

Name _____ Date _____

Decision Statement Planner Answer Key

After Exploring Land Cover

1. Based on land cover, what site would you select to implement the action plan? Answers
will vary. Students might select an urban center like Norfolk, Annapolis, or Alexandria. Or
they may select something more rural like Scotland, MD.

2. Explain why you chose this site. Answers will vary.

3. What evidence supports your decision? (You may refer to your Stakeholder Table.)
Answers will vary. Urban areas may contribute to low water quality because there are more
impervious surfaces that water runs through before it returns to the waterways. Runoff
from urban areas can be highly polluted. However, agricultural areas may have runoff high
in nitrates due to animal waste or fertilizers.

Decision Statement Planner

Answer Key, continued

After Exploring Levels of Dissolved Oxygen

1. Based on dissolved oxygen levels, what site would you select to implement the action plan?

Answers will vary. For the data here, they might select Havre de Grace, Maryland, or Norfolk, Virginia.

2. Explain why you chose this site. Answers will vary. For the data here, they might say that

Havre de Grace had the lowest reported minimum dissolved oxygen level at 5.60 mg/L.

Norfolk, Virginia had the lowest reported average dissolved oxygen level at 7.87 mg/L.

3. What evidence supports your decision? (You may refer to your Stakeholder Table.)

Answers will vary. Low levels of dissolved oxygen are an indication that water quality is poor. The objective of the action plan is to improve water quality in the Chesapeake Bay watershed, and we have to select one site to implement this plan. A site with lower levels of dissolved oxygen seems like a good place to start.

Decision Statement Planner

Answer Key, continued

After Exploring Nitrate Levels

1. Based on nitrate levels, what site would you select to implement the action plan?

Answers will vary. For the data here, they might select Scotland, Maryland.

2. Explain why you chose this site. Answers will vary. For the data here, students might say that Scotland, Maryland had the highest reported nitrate levels of any of the sites.

3. What evidence supports your decision? (You may refer to your Stakeholder Table.)

Answers will vary. High levels of nitrates could be an indicator of poor water quality. The high level of nitrates could be due to the use of fertilizers or animal waste. It could also be due to the short flow path between the area and the waterways.