Texas pimpleback	<i>Quadrula petrina</i>	Mollusks	Aquatic
Fountain darter**	<i>Etheostoma fonticola</i>	Fishes	Aquatic
San Marcos salamander*	<i>Eurycea nana</i>	Amphibians	Aquatic/Karst
Texas blind salamander**	<i>Eurycea rathbuni</i>	Amphibians	Aquatic/Karst

\* Federally threatened species

\*\* Federally endangered species

# Decision Points in the Development of a Regional Habitat Conservation Plan

## What is the Basic Scope of the HCP?

### Species Footprint

- Which species does the plan cover for incidental take?
- Where do these species occur?
- How do populations or habitats change over time?

### Impact Footprint

- Which activities does the plan cover?
- Where are these activities expected to occur?
- How do impacts change over time?

### Goals & Objectives

- What are the biological goals of the plan?
- What are the specific objectives proposed for meeting the biological goals?
- What are the community or programmatic goals of the plan?
- How will these programmatic goals be met?

### Plan Area & Permit Duration

- What area will the plan cover?
- How long will the incidental take permit be valid?

## How Much Take Will the HCP Request?

### Impact Assessment

- What is the impact of the covered activities on the covered species within the plan area over the duration of the permit?

### Participation Assessment

- How much take authorization does the permittee seek for its own activities?
- What is the expected rate of participation in the plan by others?
- How much take authorization does the permittee seek for activities undertaken by others?

## Does the HCP Meet the Issuance Criteria for a Permit and Comply with State Law?

- All taking of federally listed and candidate species will be incidental to otherwise lawful activities.
- Impacts from authorized take are minimized and mitigated to the maximum extent practicable.
- The proposed take will not jeopardize the survival and recovery of the species in the wild.
- Adequate funding to implement the plan has been assured.
- The plan complies with all provisions of Texas State Law relating to Regional Habitat Conservation Plans.

## Does the Conservation Program Balance the Impacts from the Requested Take?

### Conservation Measures

- How can impacts from covered activities be avoided or minimized?
- What kind of mitigation measures would help conserve the covered species?
- How do you measure the conservation value of mitigation measures?
- How much mitigation is needed to balance the impacts from the requested take?

### Preserve Design

- What criteria should be used to identify potential preserve land?
- How is the conservation value of potential preserve land assessed?
- What factors influence the conservation value of preserve land?

### Preserve Acquisition Strategy

- What mechanisms will be used to protect preserve land?
- What are the legal implications of various preserve acquisition strategies?
- What are the biological implications of various preserve acquisition strategies?

### Management Program

- What types of monitoring is needed to evaluate the effectiveness of the preserves?
- How will the conservation value of preserve land be maintained over time?
- What types of secondary uses are compatible with the conservation goals of the preserve system?

## How Will the HCP be Implemented?

### Permitting Strategy

- How will mitigation needs be determined for individual projects?
- What steps will participants need to take to enroll in the plan?
- Will additional terms and conditions be necessary for participation in the plan?
- What types of mitigation will be accepted from individual participants?
- How will the balance of take and mitigation be monitored and maintained?

### Funding Plan

- How much money will be needed to implement the conservation program?
- What are the costs associated with administration of other aspects of the plan?
- What types of funding are available to implement the conservation program and administer the HCP?
- How will funding for the plan be assured over time?
- How will ongoing management of preserves be funded?

### Implementing Partnerships

- Do other municipalities, agencies, or organizations have an interest in becoming a partner in the plan?
- How might implementing partners share the benefits and responsibilities created by the plan?
- What role does each partner have in the implementation and administration of the plan?

## **Hays County Regional Habitat Conservation Plan**

Funding Options Introduction

January 10, 2008

1

### **Funding Discussion Topics**

- Initial Guesstimates
- Design Criteria/Concepts
- Funding Options

2

### **Initial Funding Guesstimates**

- Apply existing RHCP model criteria/standards
  - BCCP actual preserve to habitat relationship approx. 27%
- Adjust models for current Hays Co. information
  - Reduce mitigation ratio to 1-2 relationship
  - Hays preserve to habitat relationship estimated between 16% and 20%
- Estimate land value per acre
  - Review & update/adjust data (HCAD & Texas A&M)
- Select best fit data and forecast range of preserve costs

