BLACKHAWK HILLS

Resource Conservation and Development

Report to Sponsors

Following are projects or events that the RC&D is presently involved in:

National RC&D Week – National RC&D Week celebrates the anniversary of the beginning of the RC&D program and also recognizes local RC&D Councils and their projects. This year RC&D Week will be held from September 20 to 26. In honor of National RC&D Week, Blackhawk Hills RC&D Council invites you to an Open House that will be held on **September 23, 2009** from **1:00-3:00 PM** at the new office location at 102 East Route 30, Suite 3, Rock Falls, IL.

Illinois Association of RC&Ds (IARCD) Event – Blackhawk Hills RC&D Council will be hosting the IARCD Annual Meeting and Training Session on October 14-15, 2009 at the Candlelight Inn in Rock Falls. The event is open to Council Members, RC&D Staff, Partners and others interested in the RC&D Program. The RC&D Councils in Illinois come together every year to: share ideas, discuss issues and opportunities where councils can work together, share success stories of what works, conduct business on behalf of the Association, elect Association Officers and provide training.

Blackhawk Hills Fiber Optic System – Blackhawk Hills submitted a $72 million grant application for Broadband Initiative Program and Broadband Technology Opportunities Program funding. We should hear something during the month of November. The Broadband network will provide middle-mile dark fiber infrastructure system to the un-served agricultural areas within the six county area. Links will be provided to the bandwidth centers located in the Quad Cities, Rockford and Rochelle. This will be an open system available to all providers, government entities, education, businesses and any others that are willing to provide Internet access to these communities to purchase at an Indefeasible Right to Use (IRU) for two fibers at our cost.

IL Environmental Protection Agency 319 – Milk House Waste Grant – The 319 grant that Blackhawk Hills RC&D received from the Illinois Environmental Protection Agency is nearing the end of its two year grant cycle. Over the past two years we have worked with 18 producers on milk house waste projects, clean water diversions and roof runoff management. The RC&D Council also sponsored the Grazing Workshops, a Forage Expo and a Grazing Demonstration Project to emphasize the importance of keeping livestock out of the streams. The grant of $167,843 leveraged $111,985 in matches. At this point the RC&D Council is not planning to apply for another IEPA – 319 grant to do this kind of cost share unless a need is identified by producers.

Blackhawk Hills Council Meeting – The RC&D Council's regular board meeting will be held on September 28, 2009 at 6:00 p.m. at the Lanark Heritage Center in Lanark, IL.

September 2009

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Infrastructure Projects
Executive Summary

a) Opportunity
This network will provide middle-mile dark fiber infrastructure system to the unserved agricultural areas within the six county area. Links will be provided to the bandwidth centers located in the Quad Cities, Rockford and Rochelle. This will be an open system available to all providers, government entities, education, businesses and any others that are willing to provide Internet access to these communities.

b) Description
We propose a dark fiber middle mile project that will link the unserved agricultural areas around our communities. This fiber will be open to all businesses, governments, schools, public safety and healthcare that desire to purchase an Indefeasible Right to Use (IRU) for two fibers at our cost. These entities may develop a network using this dark fiber in any manner that meets the needs of their user community. Blackhawk RC&D and our partners will actively promote this system to all vendor communities.

c) Households/businesses passed
93,917 households
17,996 businesses

d) Anchor institutions
A list of all schools, libraries, Village halls, County facilities, Hospitals and Police stations was submitted as the list of Community Anchor Institutions.

e) Services/applications
The one application of this system is the IRU for two point-to-point dark fibers.

f) Approach to non-discrimination
This fiber will be open to all businesses, governments, schools, public safety and healthcare that desire to purchase an Indefeasible Right to Use (IRU) for two fibers at cost. These entities may develop a network using this dark fiber in any manner that meets the needs of their user community. Blackhawk RC&D will actively promote this system to all businesses, government agencies and individuals that have need for dark fiber over a long period of time. This same model has been successfully implemented by the Illinois Toll Highway Authority for the 175 mile dark fiber system that they have installed over the past ten years. We have based our business approach on the Tollway's model to lease dark fiber.

g) Type broadband
Unlimited bandwidth over dark fiber.

h) Qualifications of applicant
Blackhawk RC&D is partnering with Northern Illinois University (NIU) to implement this project. The board of Blackhawk RC&D has a wealth of management experience as our members are leaders in the community holding positions in local business, as-well-as local and

county governments. NIU provides the technical depth needed to implement and operate this system. Some of their experience comes from projects in the following areas:

1. NIU maintains and supports a user community of 40,000 people with a wide diversity of a applications and hardware systems.
2. NIUnet, a dark fiber network, reaches from downtown Chicago to Iowa linking campus locations and providing Internet 1 and 2 access to local government, education and healthcare in addition to their internal needs. This network uses DWDM technology and can support almost 3 terabits of traffic.
3. NIU provides technical assistance to local communities that install fiber optic and wireless systems. Recent projects include School District 300, Village of Hoffman Estates, and City of Elgin as examples.
4. NIU provides technical guidance to the City of Chicago (Office of Emergency Management & Communications), Cook County, and City of Rockford for the design & implementation fiber optic based projects such as citywide video surveillance systems built on fiber optic and wireless based infrastructures.

i) Overall cost
$72,158,710

j) Overall expected subscriber projections
This network will support the needs of all the community anchor institutions in the six county area. There are currently 142 participating organizations with over 500 facilities making this a self sustaining enterprise.

We encourage our commercial participants to use our fiber resources to provide last mile services within our communities and surrounding unserved agricultural areas. As an organization, we will provide focus to those providers who will propose broadband services for our community anchor institutions and the unserved rural agricultural areas that make up the majority of our six county area.

k) Jobs created or saved
The majority of the new network costs are related to engineering, construction and professional services. These services will be provided by local firms that will create jobs and serve as an economic stimulus to the region, while providing much needed high speed communication capabilities. We estimate that this network has the potential to directly create between 95 – 100 professional services and construction jobs per county (about 600 total), and indirectly a significant number of additional jobs related to the network components.

Blackhawk Hills Network Consortium

Planned Connectivity
12Aug2009

Legend

- Whiteside County Sites
- Stephenson County Sites
- Ogle County Sites
- Lee County Sites
- Jo Daviess County Sites
- Carroll County Sites

Note:

Green Line = Proposed Fiber Links
Magenta Line = Existintg Fiber Links

N

0 1.5 3 6 9 12 Miles

1:150,000

Text

NIU Broadband Development Group
NIU Outreach