

# Landowner Attitudes Towards Stream Buffers





# SURVEY INFORMATION

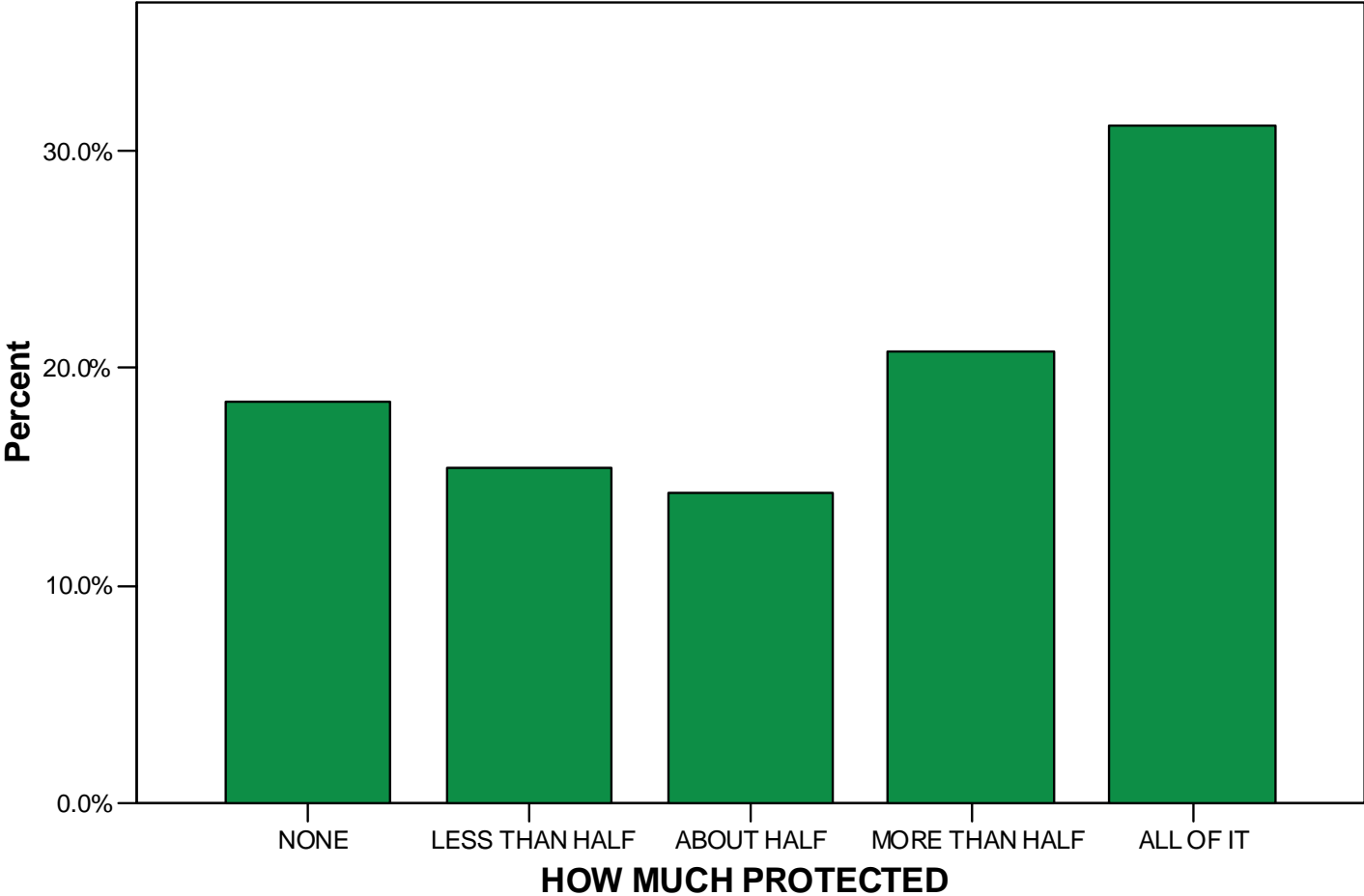
- Sent to riparian landowners in PA, DE, MD in 1999
- 986 valid surveys received
- 61% response rate
- 16.8% agricultural, 19.3% forestry, 34.2% residential, 3.5% commercial, 6.3% natural area/recreation



