

Stewardship Actions

NOAA B-WET National Evaluation: <http://www.noaa.gov/office-education/bwet/grantee-resources/national-evaluation>

BACKGROUND

During NOAA's Meaningful Watershed Educational Experiences (MWEEs), teachers and students are expected to participate in age appropriate projects during which they take action to address environmental issues. Examples of potential stewardship actions include:

- *Watershed Restoration or Protection*: create schoolyard habitat, planting trees or grasses, invasive species removal, community cleanup, stormwater management, etc.
- *Everyday Choices*: reduce/reuse/recycle/upcycle, composting, energy conservation, water conservation, etc.
- *Community Engagement*: presentations, social media, event-organizing, messaging at community events/fairs/festivals, mentoring, PSAs, flyers, posters, etc.
- *Civic Action*: town meetings, voting, writing elected officials/decision makers, advocating for policy change, etc.

SUMMARY

- 72% of teachers participated in at least one stewardship behavior during their professional development (PD), primarily in watershed restoration/protection (35%).
- 82% of teachers engaged their students in stewardship behaviors as part of their MWEEs, primarily in everyday choices (57%).
- 28% of teachers, as well as 24% and 18% of students, are NOT engaged in environmental stewardship behaviors during PD, grantee led MWEEs, and teacher led MWEEs, respectively.
- Few teachers experienced civic actions during their PD (3%), engaged their students in these actions during MWEEs (11%), and expected students to engage in civic actions as a result of MWEEs (mean=4.7).
- Analyses revealed that civic actions were distinct from the other stewardship behaviors, possibly because civic action may be more difficult to implement.

FINDINGS

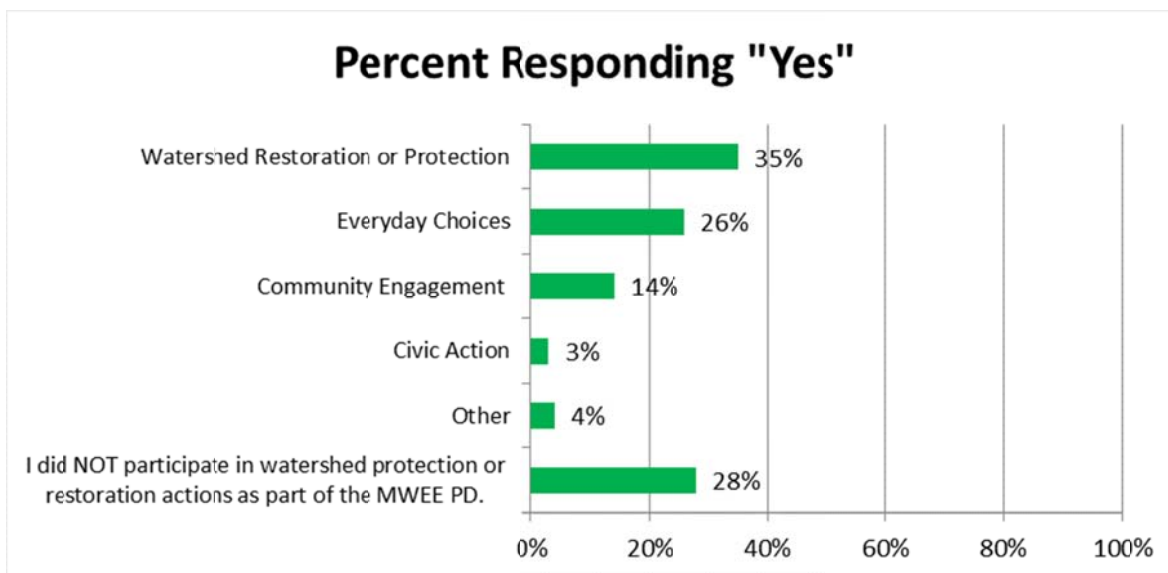


Figure 1. Stewardship actions teachers reported engaging in during their MWEE professional development (n=72) (Responses do not add to 100% because teachers could select all that apply.)

