Upper Llano WPP Coordination Committee Meeting

February 5, 2015

Meeting notes (K. Wagner/E. Seldomridge)

**Tom Arsuffi**

Started WPP:

* 2.5 years ago

Watershed threats:

* Brush, land fragmentation, riparian protection (streambank restoration?), upland management, axis deer, feral hogs, invasive plants (elephant ears, giant cane, chinaberry)

Education:

* Diversity trails, seminars, TTU outdoor school

Watershed approach

* 5 times cheaper to keep a watershed healthy than to fix an impaired one

Monitoring update:

* Last sampling to occur on 2/6/15; next step is to analyze all data

Partnership:

* This is Stakeholders Plan; we have great partnership

New members:

* Matt Shelley, Josh Dean TPWD
* Joel Pigg, Real/Edwards Conservation District
* Lori Hazel, TFS
* Megan Bean, Preston Bean, TPWD
* Joe David Ross

**Terry McLendon (**[**link to presentation**](http://southllano.org/blog/wp-content/files/TTU%20JUNCTION%20Edys%20FEB15.pdf)**)**

Development of EDYS - mechanistic & spatially explicit model

Simulates hydrology, vegetation, animal, and landuse

9 Llano Models linked together (for each of 3 counties - modeled riparian, uplands, and channel)

Inputs: rain, soils, veg, land mgt

* 48 soil units
* 26 vegetation types
* 11 landuse types
* Veg adjusted for woody species

Output = water yield, sediment loads, forage production, tree re-growth, wildlife diet, etc.

* Model run requires 4 hrs (can do 3-4 runs/day)

Possible Scenarios

* Rainfall patterns (25 yr): avg, dry, wet
* Brush control (90% removal, specified areas): avg rain, wet, re-treatment
* Fire (when, where, how often): avg rain, drought, number/yr
* Cattle grazing (none, moderate, hvy): avg precip, dry
* Deer (numbers, mobility): dry, average yrs, following fire
* Increase in Arundo (where, how much, how rapid)
* Urban & mineral development

Endpoint variables

* Water budget: runoff, ET, storage, deep percolation, river flow
* Water quality: sediment load
* Upland vegetation: woody species, grasses, deer diets
* Riparian vegetation: change in types, increased Arundo

Model status:

* Upland and riparian models up and running
* Channel model being linked to riparian
* Doing test runs

Example scenarios:

* Cibolo Creek brush control example
* Ft. Hood
* Ft. Bliss
* Otero Mesa

Other impact variables include rotational grazing

Cibolo modeled:

* Livestock grazing
* Brush mgt
* Cultivation
* Improved pasture
* Fertilization
* Herbicides
* Reseeding
* Hunting
* Urbanization (anticipated annual growth)
* Irrigation

Need to ensure that brush control is recommended in the Regional Water Plan

*Follow up on brush control in Regional Water Plan (Tyson): Brush control is included in both the Region J and Region F plans for both Ashe juniper and Arundo donax.. The LRFS may wish to make comments on the Initially Prepared Plan (on behalf of the WPP) to also include elephant ear and chinaberry as well as highlight cost sharing programs available in the watershed via LIP.*

**Kevin Wagner**

·         Kevin brought several examples of WPPs

·         Next steps as a group: determine what scenarios are for the model; everything else hinges on what group wants implemented in watershed in next 10 years

·         9 required elements to be able to get this approved to then receive funding for implementation section of the plan

·         Keep in mind that most of these plans are developed for areas that have series water quality issues, but we don’t have water quality impairments. We want to maintain water quality and flows.

o   A: goals since no water quality reductions needed

o   B: estimate load reductions and goals will be plugged into model and we can then better estimate loads

o   C: management measures desired for watershed (need to consider feasibility);

o   After that need to figure out cost of implementation

o   Typically have education and outreach component (maintain and build on TTU Junctions work and Extension Agents)

·         Shooting to wrap up first draft plan by June/early July; working to accelerate meeting schedule

·         Moving forward: writing individual sections of plan, circulate for review and comment, presentation on chapter and time for public comment

·         Prior to next meeting will send intro chapters for review

·         Tom: working group meetings to revise goals in regard to terry’s model and goals?

**Wrap up**

Intro chapters of WPP and working group topics (reviewed as a group) so that we come up with consensus BMPs and scenarios

Will send doodle poll to give time and date options but look for a meeting around mid-March