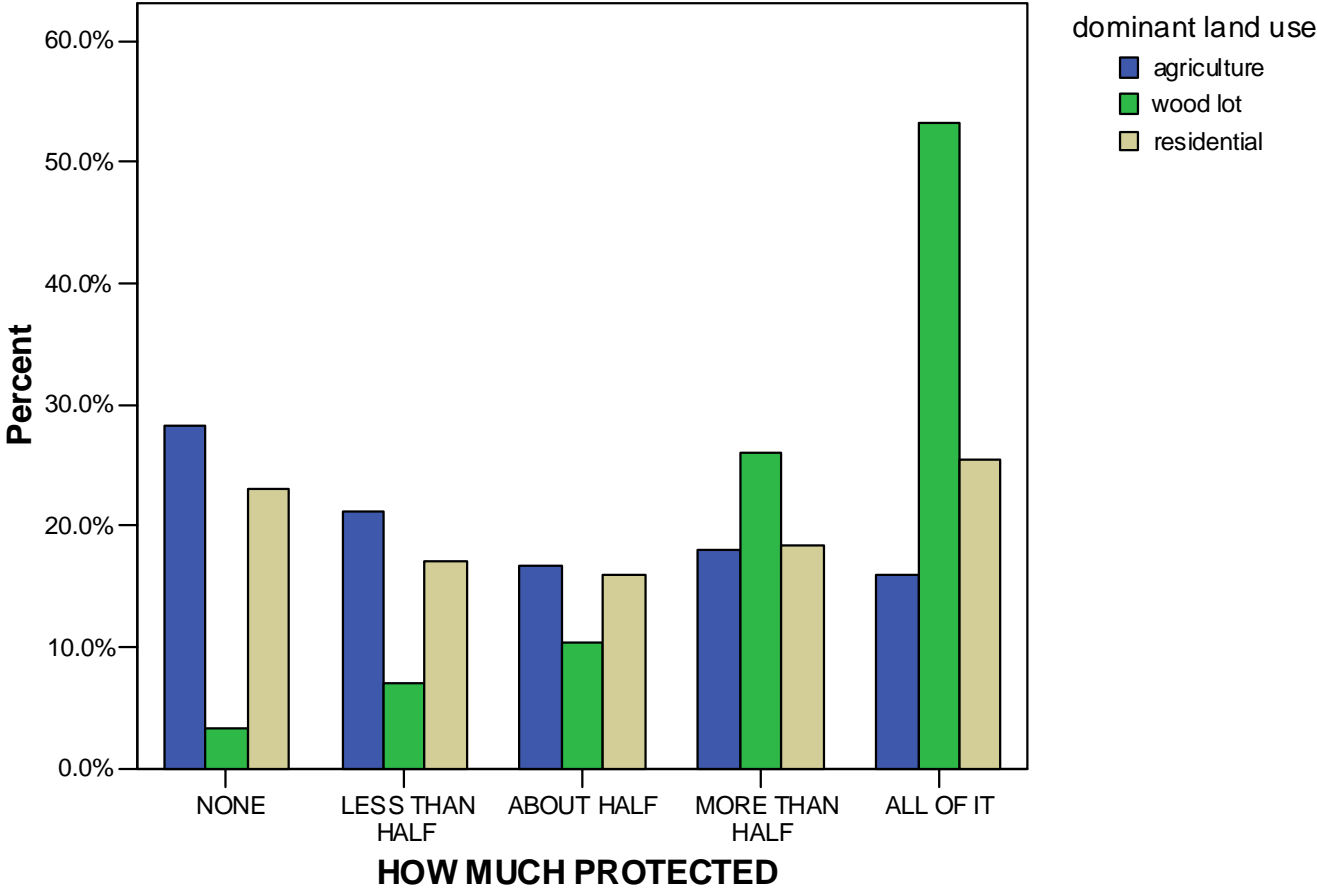
# Purpose of Survey

- Measure willingness to create and maintain streamside forests
- Measure support for policy options for encouraging landowners to have streamside forests
- Explain variation in willingness to create and maintain streamside forests

