

# Accelerating Riparian Buffer Adoption to Enhance Water Quality and Farm Income

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# Background

Riparian buffers are strips or small areas of permanent vegetation established along the edges of rivers, streams, and other water bodies, providing a “buffer” between the water body and adjacent land - typically crop land. Riparian buffers protect and enhance water quality in at least three ways: a) sediment and other particulate-bound pollutants are trapped within the buffer; b) banks are stabilized; and c) runoff water, often containing soluble nutrients and pesticides, is reduced through increased infiltration in the buffer.

Although farmers and landowners may recognize these benefits, they are often reluctant to install buffers because land must be taken out of production which decreases income, and maintenance is required which increases expenses. This project is designed to address these and other concerns.

# Overall Objective

- Foster the installation of conservation (riparian) buffers in Nebraska



# **Three component approach**

- **Multi-faceted educational program**

# Multi-faceted educational program

- meetings
- tours
- workshops
- training sessions
- website ([conservationbuffers.unl.edu](http://conservationbuffers.unl.edu))
- electronic presentations
- publications
- other techniques



# Three component approach

- Multi-faceted educational program
- Major demonstration sites

# Demonstration Sites

One focus - showcase “productive conservation”

- the concept of using plants with income-producing potential in a buffer or other conservation practice
- woody florals, small fruits, and hybrid hazelnuts





# **Three component approach**

- **Multi-faceted educational program**
- **Major demonstration sites**
- **Peer-based outreach program**

# Peer-Based Outreach Program

- “FarmLink” - farmers or other rural leaders individually contact farmers and landowners to promote conservation practice adoption



