

## **GroWNC Natural Resource WG Meeting Notes**

### **October 4, 2012 at LOSRC Offices**

**Meeting Participants:** Lang Hornthal, Steve Duckett, Tim Garrett, Judy Francis, Bob Gale, Michelle Pugliese, Jennifer Bauer, Valerie True, Steve McLeod, Eric Romaniszyn, Erica Anderson, Kristin Peppel

### **Meeting Notes**

#### **A. Gaps / New objectives that need to be added into analysis**

##### **1. Forest Health and Climate Change / Environmental Health. Includes:**

- Performance measures specific to forest health (akin to Water quality, Ag lands)
- Drought cycles
- Invasive species
- Fire
- Sustainable forestry and role of sustainable forestry in maintaining forest health

**Action Step:** Contact RENCI/USFS about extracting performance measures from the WNC Vitality Index chapters related to the above factors. Will send set of performance measure next week once they are developed.

Group discussed how the natural landscape is the basis for economy, healthy, energy, etc. and wondered how/if the LLC/natural resource datasets are being used as the basis to determine future development patterns. Judy Francis noted that the environmental framework needs to be used as the basis for all other decisions that are made related to economy, development patterns, etc.

#### **New Objective: Promote and protect healthy forests -**

##### **Associated Performance Measures:**

- Acres of high elevation forests
  - Followed up with Andy, Jon, Greg
- Acres of rich cove forests
  - Followed up with Andy, Jon, Greg
- Acres of forests impacted by invasive species (WNC Alliance has some data)
  - contacted Bob, Lindsay, and Julie
- Acres of private forestlands with management plans
  - Contacted Michael Cheek – working on acreage per county in FMP and map points
- Acres of forestlands converted to residential/commercial development – NCLD 2006
- Acres of forestlands certified by SFI/FSC
  - contacted Amy with SFI; FSC

## 2. **New Objective: Sustain water quantity in the region**

### **Associated Performance Measures:**

- Change in water levels in reservoirs
- # permits for water withdrawals
- # permits for discharges
- Total amount of water withdrawals
- Total amount of water discharges
- # permits for well-drilling
- Average depth of new wells
- Amount of annual rainfall
- Change in stream flow rates

## 3. Addressing **environmental hazards** and **safety** in new development planning

**New Objective:** Minimize development in areas that are affected by natural hazards (flooding, landslides, hurricanes, earthquakes, tornadoes)

### **Associated Performance Measures:**

- Acres of new development within high and moderate landslide hazard zones, as defined on the NC Geological Survey landslide hazard Stability Index and Debris Flow Pathways Maps
- % new residential / commercial development within landslide hazard zones, as defined on the NC Geological Survey landslide hazard Stability Index and Debris Flow Pathways Maps
- Acres of new development in the 100 year floodplain
- % new development in the 100 year flood plain

**Themes:** These 3 new objectives should be added to the following themes

- Economic Prosperity
- Protection and Enhancement of Natural and Cultural Resources
- Adequate Infrastructure
- Accessibility and Connectivity
- Healthy Communities ( Obj 3 performance measures can added under “Increase supply of safe and efficient housing...” obj)

It is also suggested that the **Enhance Water Quality** objectives/performance measures be added to the above themes where it is not already present.

The group felt strongly that water quality/quantity, air quality, and forest health need to be explicitly linked with economic prosperity. By not including these, we are perpetuating the misconception that these are not an integral part of the region’s economic prosperity.

4. Specifically address **Sustainable forestry** as a key economic driver. Group discussed that while SF has historically been lumped in with agriculture, this is not necessarily the case in current times, and it needs to be more explicitly noted – with its own set of performance measures.