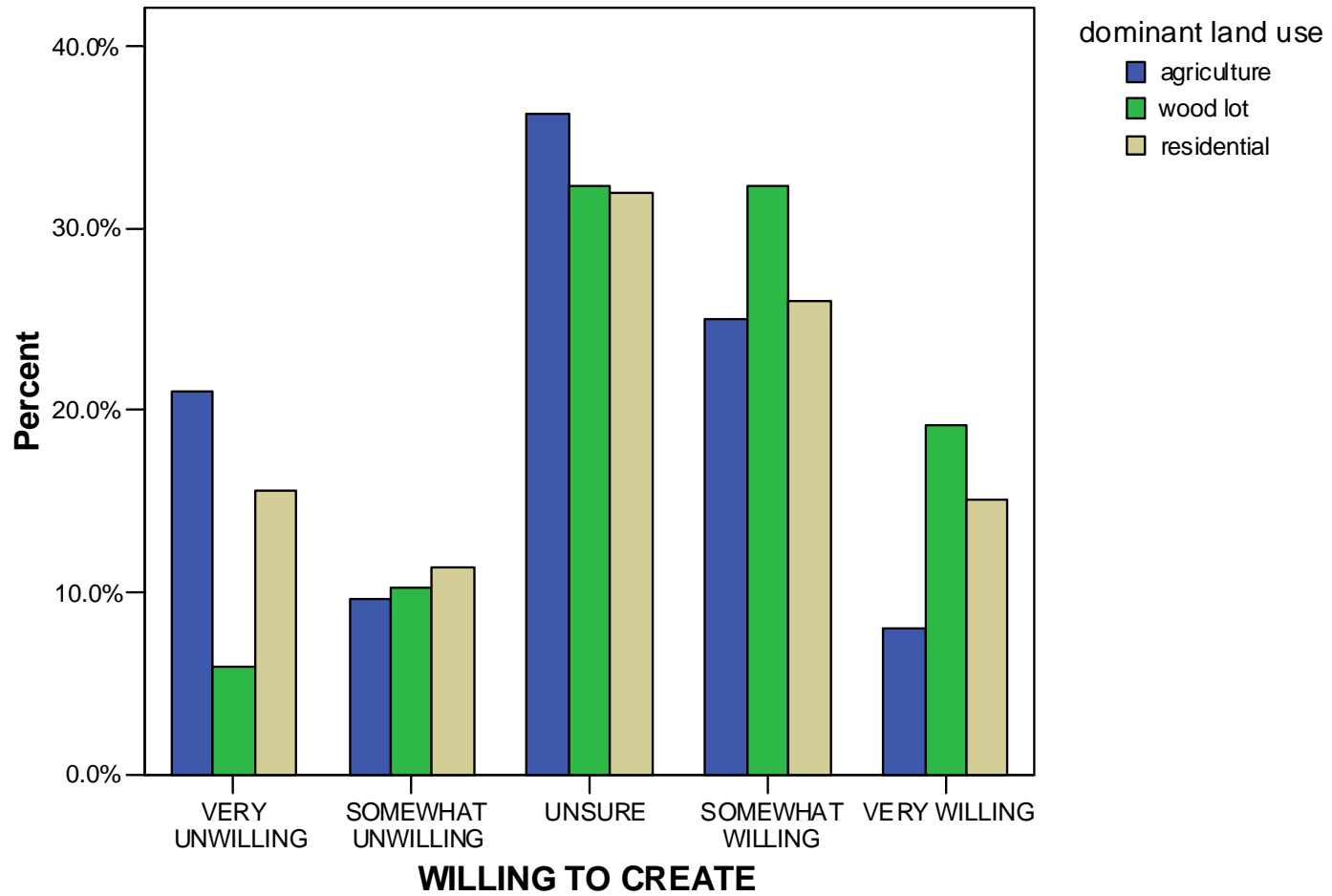
# AMOUNT OF STREAMSIDE LAND FORESTED



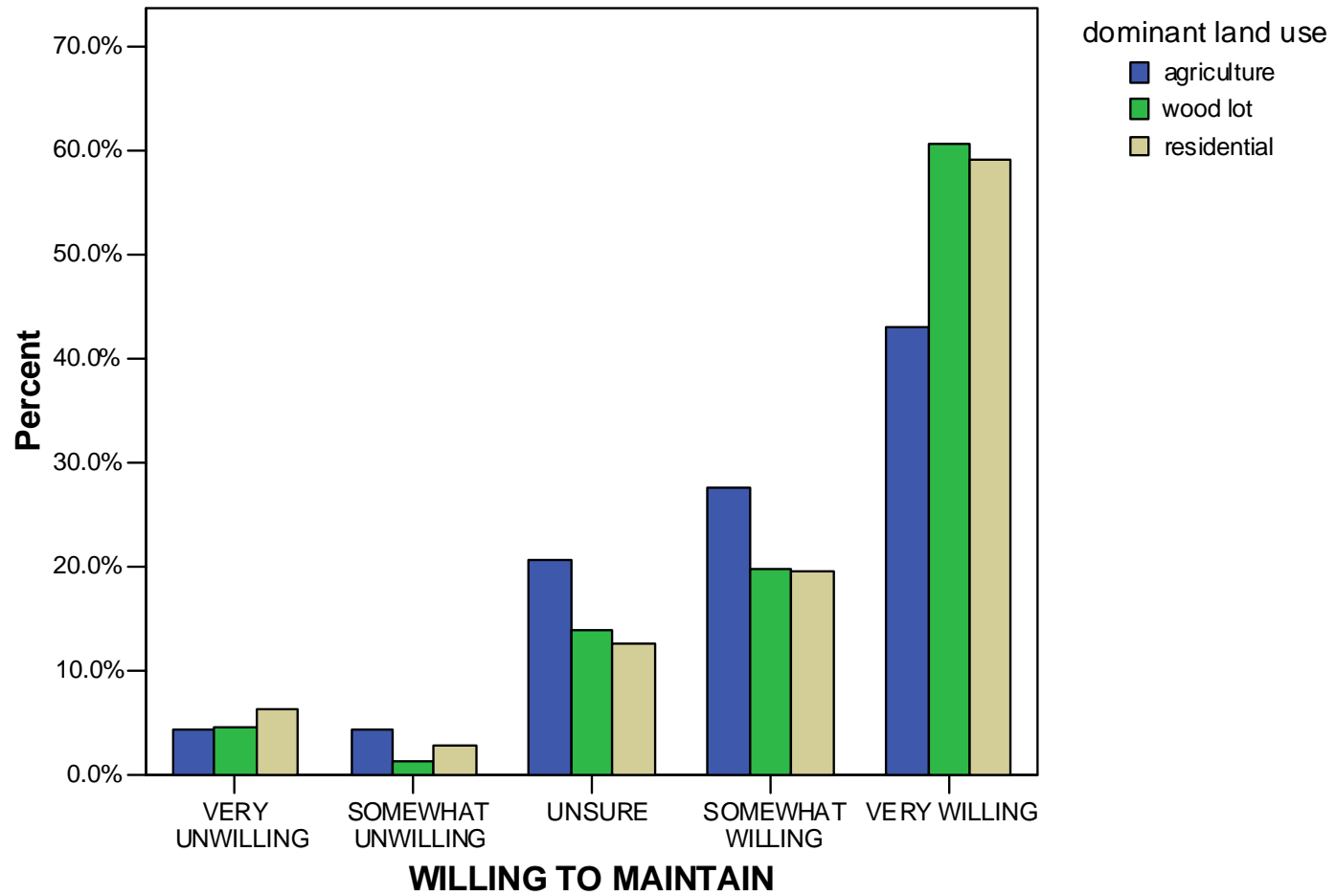
# AMOUNT OF STREAMSIDE FORESTED BY DOMINANT LAND USE



## WILLINGNESS TO CREATE BUFFERS BY LAND USE



## WILLINGNESS TO MAINTAIN BUFFERS BY LAND USE





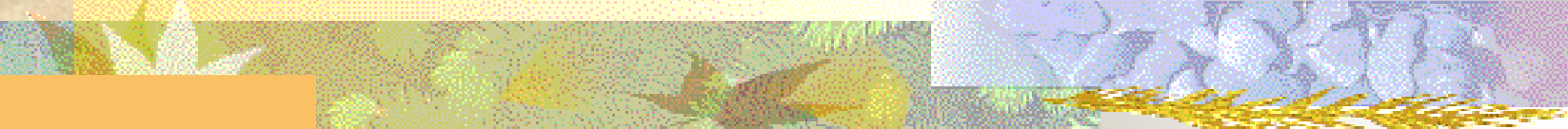
# Importance of Factors Affecting Willingness (mean scores)

- Bank stability (3.70)
- Wildlife habitat (3.57)
- Minimize flooding potential (3.51)
- Belief necessary to protect stream (3.33)
- Costs, loss of income (3.12)
- Maintain look of meadow stream (2.83)



# Willingness to Create Correlates

- Wildlife habitat (.376, .001)
- Necessary to protect stream (.348, .001)
- Improve downstream areas (.315, .001)
- Fishing (.299, .001)
- Bank stability (.296, .001)
- Minimize flood potential, shade, pests, meadow, view, encroachment, costs, space: no correlation



