

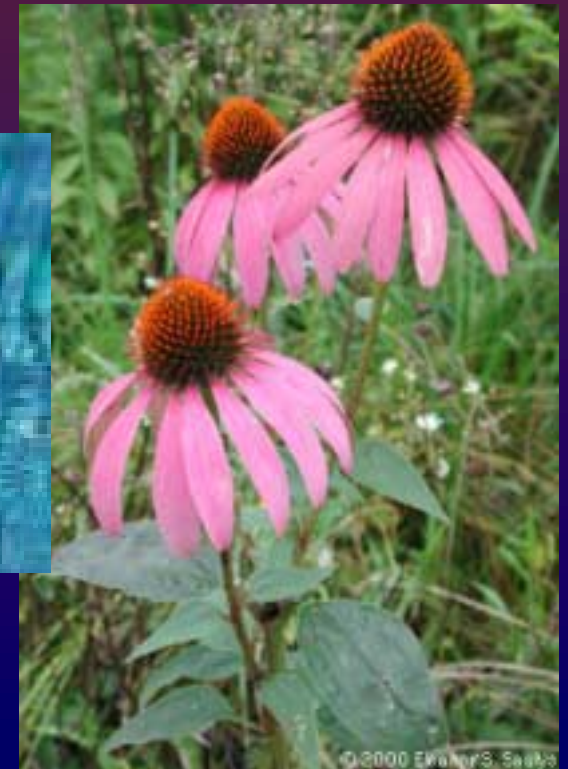
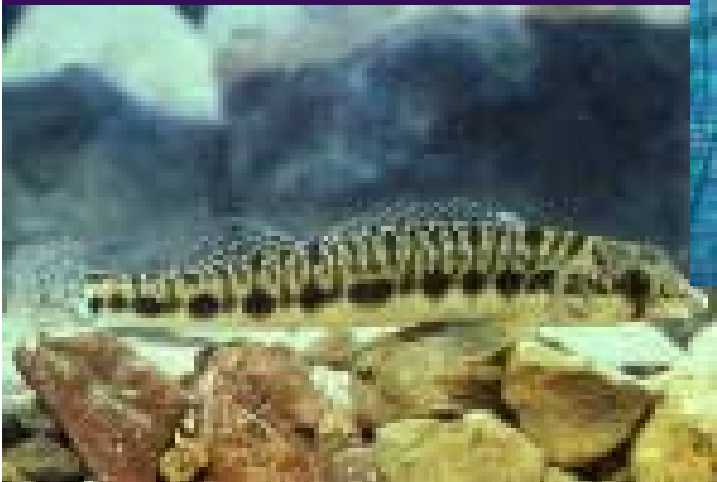
U.S. Fish and Wildlife Service





Fish and Wildlife Service Mission

- ❖ Conserve, protect and enhance fish, wildlife, and plants for the American people





Ecological Services' Main Work Areas

- ❖ Wetland and stream protection and restoration
- ❖ Contaminants
- ❖ Improvement of private lands for F&W resources
- ❖ Evaluation of land management on other Federal lands for F&W

