

2026 Oklahoma Envirothon Coach Packet

This Coach Packet provides background information, contest structure, rubrics, and resources for the 2026 Oklahoma Envirothon Current Issue. It is designed to support educators, coaches, and students in understanding Non-Point Source (NPS) Pollution and stormwater challenges in Oklahoma, while preparing their teams for the oral presentation and student action component.

Background: Non-Point Source Pollution in Oklahoma

Non-Point Source (NPS) Pollution is pollution that does not come from a single, identifiable source. Instead, it results from rainfall or snowmelt moving over and through the ground, picking up pollutants and carrying them into lakes, rivers, wetlands, and groundwater. Common NPS pollutants include:

- Nutrients (nitrogen and phosphorus) from fertilizers and manure
- Sediment from soil erosion
- Oil, litter, and chemicals from urban areas
- Bacteria from failing septic systems

In Oklahoma, NPS pollution is the leading cause of water quality impairment. Reservoirs such as Arcadia Lake, Lake Thunderbird, and Eufaula Lake provide drinking water and recreation for Oklahomans, but face challenges from nutrient enrichment, sedimentation, and stormwater runoff. Both agricultural and urban landscapes contribute to these problems, making community-based solutions essential.

Contest Structure: Current Issue Component

Teams will prepare a 15-minute oral presentation and participate in a Q&A session. Their task is to answer the guiding question:

“How does non-point source pollution affect a watershed in your community, and what can you do (student-led action — completed during the current school year) to help reduce those impacts in Oklahoma?”

Teams must include:

1. Local watershed analysis (causes, impacts, data)
2. Scientific understanding of NPS pollution
3. Proposed best management practices (BMPs) and community strategies
4. Completed student action project with documentation
5. Engagement with community partners

Student Action Component

Each team must design and complete a student-led action project during the academic year. Projects should connect to NPS pollution or stormwater issues in their community. Examples include:

- Hosting a storm drain marking and education campaign
- Designing and planting a rain garden at their school
- Partnering with local conservation districts for a riparian buffer planting
- Conducting a community workshop on fertilizer and lawn care practices

- Leading a Blue Thumb stream monitoring and cleanup event
- Hosting a local household well testing events with Oklahoma Well Owners Network (OWON)

Teams must provide written summaries, photos, and documentation of their action project.

Judging Rubric: Oral Presentation

Criterion	Excellent (5 pts)	Good (3 pts)	Needs Improvement (1 pt)
Local Issue Analysis	Uses data/maps from Oklahoma watershed, clear causes/impacts	Some local detail but mostly general	Vague or no local relevance
Scientific Understanding	Accurate use of NPS concepts & Oklahoma examples	General accuracy	Misconceptions
Solutions Proposed	Creative, feasible, place-specific BMPs	Some relevance, limited detail	Impractical or irrelevant
Student Action	Completed, well-documented, clearly impactful	Completed but limited scope	Incomplete or unclear
Community Engagement	Strong partnerships (conservation districts, Blue Thumb, city)	Some outreach or contact ideas	Minimal or no engagement
Presentation Skills & Time Use	Clear, engaging, within time	Mostly clear, slight time issues	Disorganized or over time

Key Oklahoma Resources and Contacts

Teachers and students can connect with the following for expertise, support, and partnership:

- Oklahoma Conservation Commission (Blue Thumb Program): Stream monitoring, storm drain projects
- Local Conservation Districts: Riparian plantings, BMP demonstrations
- Oklahoma Department of Environmental Quality: Stormwater regulations and urban outreach
- Oklahoma Water Resources Board: Watershed planning and water quality standards
- Oklahoma State University Extension: Fact sheets, rain garden and irrigation workshops
- Watershed Groups: Friends of the Illinois River, Lake Thunderbird Watershed Alliance
- Municipal Stormwater Programs: Cities of Tulsa, Oklahoma City, Norman
- Oklahoma Water Resources Center: Host a local well water screening

2026 NCF-Envirothon Mississippi Study Guide

For more resources, see:

<https://envirothon.org/wp-content/uploads/2025/09/2026-Current-Issues-Part-A.pdf>