# Correlates of Willingness to Maintain Streamside Forests

- Wildlife habitat (.297, .001)
- Necessary to protect stream (.285, .001)
- Bank stability (.263, .001)
- Improve downstream areas (.223, .001)
- Fishing, loss of income, look of neighborhood (weak, less significant)



# Overall Impact of Factors

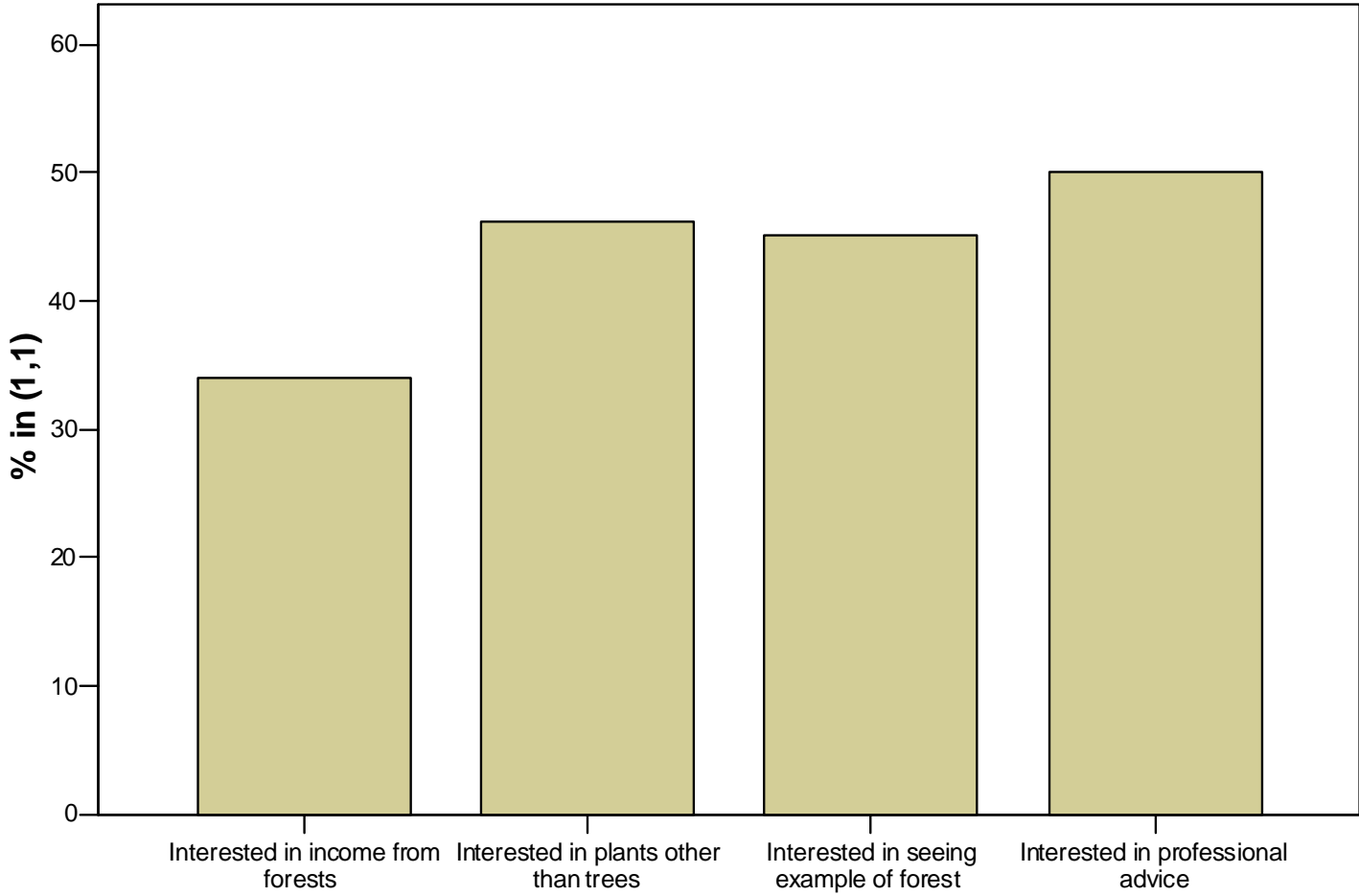
## ■ Positive

- Create (.414, .001)
- Maintain (.310, .001)