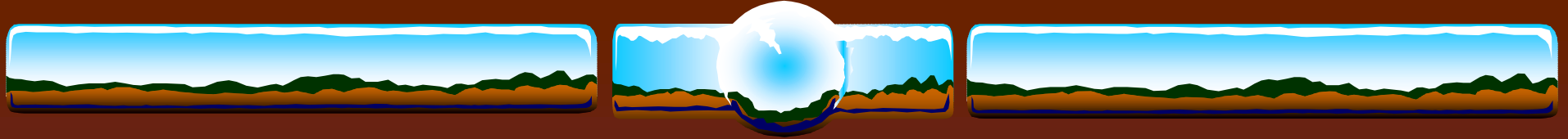




Primary Resources ES Addresses

- ❖ Migratory Birds
- ❖ Anadromous fish
- ❖ T&E species



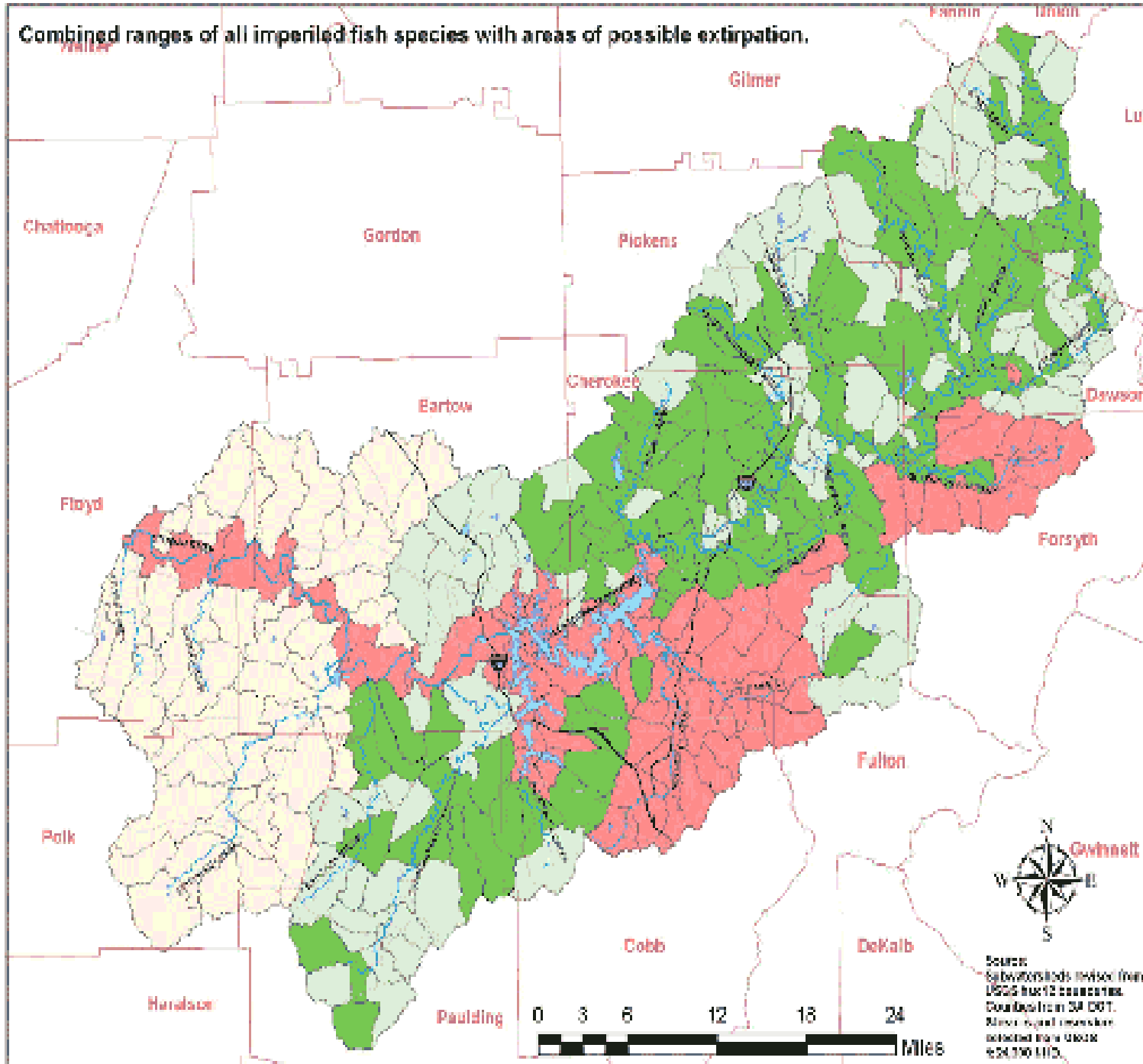


HCP for Listed Species in the Etowah Basin

- ❖ Etowah darter
- ❖ Amber darter
- ❖ Cherokee darter



Combined ranges of all imperiled fish species with areas of possible extirpation.



Federally listed fish of the basin include:
 Bowfin darter (*Etheostoma caeruleum*)
 Cherokee darter (*E. scottii*)
 Amber darter (*Percina antecessa*)

Other imperiled fish of the basin include:
 Speckled shiner (*Notropis heterodon* sp. of *notropis*)
 Heckler's madtom (*Ameletus marmoratus*)
 Holiday darter (*E. sp. of brevivittatus*)
 Lined darter (*P. sp. of macrocephalus*)
 Heckler darter (*P. antecessa*)

These species are expected to be listed threatened or endangered within the next few years.