**New Objective: Promote a Vital Forest Economy (in Economic Prosperity Theme)**

**Associated Performance Measures**

- Acres of forestland converted to residential development
- % of forestland converted to residential development
- Number of employees in sustainable forestry industry
- Dollars generated from timber sales
- Amount of timber that stays in the region and used towards additional products

5. **New Objective:** Foster Increased awareness of naturally occurring hazards in Western N.C. (in Public Awareness/Education theme)

**Associated Performance Measures**

- number of adult and student programs that discuss natural hazards in WNC (flooding, landslides, hurricanes, earthquakes, tornadoes)
- number of local government emergency preparedness programs or promotions (like public service messages)
- acres and % new residential and commercial development in 100 year flood plain
- acres and % new residential and commercial development in high to moderate landslide hazard zones, as defined on the NC Geological Survey landslide hazard Stability Index and Debris Flow Pathways Maps (see NC Geological Survey landslide hazard maps for Buncombe, Henderson, Macon, Watauga Counties)

**B. Additional performance measure to be added to existing objectives (which may be present in multiple themes)**

**Protection and Enhancement of Natural and Cultural Resources**

**1. Enhance water quality**

- Linear feet of protected riparian areas
- Acres of protected wetlands
- Acres of new development in high landslide probability lands (data: NCGS stability index map high hazard landslide zone -currently available in Buncombe and Henderson counties)
- Acres of land protected that contain a headwater stream
- Linear feet of protected streams
- Dollars spent on stream restoration (BMPs) on private lands

- # Stormwater BMPs implemented (i.e., ., rain gardens, cisterns, detention basins, constructed wetlands, etc.) - get data from SWCD, NCSU, Coop Ext, NGO, local gov.)

## 2. Protect Sensitive Lands

- Acres in permanent protection (fee simple acquisitions) – data from RF – Valerie True
- Acres of fee-simple bog preserves – CMLC and BRF
- Acres of new development in high landslide probability lands (data: NCGS stability index map high hazard landslide zone -currently available in Buncombe and Henderson counties)

## 3. Maintain Scenic Quality

- Acres of lands protected in scenic viewsheds (per Blue Ridge Parkway and Appalachian Trail Conservancy Viewshed data)

## Economic Prosperity

### 1. Support the tourism economy

- # USFS permits for outings in national forest
- # events and festivals
- Revenue generated by summer camps ( or maybe this is under the diversify the economy obj?)
- # miles of public trails

2. Group wanted to see something explicit to the alternative healing / herb industry here but wondered if this is included under “target industries” noted in the Diversify the Economy” ?

## Healthy Communities

**NR Goal:** Add “Visitors” to goal (“Residents and visitors recognize the health and restorative...”) –oversight by group in initial goal development.

### Objectives:

#### 1. Increase the supply of safe and energy efficient housing accessible to all

- Add “healthy built homes” to list under first bullet
- #, acres of new residential housing units built within landslide hazard zones

#### 2. Change Promote Healthy Residents to “Promote mental and physical health of residents”.

Group talked a lot about the draw of WNC as a healing place (also a key part of our history) – and the power of our mountains for mental health and restoration. We talked about adding an objective specific to mental health, but felt like the objective above encompassed mental health, but needed to be more explicit. The other

comment about this objective is that it lacks measures of healthy residents and focuses on measures of disease instead.

Some suggested addition **performance measures** include:

- # mental health centers/programs (substance abuse, mental health providers)
- # people with gym memberships
- # wellness centers (includes spa, massage therapy, alternative healing)
- # schools with outdoor education programs/components
- Average amount of daily time outside for school children (in school hours)

### **3. Improve access to physical activity and outdoor recreation options**

- # public trail miles
- # river access points along French Broad River
- # summer camps based in outdoor setting
- # outdoor recreation/education programs for kids
- # participants in outdoor education/recreation programs for kids

### **Education /Public Awareness**

Add NR goals about outdoor recreation and wildlife and biodiversity – as each of these goals hinges on people recognizing the value of maintaining connectivity and the benefits of outdoor recreation/restoration.

In Land and Water NR goal , add **educators** to list along with decision-makers, community leaders, and landowners

### **Objectives:**

1. Improve Access to educational opportunities
  - # programs that educate people about natural hazards (floods, hurricanes, landslides...)
  - # participants enrolled in natural resource/outdoor education programs
  - Dollars spent on outdoor education programs for youth
  - # youth camps in outdoor settings
  - # partnerships between businesses/organizations and school groups that foster outdoor education programs and experiences
2. Raise awareness of regional issues
  - Dollars spent on education programs aimed towards building awareness of youth on environmental issues and opportunities