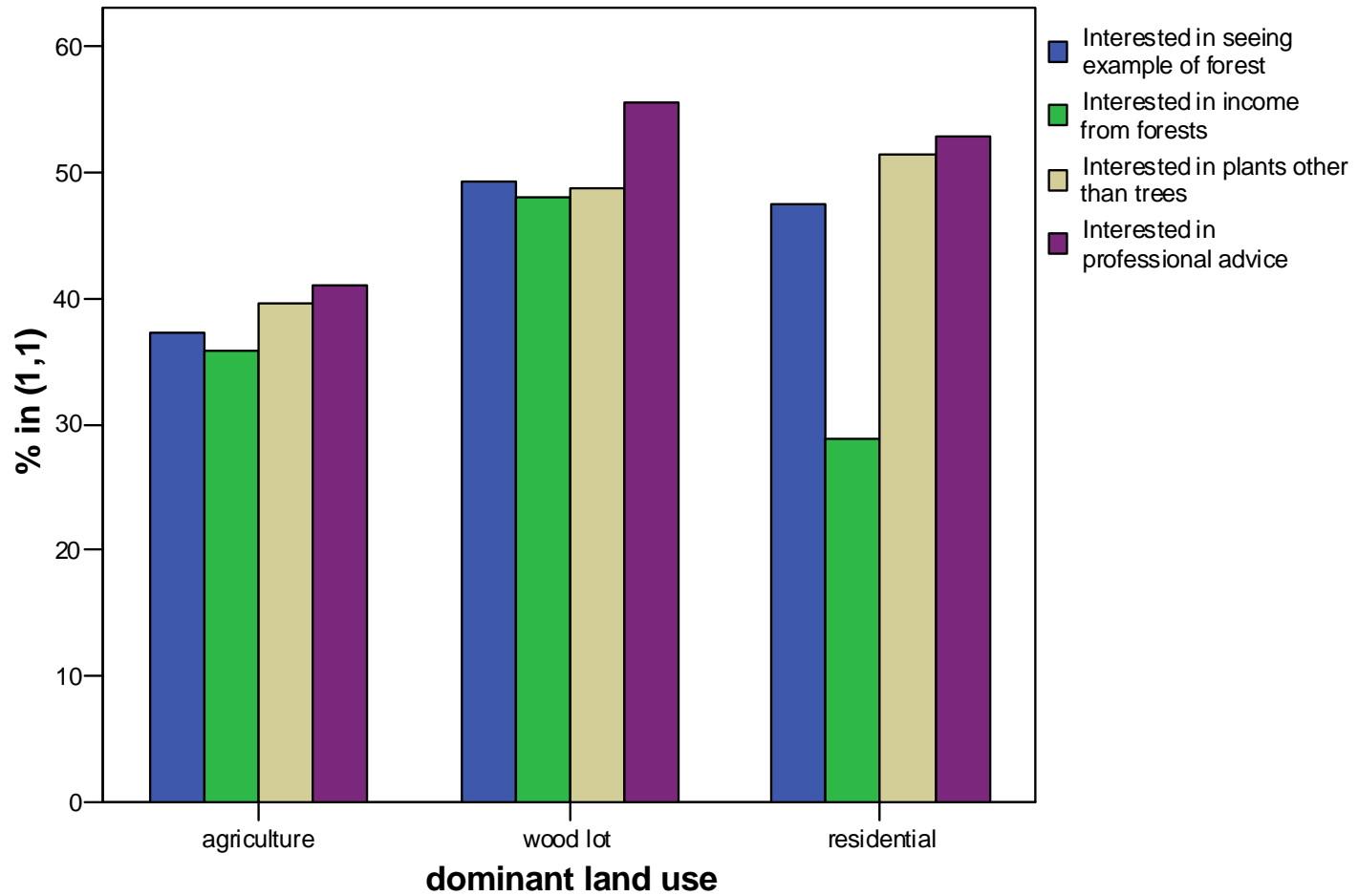
## ■ Negative

- Create (.004, n.s.)
- Maintain (-.064, n.s.)