Combined range estimates and areas of possible extirpation created by Byron Freeman based on species habitat requirements and known historic distributions comprising all 9 imperiled fish species in the Etowah basin.

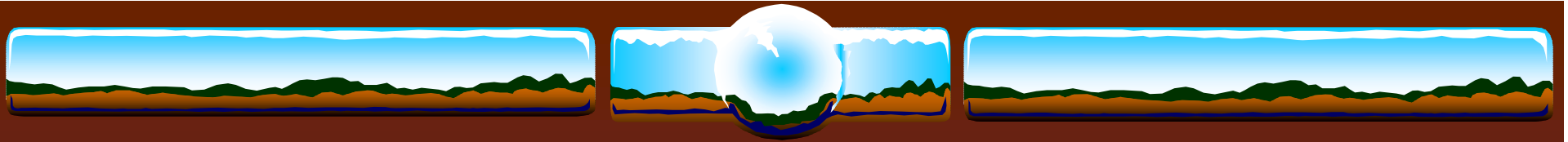
Map created April 12, 2002 by Carrie Straight and Seth Wenger.

Legend

Imperiled Fish Estimates

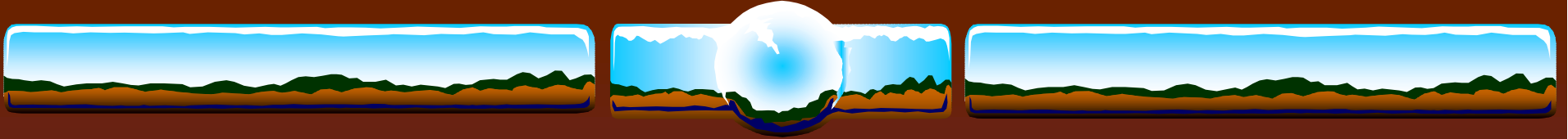
- Known populations
- Suspected populations
- Presumed outside of range
- Possibly extirpated
- Large Reservoirs
- Major Rivers
- State Highways
- Interstates
- Counties

Source: *Etowah River Watershed* revised from USGS 1:50,000 scale maps. County data from GA DOT. Major road numbers adopted from USGS 1:50,000 maps.



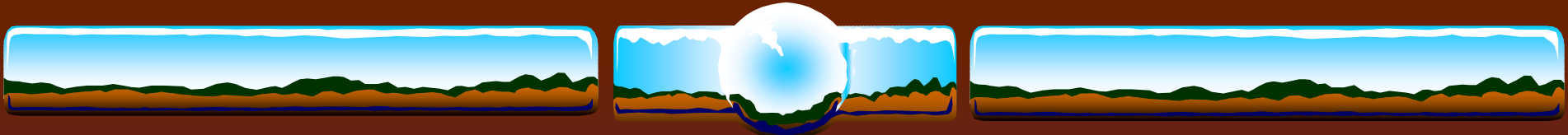
An HCP is a Partnership

- ❖ To plan ahead for future development
- ❖ To guide how the community looks in the future
- ❖ To protect quality of life in the community
- ❖ To protect listed and rare species
- ❖ Protect water quality for people and wildlife



Endangered Species Act

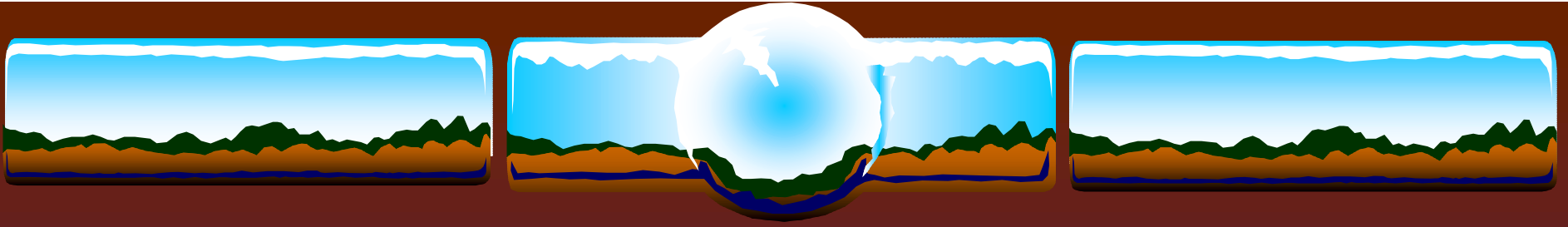
- ❖ Prohibits **take** of listed fish and wildlife
- ❖ Take = to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct.
- ❖ Harm includes significant habitat modification that kills or injures by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.