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### **Preserve & Land Value Assumptions**

- Total Preserve
  - 27,172 ac – 33,965 ac
- Single Key Macrosite
  - 4592 ac – 7206 ac
- Per Acre Value (2008 est. dollar values)
  - \$5,458
- Conservation Easement Adjustments
  - 50% of preserve
  - 50% of land value

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## Preserve & Land Value Guesstimates

- Total Preserve (rounded)
  - Fee Simple: \$150,000,000 -- \$185,000,000
  - With Easements: \$115,000,000 -- \$140,000,000
- Single Key Macrosite (rounded)
  - Fee Simple: \$25,000,000 -- \$40,000,000
  - With Easements: \$20,000,000 -- \$30,000,000
- These values are very likely to change (increase) as preserve design and land value assumptions are refined.

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## Funding Plan Design Criteria/Concepts

- Dedicated Sources
- Level/Adequacy of Funding
- Timing/Flow of Funding
- Predictability of Funding
- Single vs. Multiple Sources of Funding
- Lump Sum vs. "Pay as You Go" Approach

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## Funding Options

- Permit Holder or Managing Partner Contributions
  - Land or Funding
- Developer Mitigation/Participation Fees
- Local Government Funding
  - Bonds
  - General or Utility Fund Dedications (tax benefit Financing)
- Federal Income Tax Code Incentives
- Grants/Donations/Dedications
  - USFWS
  - State
  - Non-Profits
  - Individuals & Developer Donations/Dedications
- Property Owner Fees (HOA Fees)

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## Questions/Dialog

- Next Steps:
  - Establish Preserve Concept & Design
  - Project Growth Trends
  - Develop Cost-Benefit Model
  - Finalize Funding Plan

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# Hays County Regional Habitat Conservation Plan

## Funding Source Options:

1. Permit or Managing Partner Contributions (land or funding)
  - Non-Profit Partners
  - Municipalities
  - Other Public Sector Partners
2. Mitigation Fees
  - Participation Fees
  - In-Lieu Donations
3. Local Government Funding:
  - GO/Utility (Water or Drainage) Bonds
    - Existing Authority
    - Future Authority
  - Direct General/Utility Fund Subsidy
    - Tax Benefit Financing
  - Conservation Development Incentives
    - Tax Abatement
    - Conservation Payments
    - Fee Waiver
  - Park/openspace land dedication
4. Federal Income Tax Code Incentives
5. Grants/Donations/Dedications
  - USFWS Section 6 Grant
    - Traditional
    - Non-Traditional
  - 2002 Farm Bill - Farm & Ranch Protection Program
  - Partners for Wildlife
  - Non-Profit Grant
  - Individual Donation
  - Texas Parks & Wildlife Department
    - State Wildlife Grants Program
    - Wildlife Diversity Conservation Grants
    - Landowner Incentive Program
6. Homeowners Fees (HOA Fees)
7. Other or Potential Supplemental Funding Sources

## Use:

### Property Rights Acquisition

- Fee Simple Acquisition
- Conservation Easements
- Conservation Development
- Preserve O&M

Conservation easement or deed restriction

Research, monitoring & outreach  
Planning & Land Acquisition  
Conservation easement acquisition held by local entity to protect farm or ranch land from development; Max. grant 50% of easement cost; public entity & private landowner may share match  
Small outreach or mgt. projects usually less than \$25k  
Uses are per grant requirements  
Uses are per donation requirements

TWAP Focus - Research, 50% match, Mar.; \$3million total program funding (Original funding is USFWS)  
TWAP Focus; Habitat Restoration & Monitoring, Dec.; \$1million total program funding for 2 yrs.  
Landowner Habitat Conservation Activities. 25% match required  
Preserve O&M

o National Resource Conservation Service Programs

- Wetlands Reserve Program
- Grasslands Reserve Program

NRCs holds easement for specified use; acquired at fair market value of easement (may free funding for additional acquisitions or O&M)

o Private Sector 2002 Farm Bill Programs

- Wildlife Habitat Incentive Program
- Environmental Quality Incentive Program

Private Landowner Habitat Conservation Activities; TWAP Focus; Max grant of \$25k, 50% match  
Soil, water and natural resource protection on farmland, pastureland and non-industrial forest; Hay Co. focus is brush mgt.; Max. grant of \$450k, 50% match