# PERCENT INTERESTED IN OPTIONS



## INTEREST IN OPTIONS BY LAND USE

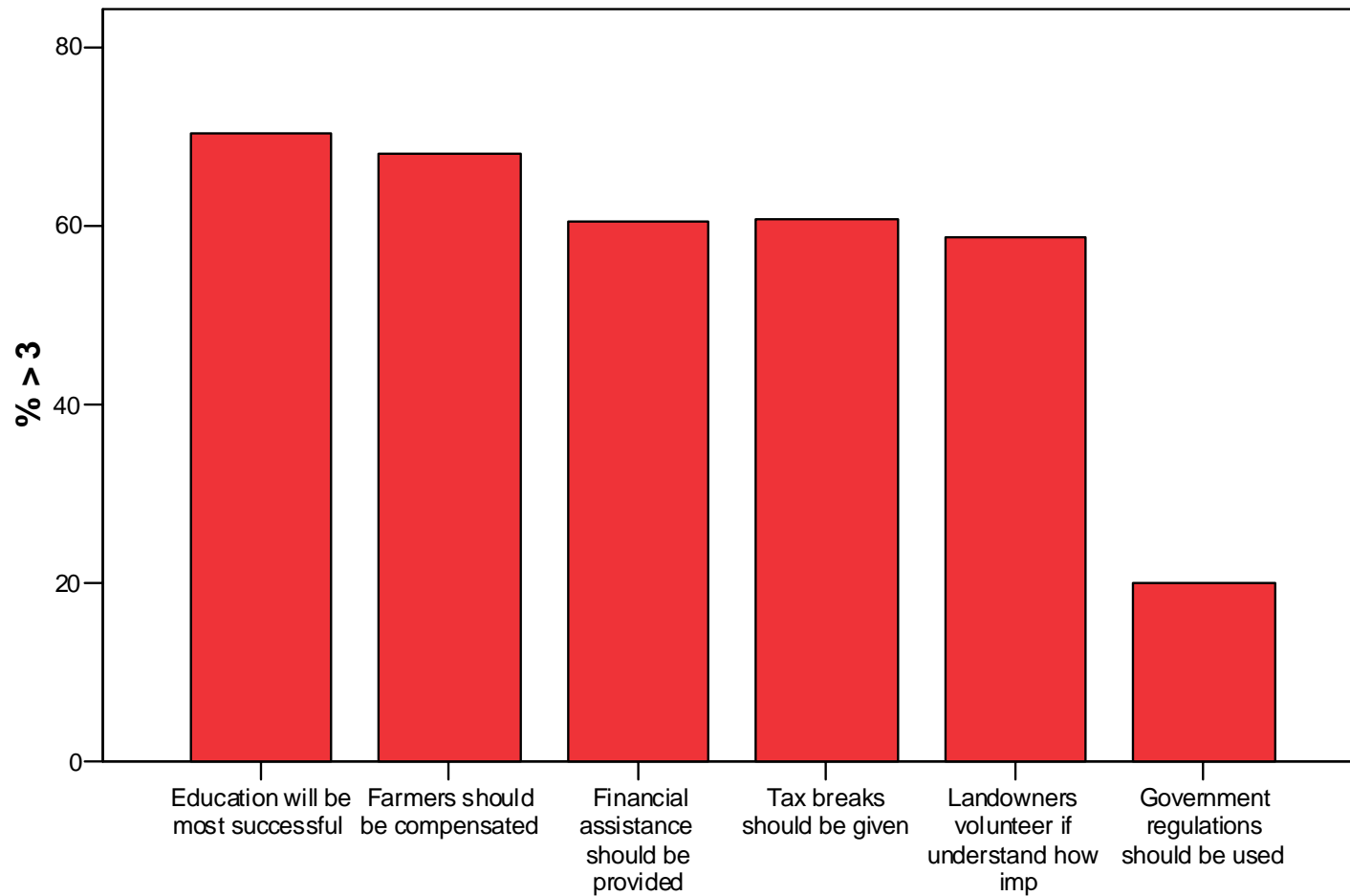




# Additional Correlates of Willingness to Create or Maintain Streamside Forests

- Sense of connection with nature (.227, .152)
- General environmental concern (.269, .186)
- Environmental behaviors (.347, .191)

## PERCENT STRONGLY OR MODERATELY AGREEING WITH POLICY ALTERNATIVES





# Conclusions

- Most landowners unsure about creating streamside forests
- Most landowners with streamside forests intend to keep them
- Amenities, benefits of streamside forests more important than costs, concerns
- Willingness to create buffers related to environmental attitudes, concern, and behavior
- Policy options other than regulation preferred