# “FarmLink” –

## Promoting Conservation One-to-One

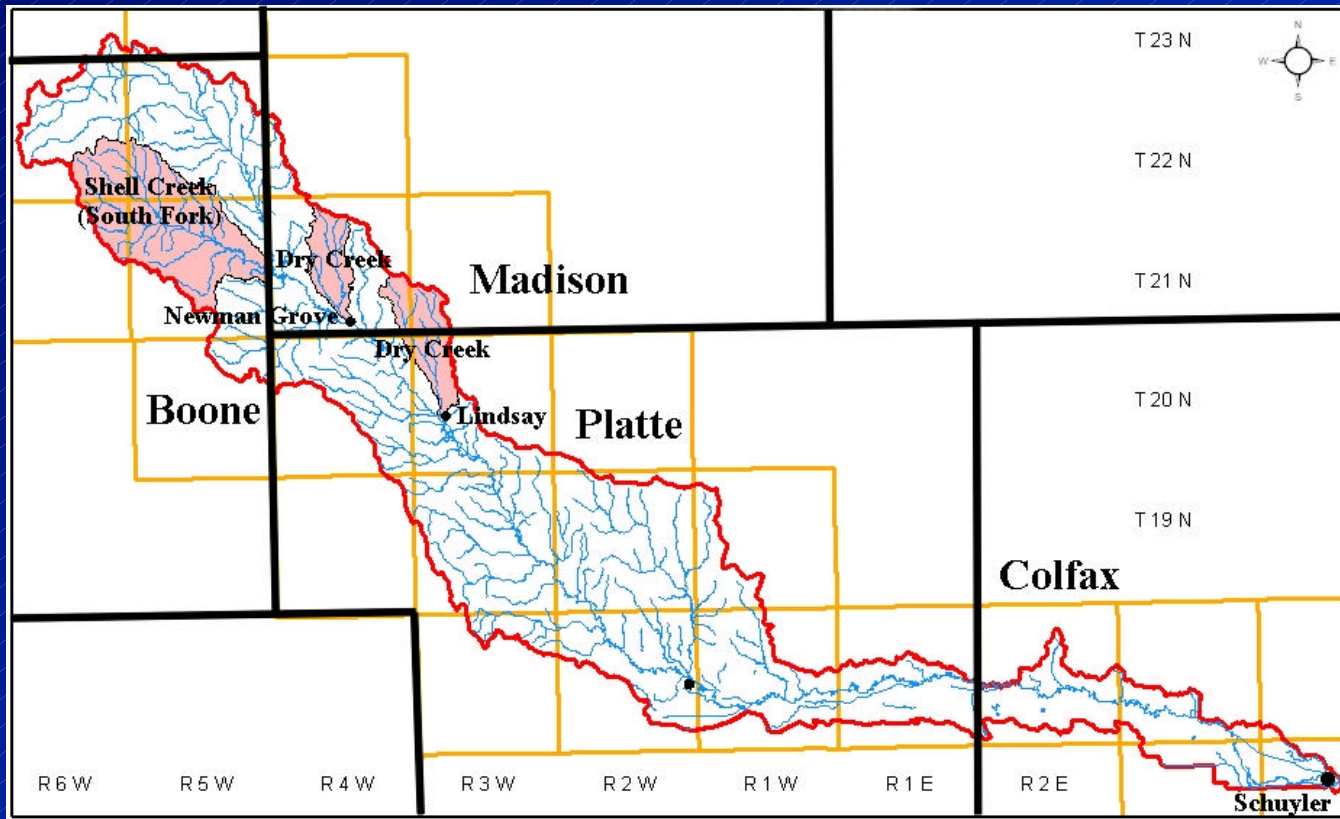


# **Background**

**One-to-one programming is certainly not new or unique - it was probably one of the most-used Extension education methods for many years. However, because of budget and time constraints, we have generally moved away from this technique.**

**In certain circumstances, though, one-to-one programming can be a very effective tool.**

# Selected Target Area – Shell Creek Watershed



# **FarmLink Advisor Selection Criteria**

- **Local farmer/landowner (possibly semi-retired)**
- **Well-respected, recognized as a leader**
- **Strong conservation ethic**
- **Good communicator**
- **Motivated, positive attitude, out-going**
- **Well-kept farmstead**
- **4 individuals selected**

# **FarmLink Advisor Training**

- **Buffer benefits and design basics**
- **Government program availability**
- **“Sales” techniques**
- **Conducted by Extension, NRCS, NRD, etc.**

# **Farm Visit Process**

- **Required to be “on-farm”, face-to-face**
- **Scheduled in advance via phone**
- **Generally 1.5 to 2.5 hours duration**
- **During “off-peak” periods**



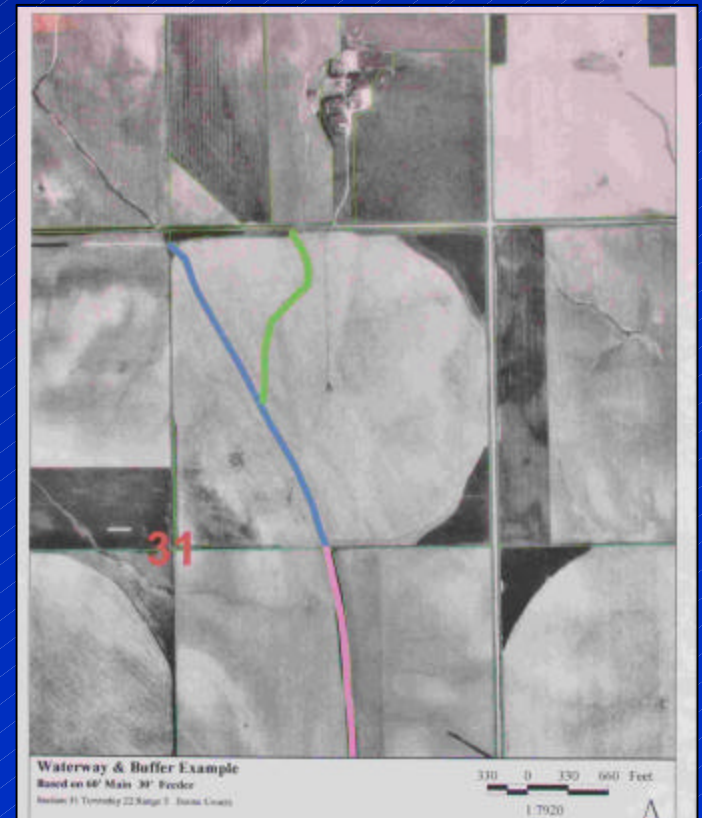
# Farm Visit Content

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- **Discuss various conservation practices, benefits, other options, etc.**

