Investigating and Acquiring Mitigation Sites

April 15, 2011

AMERICA'S
BEST
ENERGY VALUE

Karl Baker

Land Agent

ICG Hazard, LLC

Investigation

- **What makes a great mitigation site?**
  - **Need**
  - **Water Quality**
  - **Location**
  - **Site Control**
  - **Size**

Investigation cont'd

- **Need:**
  - **Headcuts**
  - **Bank Erosion**
  - **Canopy Loss**
  - **Historic Stream Relocation**
  - **Logging Debris/Damage**
  - **Other Land Use Impact**

Headcuts

Headcuts cont'd

Bank Erosion

Bank Erosion cont'd

Loss of Canopy

Historic Relocation

Logging Debris

Other Land Use Impacts

Other Land Use Impacts cont'd

Other Land Use Impacts cont'd

Other Land Use Impacts

Investigation

- **What makes a great mitigation site?**
  - **Need**
  - **Water Quality**
  - **Location**
  - **Site Control**
  - **Size**

Water Quality

- **Always target good quality water.**
- **Remember, the lights are on but nobody's home……**

Investigation

- **What makes a great mitigation site?**
  - **Need**
  - **Water Quality**
  - **Location**
  - **Site Control**
  - **Size**

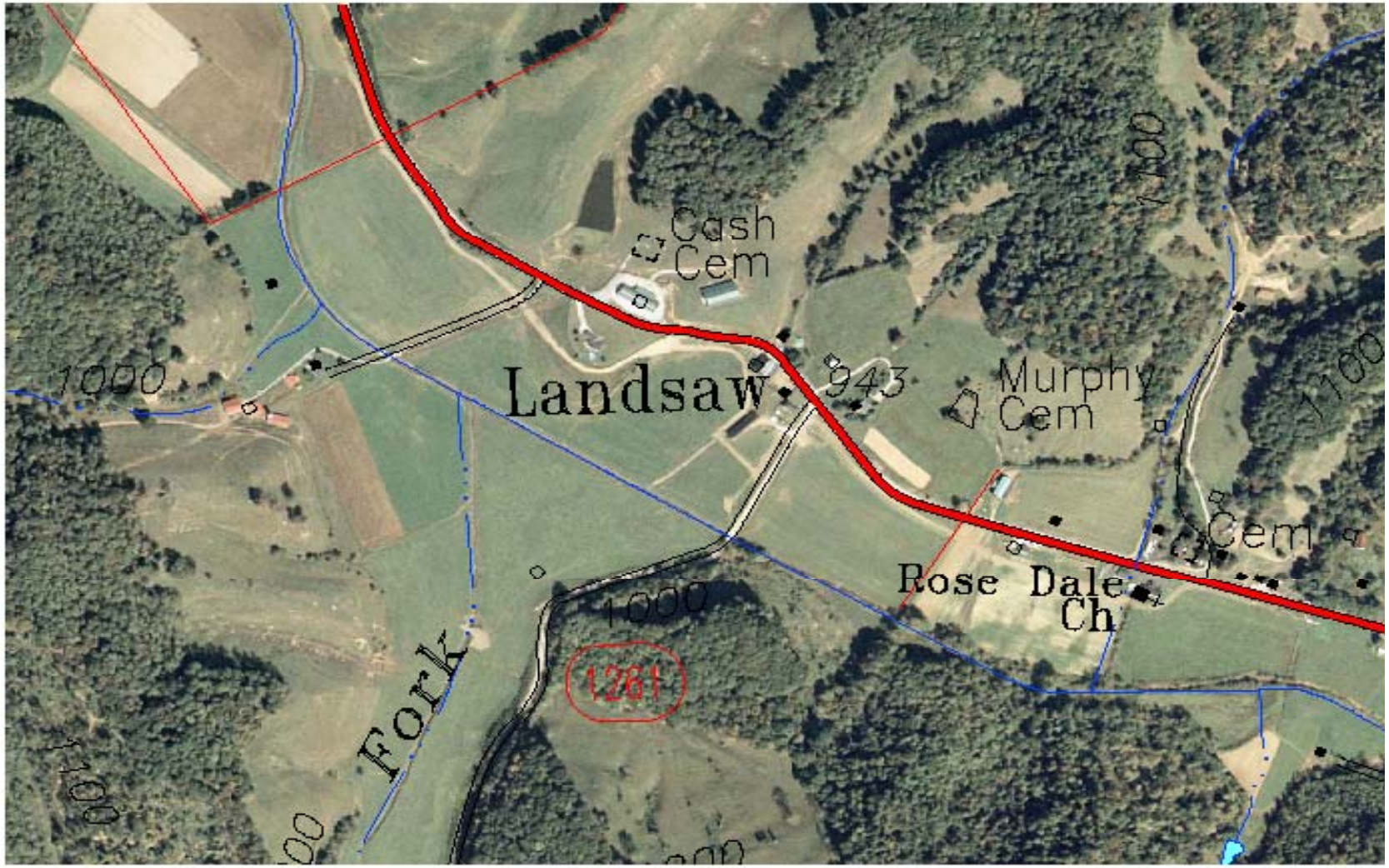
Location

- Headwater streams
- Urban areas
- Farms

Headwater Stream

Urban Areas

Farms


Cash
Cem
Landsaw
943
Murphy
Cem
Cem
Rose Dale
Ch
1000
1261
Fork

Investigation

- **What makes a great mitigation site?**
  - **Need**
  - **Water Quality**
  - **Location**
  - **Site Control**
  - **Size**

Site Control

- Natural Resources – gaslines, gas wells, coal reserves
- Public roads within the watershed
  - Paved – road salt runoff, access to a greater number of unwanted users
  - Gravel – transport of gravels into the stream channel
  - Drainage pattern – culverts can redirect drainage throughout the mitigated area
- Trespassing - intentional or based on historic usage
- Garbage dumping – especially a problem along uninhabited roads

Investigation

- **What makes a great mitigation site?**
  - **Need**
  - **Water Quality**
  - **Location**
  - **Site Control**
  - **Size**

Size

- **Tract must be large enough to offset all of the associated costs including:**
