# Setting the Scope for M.S. Research Projects

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Building on previous presentations by Andrew Goodliffe (2012) and Sarah Sarah Penniston-Dorland (2014)

#### Session outline

- Your goals
- Student's goals/needs
- MS considerations
- External constraints
- Personal experiences
- Your project

# What makes a successful MS project?

- Thesis defense
- Technical proficiency/demonstration of skills
  - Writing, critical thinking, project completion
- Answering a specific question
  - e.g., Flood synchronicity in the Peckman watershed
- Timeliness
- Conference presentation, maybe publication
- Furthering your research agenda

## Your goals

- What are the needs of your research program?
- How can an M.S. project feed into other aspects of your research program? Pilot data?
- Can you adapt a larger-scale project into a smaller M.S. project? Can you expand a smaller project into an M.S. project?
- How many other students do you have? Where/ how will your M.S. students fit in?

#### Student's goals/needs

- What are the student's goals after completing the master's (why are they doing this)?
- What are the student's skills, interests, and abilities?
- Should a master's project be published?
- What are your overall learning outcomes for an M.S. student?
- How much time can your student devote to this?
- Academic background

#### MS Considerations

- Projects can vary widely
- Technical proficiency/demonstration of skills vs. furthering science
- Writing
- Student's other commitments
- Scale of theses in your department

#### Personal experiences

- My experiences
  - Specific questions to answer
  - Manageable expectations
  - Regular meetings (2–4 times per month)
  - Clear expectations from you and your student
  - Timelines and regular updates

### Design your own M.S project

- Goals
- Funding?
- Amount of time? Summer required?
- Logistics: Travel? Equipment? Lab?
- Previous skills required?
- Other?