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- Use aerial photo of farm to show where practices might be utilized



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- **Discuss different conservation practices, benefits, other options, etc.**
- **Use aerial photo to show where practices might be utilized**
- **Discuss availability of government programs that could be used to help with practice installation, maintenance, and land rental costs**

# Farm Visit Content

- Discuss different conservation practices, benefits, other options, etc.
- Use aerial photo to show where practices might be utilized
- Discuss availability of government programs that can be used to help with costs of installation, maintenance, and land costs
- Sign intent form if interested/committed to practice installation

# **Farm Visit Content**

- **Discuss different conservation practices, benefits, other options, etc.**
- **Use aerial photo to show where practices might be utilized**
- **Discuss availability of government programs that can be used to help with costs of installation, maintenance, and land costs**
- **Sign intent form if interested/committed to practice installation**
- **Encourage follow-up visit to NRCS office to develop/sign practice installation contract**

# **Advisor Payment**

- **Made clear that Advisor was not University employee**
- **\$30 per on-farm visit**
- **\$0.30 per mile**
- **\$100 bonus if landowner signs practice installation contract with NRCS/FSA**

# **Project Coordinator Role/Responsibility**

- **Locate and screen potential advisors**
- **Assist with training**
- **Provide on-going supervision and monitoring**
  - **Answer routine questions**
- **Process reimbursement claims**
- **Liaison with NRCS/FSA**
  - **Deliver signed intent forms**
  - **Follow-up on progress**
- **Contact landowners**
  - **Encourage to contact NRCS/FSA**
  - **Answer questions, etc.**



# Shell Creek FarmLink Program

- **Some Accomplishments/Impacts**
  - **42 individuals contacted by advisors**
  - **28 signed intent form**
  - **15 contracts executed**
    - **61.3 ac. of conservation buffers**
      - **~20 ac. of grassed waterways**
        - **control runoff from ~225 ac.**
      - **~41 ac. of stream-side buffers**
        - **filter runoff from ~2000 ac.**
        - **protect 12,200 ft. of streambank**
    - **>\$73,800 payments over life of contracts**

# Shell Creek FarmLink Program

- **Additional Accomplishments/Impacts**
  - **One advisor also installed 10.4 ac. of buffers**
    - **1.1 ac. grassed waterway**
      - **control runoff from >30 ac.**
    - **4.3 ac. streamside buffer**
      - **filter runoff from ~200 ac.**
      - **protect 5,282 ft. of streambank**
  - **5 ac. of cropland planted to grass**
    - **erosion reduced ~20 tons per year**
    - **wildlife habitat established**
  - **>\$10,000 payments over life of contract**

# **Some Problems Encountered**

- **NRCS Field Office personnel often did not follow-up on indicated interest by landowners**
  - **Numerous other programs to administer**
  - **On-farm visits viewed as potentially discriminatory**
- **Some advisors did not perform**
  - **Too busy with their own operations**
  - **Not fully committed to conservation**
- **CCRP rental payments have not kept pace with current cash rents**
  - **No differential for irrigated land**

# **Some Reasons for Success**

- **Individualized attention**
  - **Ability to tailor to individual person/situation**
    - **Discuss multiple practices and options**
    - **Many not aware of program availability**
- **Initial contact is with “neighbor”, not agency**
- **Personable, knowledgeable advisors**
  - **Well known and respected**
  - **Conservation advocates**
- **Promotes adoption vs. primarily awareness**
  - **Intent form implies commitment**
  - **Likely some feelings of guilt**

# **Future**

- **2 New Projects - EPA Section 319 Funding**
  - **~31,000 acres - 3 Shell Creek sub-watersheds**
  - **~12,000 acres - Duck Creek watershed**
- **Multiple conservation practices**
  - **Buffers & other structural practices**
  - **No-till systems**
  - **Septic systems & domestic wastewater**
  - **Livestock manure management (CNMP)**

# Summary

**In some situations, one-to-one information delivery can be a very effective educational programming tool.**

**“You have given me more information in this hour and a half than I could have ever gotten leaning across the counter at the USDA Service Center.”**

**- Shell Creek Landowner**

# Thank You



## Questions/Discussion?