  - **Purchase**
  - **Design**
  - **Permitting**
  - **Construction**
  - **Maintenance**
  - **Monitoring**
- **Equipment efficiency**
  - **Less movement and mobilization costs**
- **Greater impact to watershed**
  - **Maximized downstream benefit**

Acquiring

- How do I find?
- Economics
- Ownership

Acquiring

- **HOW DO I FIND THESE SITES?**
  - **Newspapers**
  - **Real Estate Agents**
  - **Loggers**
  - **Word of Mouth**
  - **Drive By**

Acquiring cont'd

- **Newspapers:**
  - **Classifieds**
  - **Court Sales**
  - **Estate Sales**
  - **Bank Foreclosures**
  - **Divorces**
- **Real Estate Agents:**
  - **Not the best farm**
  - **Farms with issues**

Acquiring cont'd

- **Loggers:**
  - **50% of our sites are found through loggers**
  - **After logging, owners are usually primed to sale the tract**
- **Word of Mouth:**
  - **Once you have purchased in an area, sellers begin to knock on your door.**
  - **Leave a card.**
- **Drive By**
  - **Look for areas not maintained or in disrepair**

Acquiring

- How do I find?
- Economics
- Ownership

Economics

- Buy or Lease
- Cost per Unit

Buy or Lease?

- Buying can be less expensive in the long run
- Lease area is harder to harder to get restricted covenants
- Future control
- Improved site control
- Resell with restrictions intact

Cost per Unit

- Cost per acre
- Cost per tract
- Cost per credit unit (in Eastern KY – the EIU)

Ownership

- **Title**
  - **Always, always, always run title**
  - **Not just for ownership**
    - **Tax liens**
    - **Leases**
    - **Easements**
    - **Rights of way**

My Hit List

- Headwater watershed
- Maximum control
- Limited public access
- Excellent water quality
- Bang for my buck ($)
- Largest tract possible

My Avoidance List

- Sediment control ponds!
- Residences
- Poor water quality
- Sandy soil
- Landslide areas
- Limited equipment access
- Coal reserve areas
- Leases!

Things I've Learned

- Be a good neighbor
- Know when to walk away
- Build in permanent stream crossings
- Maintain good agency relationships
- Keep up to date on new ideas and ways

- Questions?