What Actions Might Take Listed Aquatics

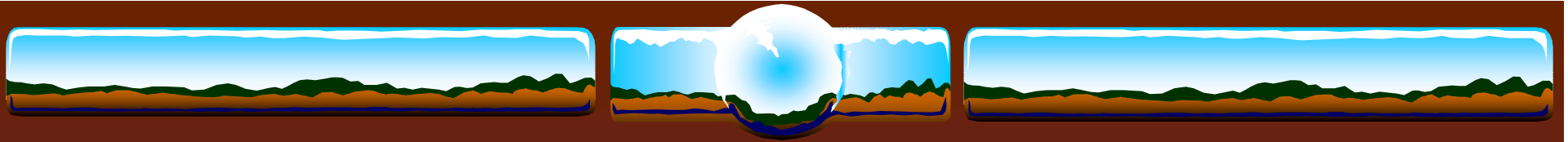
- ❖ Culverts or pipes in streams
- ❖ Open trench construction
- ❖ Clearing riparian vegetation
- ❖ Dams and impoundments
- ❖ Upland construction that increases % impervious surface or sediment in runoff
- ❖ Increased contaminants in runoff
- ❖ Forestry and agriculture





THE ESA IS NOT DESIGNED
TO STOP DEVELOPMENT

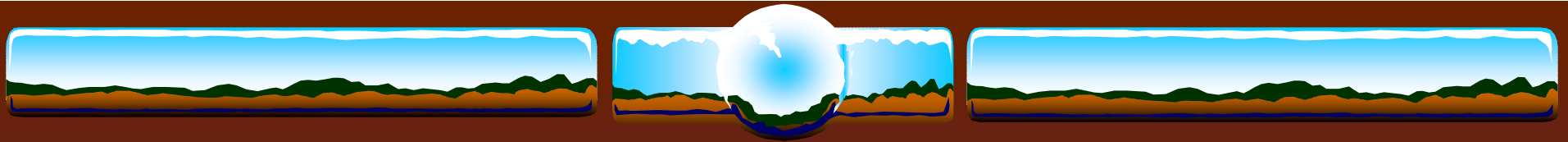
BUT PROMOTES
ENVIRONMENTALLY SENSITIVE
DEVELOPMENT



Section 7 vs. Section 10

Section 7 – between Federal agencies
(formal consultation ends with a
biological opinion)

Section 10 – between FWS and non-
federal agencies and private
landowners (coordination ends with an
HCP)



Section 7

vs

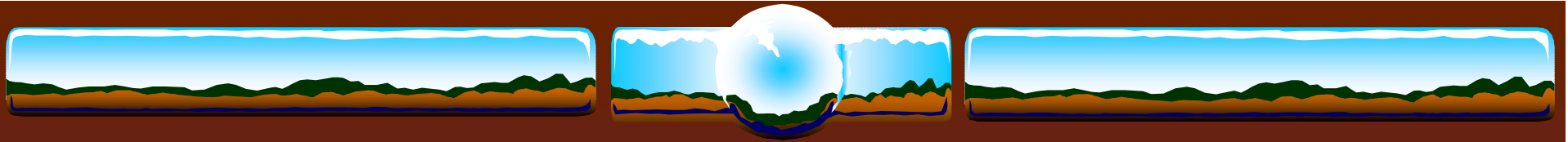
Section 10

❖ Consultation between federal agencies (BOs)

- Corps Section 404 permit
- FERC licensed powerline/pipeline
- FHWA funded road
- FCC licensed cell tower
- work on Lake Allatoona

❖ No Federal agency involvement (HCPs)

