Land use changes like prairie strips, perennial vegetation, and extended rotations are important practices that can help achieve the goals of the Iowa Nutrient Reduction Strategy.

**Prairie Strips**
Strategically placed within corn or soybean cropland perpendicular to the flow of water, the strips are sized based on the farming and machinery needs of each farm. They can be re-designed to respond to changes in machinery or sediment deposition. Strips can be placed in the field as a contour buffer strip, or on the edge of the field as a filter strip. Prairie strips studies have shown that strategically converting as little as 10% of a cropped field to perennial prairie in narrow patches along contours and foot slopes can reduce sediment movement by 95%, and reduce losses of nitrogen in runoff by 84% and phosphorus by 90%.

**The Dollars and Sense**
Prairie strips rank among the least expensive of in-field management practices. The average annual cost of treating a farm field with prairie strips ranges from $24-35/acre. That includes establishment, management, and opportunity cost per year. There are also cost-share opportunities to reduce the cost to the farmer or landowner.

**Prairie Strip benefits**
- Encourages infiltration and slows the flow of water
- Creation of wildlife habitat and migration corridors
- Minimal maintenance required
- Keeps nutrients in the field
- Reduced soil erosion
- Income generation from hunting leases
- Tolerant of weather extremes
Perennial Vegetation
For some fields, keeping the ground covered all year with perennial vegetation is the best option. Options for perennial vegetation include: energy crops like Miscanthus and switchgrass, land retirement through the Conservation Reserve Program (CRP), or conversion to grazed pasture. These practices can help significantly reduce nitrate losses by 72–85% and phosphorus losses by 34–75%.

Extended Rotations
Introducing one or more additional crops to the commonly used corn and soybean rotation can reduce the application and loss of both phosphorus and nitrate. Common crops used in extended rotations include alfalfa, oats, wheat, or cereal rye. A significant shift to extended rotations would decrease the amount of corn and soybeans produced, but would increase alfalfa production and demand for livestock production.

Start Small
It is important to recognize that it takes time to learn new management techniques. Consider using the practice on a smaller portion of the land and increasing use each year, or suggest one change per year, so the tenant can learn new management skills to incorporate practices successfully. Working together to gather information about the practice and addressing any concerns early will help smooth the transition to the new practice, and minimize conflicts.

Your local NRCS staff and Iowa State University Extension field specialists are available to meet with you and your tenants to help answer questions, and to provide resources and technical assistance.