

Shared Waters: Making a positive impact on our local watershed



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Lesson 10: Developing and Implementing Your Action Plan

(1-3 days)

Overview:

The Action Project is the culmination of a Meaningful Watershed Educational Experience (MWEE), which brings together all the learning and insights gained throughout the unit. In this lesson, students apply their knowledge and data analysis to identify and address a local watershed issue. The scope of the action project can vary, from modest initiatives to more ambitious endeavors, with various options available on the [Bay Backpack](#) website for guidance. For lesson 10, we have provided a versatile action project that is adaptable to almost any environmental topic and can be completed within a range of time frames. If your schedule restricts you to a single day for this lesson and its associated activities, we recommend focusing on the "Everyday Choices" Action Plan outlined in Activity 1. This approach simplifies Activity 2, making it more manageable and achievable within a limited timeframe.

Materials:

Materials provided in the lesson 10 kit:

- **Activity 1:** n/a
- **Activity 2:** n/a

Materials you will need to gather:

- [Lesson 10 slide show](#)
- **Activity 1:** [Let's Act! Guide](#)
- **Activity 2:** ["Road Map to Action" worksheet](#)

Suggested Reading:

- Reading Connection: [Old Enough to Save the Planet](#)

Learning Objectives:

At the completion of the lesson, students will be able to:

- Identify actions that directly address the synthesis of data from Lesson 9.
- Develop a plan and/or carry out a plan to address the environmental issue identified in Lesson 9.
- Evaluate the impact of the action. (Possible assessment extension)



Activity 1 (25 min): Types of Action(s)

Start off by revisiting the data synthesis from Lesson 9. Ask the class, "What was our conclusion from our last lesson?" Once they've answered, have them chat with a partner about the patterns or connections in the data that led to their conclusion. Then, invite one or two students to share their discussions.

Next, say, "We've got our conclusion, so what's next? It's time to use what we know to make a difference... that means creating an action plan to help our environment! But first, what kinds of things can we do to help the environment? Let's brainstorm some ideas together!"

Begin your lesson by reviewing the synthesis of data from Lesson 9. Ask the class, "What was our conclusion from our last lesson?" Once they've answered, have them chat with a partner about the patterns or connections in the data that led to their conclusion. Then, invite one or two students to share their discussions. Next, say, "We've got our conclusion, so what's next? It's time to use what we know to make a difference... that means creating an action plan to help our environment! But first, what kinds of things can we do to help the environment? Let's brainstorm some ideas together!"

- Give students 2 minutes to jot down a list of ways people can help their environment. Then, have them share their ideas with a small group or a shoulder partner.
- Then, distribute the "Let's Act Guide" and begin the brief PowerPoint presentation, "Let's Act!" This PowerPoint presentation shares 4 types of actions that students can take: 1) Watershed Restoration or Protection Project, 2) Everyday Choice Project, 3) Community Engagement of Education Project, and 4) Civic Action Project
- At the end of each slide, ask if anyone in the group came up with an idea that matches the type of action just discussed. Have students jot down a suitable example of each kind of action on their guide.
- Now, lead a discussion about what type of Action the class will focus on for Activity 2. This gives you a bit more control over the type of action plan the class will eventually choose.

Possible Extension:

Although giving students input into the chosen action plan is great, we realize that the amount of time any teacher can dedicate to this project varies greatly. This part of the lesson is great for "guiding" your students toward a specific type of action project by focusing on it as an example during the PowerPoint presentation. For example, if you would like the class to clear invasive species on the playground to address the issue you found, you could focus on the Watershed restoration or the protection type of project and use invasive species as an example in the discussion.



Possible Differentiation Adaptations:

The Let's Act Guide can be completed on a computer for students with difficulty with fine motor skills. Alternatively, students could be given the "Let's Act! Guide" key to paste into their science journal, drawing pictures of the examples listed.

Activity 2 (35 min): The Plan

Distribute the Guide: Hand out a "Road Map to Action" guide sheet to each student. This sheet helps students craft an action plan using the data synthesis from Lesson 9.

Start the Discussion: Read the first paragraph of the guide sheet aloud as students follow silently. Draw a parallel by asking students about planning for a long trip to relate to the planning process.

Identify the Environmental Issue: Students should refer to their notes and charts from Lesson 9 to articulate the environmental issue they previously identified. Encourage them to be specific; for instance, "Nutrient pollution is an issue in our area causing algae blooms due to excess nutrients."

Evidence of the Issue: Use data gathered in Lesson 9, displayed on anchor charts and notes, to support the identified issue. Have a quick talk on the importance of evidence in recognizing environmental problems and devising action plans.

Formulating Our Action Plan: Depending on the desired depth and classroom time, guide students to create either a simple "Everyday Choice" action or a more involved project. Use the questions below to guide the discussion.

- Does this plan directly address the issue at hand?
- Does this plan connect to the evidence?
- Is this plan reasonable for the time and resources we have?

Small groups can write their action plans on chart paper and present them to the class. Discuss and possibly vote on the best action to undertake as a class, asking critical questions about the action's relevance, evidence connection, and feasibility. Decide on a single, class-wide action that is achievable within your resources and time frame.

Steps to Complete the Plan: It is important to allow students to think through the process of action. Again, how you structure the completion of this in the guide depends on the type of action your students complete. If it is an "Everyday Choice," students will complete it on their own. If this is a class-wide project, it would benefit the class to decide on a final procedure and post it somewhere in the classroom for reference. Help the class outline the steps for their chosen action and display them in the classroom.



Anticipating Road Blocks: Help the class anticipate potential obstacles. Discuss as a group or individually, considering available resources and possible partners to overcome these challenges.

Possible Extension:

Again, the action plan can be as large or as small as you desire. An extension for this part of the lesson would be to create an action plan that integrates multiple disciplines. We provide several examples below:

- Public service announcement poster or video- Students create a poster, video or podcast with information on the issue, possible causes, and a call to action. (See example poster)
- Long- or short-term watershed restoration or protection project: Have students spend a certain amount of time each week or month working on the issue identified in the unit. You, partners you identify within the community, or parent volunteers can direct this project. For liability reasons, you will need to clarify whether the project is a school-sanctioned activity or something else.
- Civic Action—Integrate language arts, history, and social science by having students attend a council meeting, school board meeting, or other public space to voice their concerns, propose a solution, or raise awareness in the city/county about the environmental issue your students identified.

Possible Differentiation Adaptations:

It is important to prepare for any academic, social, or physical limitations certain students may encounter when completing any type of action project. Teachers should capitalize on each student's strengths, assigning tasks that match their strengths while making the importance of their role explicit.

Assessment:

Because this lesson has multiple opportunities for written formative assessment (e.g., completing the Road to Action guide), it may be best to ask students to share their answers to the following assessment questions in a think/pair/share activity as a closure to the lesson.

1. Why is it important that we base our action plan on data?
2. What type of action (from the 4 we discussed) did you plan to take?
3. What do you predict will happen if you complete your action plan?

Possible Assessment Extension:

Once your students have completed this unit, we suggest returning weekly to discuss and evaluate progress on the action plan. Possible questions to ask include but are not limited to:

1. What steps have you completed in your Action Plan?



2. How did it make you feel to act on this issue?
3. Is your action impacting the issue in any way? Why do you say that?
4. How might you evaluate the impact you (or we) have on the environmental issue?
5. Would another action impact this issue more than the one you chose?

Reading Connection:

[Kirby, Loll, Adelina Lirus, and Kallan Benson. **Old Enough to Save the Planet** Magic Cat Publishing, 2020.](#)