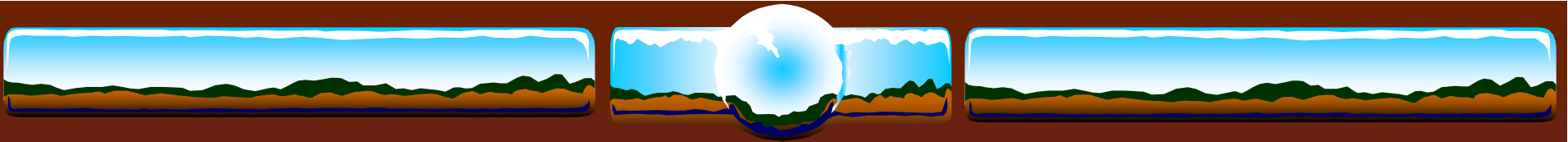
- bridges and arch spans
- local utility lines
- non-FHWA funded roads
- farm ponds and other ag
- riparian clearing/forestry
- other upland activities



Simple Regional HCP Could Cover:

- ❖ Road crossings of streams
- ❖ Utility crossings of streams





Moderate Regional HCP Could Cover:

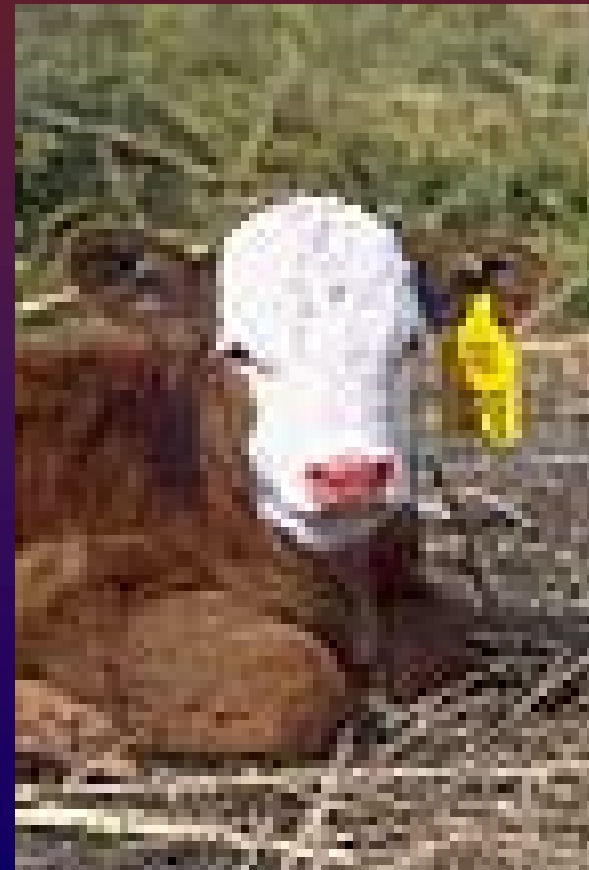
- ❖ Road and utility crossings
- ❖ Subdivisions, including review of S&E plans to ensure protection of T&E





Complex Regional HCP Could Cover:

- ❖ Road and utility crossings
- ❖ Subdivisions
- ❖ Farm ponds
- ❖ Riparian clearing
- ❖ Forestry operations
- ❖ Agriculture

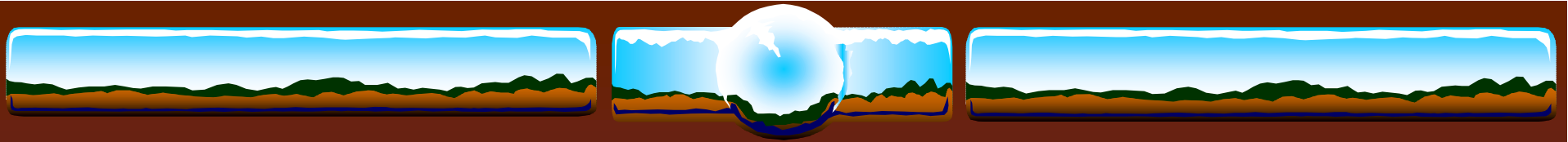




Benefits of a Regional HCP

- ❖ Conservation of T&E species
- ❖ Improvement of water quality





Benefits of Regional HCP

- ❖ Save time and paperwork
- ❖ Less costly than multiple individual HCPs
- ❖ Provides long term community planning
- ❖ Promotes inter-community coordination
- ❖ Federal law enforcement support
- ❖ Increased federal funding opportunities