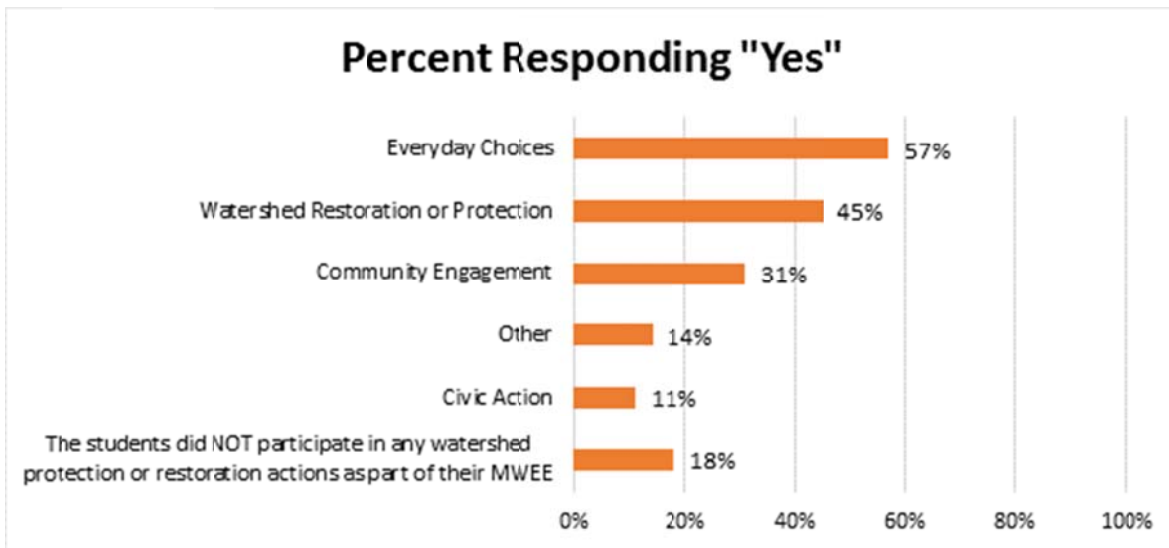


Figure 2. Environmental stewardship actions incorporated into teachers' MWEs (n=103) (Responses do not add to 100% because teachers could select all that apply.)

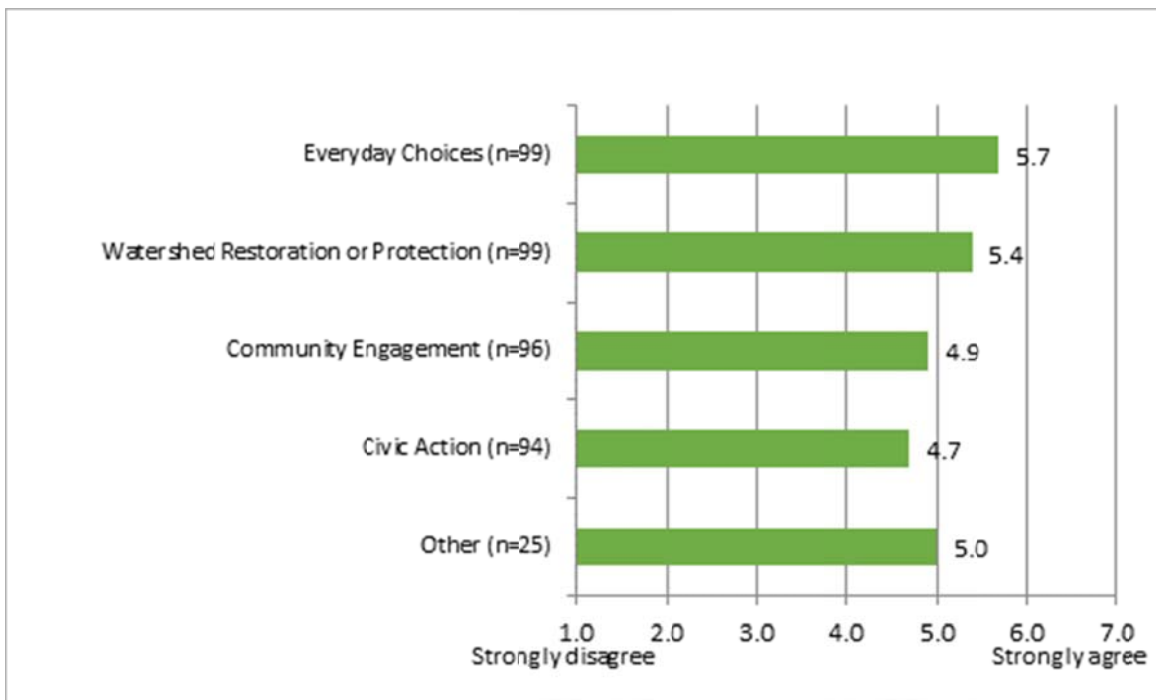


Figure 3. Teachers' perceptions of the likelihood that students will engage in stewardship actions as a result of MWEs

DISCUSSION QUESTIONS

- Are you surprised by the lack of civic action types of stewardship activities? How might you explain this?
- How can we build capacity for civic actions, to enable science and other teachers to implement them?
- How can we better support teachers in implementing watershed protection and restoration activities vs. everyday choices?