

2026 Iowa State Envirothon Current Issue: Non-Point Source Pollution

Below is the scenario for the presentation portion of the 2026 State Envirothon Competition. Feel free to use any format for your group's presentation. Previous participants have created successful presentations using a variety of creative formats. These include role-playing, expert panels, public forums, and traditional presentations.

The city of Goodacre, population 31,452, is nestled in the Good River valley, a karst area between towering limestone bluffs. It is a growing community known for its walkable, picturesque, wide, well-maintained streets and sidewalks, and distinctive downtown retail stores with a burgeoning reputation as a shopping destination. Near the downtown area is a sprawling educational complex comprising a community college and K-12 school district buildings, including an extensive athletic complex for school and community sports programming. A well-maintained, highly regarded 18-hole public golf course sits adjacent to the sports venue. New hard-surface parking areas are planned around the school and sports complex.

A dam on the Good River forms an attractive impounded 40-acre reservoir, resulting in Lake Good. The lake has become the centerpiece of downtown development and the city's hub for outdoor recreation, such as swimming, kayaking, camping, and fishing.

All residents enjoy an extensive sewer and water treatment system and safe drinking water from several wells bored into a deep aquifer. A new area south of the city has recently been annexed and zoned for badly needed, affordable new single and multifamily residential properties.

To the north and upriver of Goodacre is rolling, fertile farmland, traditionally used for growing cultivated row crops, hay, pasture, grasslands, and forests. There are also diversified livestock production operations in the areas surrounding Goodacre.

Issues requiring mitigation in the Good River watershed include:

- Aging sewer and water treatment infrastructure
- Occasional flooding following major rain events
- Degradation of Lake Good by siltation
- Occasional algae blooms in Lake Good
- Water tests showing unsafe conditions for swimming have closed Lake Good infrequently over the past few summers.

Issues to address:

- 1) What are the potential sources of non-point source pollution in the watershed around Goodacre?
- 2) Describe best management practices (BMPs) that urban homeowners, business owners, and institutions could adopt to mitigate non-point source pollution of the Good River watershed.
- 3) Describe best management practices local crop and livestock producers could adopt and practice to prevent and reduce non-point source pollution that may be occurring as a result of their production practices.
- 4) What innovative best management practices and designs can be incorporated by the city of Goodacre as it plans new residential and recreational development to prevent/reduce non-point source pollution?
- 5) What governmental organizations and other groups can be helpful to the urban residents, agricultural producers, and city planners in accomplishing their goal of reducing non-point source pollution in the Good River watershed?
- 6) What may be special considerations concerning the implementation of any of the above mitigation efforts? (i.e., financial commitments, short-term and long-term effects, public support, and sustainability)