



# USING PUBLIC, PRIVATE AND NON- PROFIT PARTNERSHIPS TO HELP TACKLE AIS

Tuesday, Oct. 18, 2016

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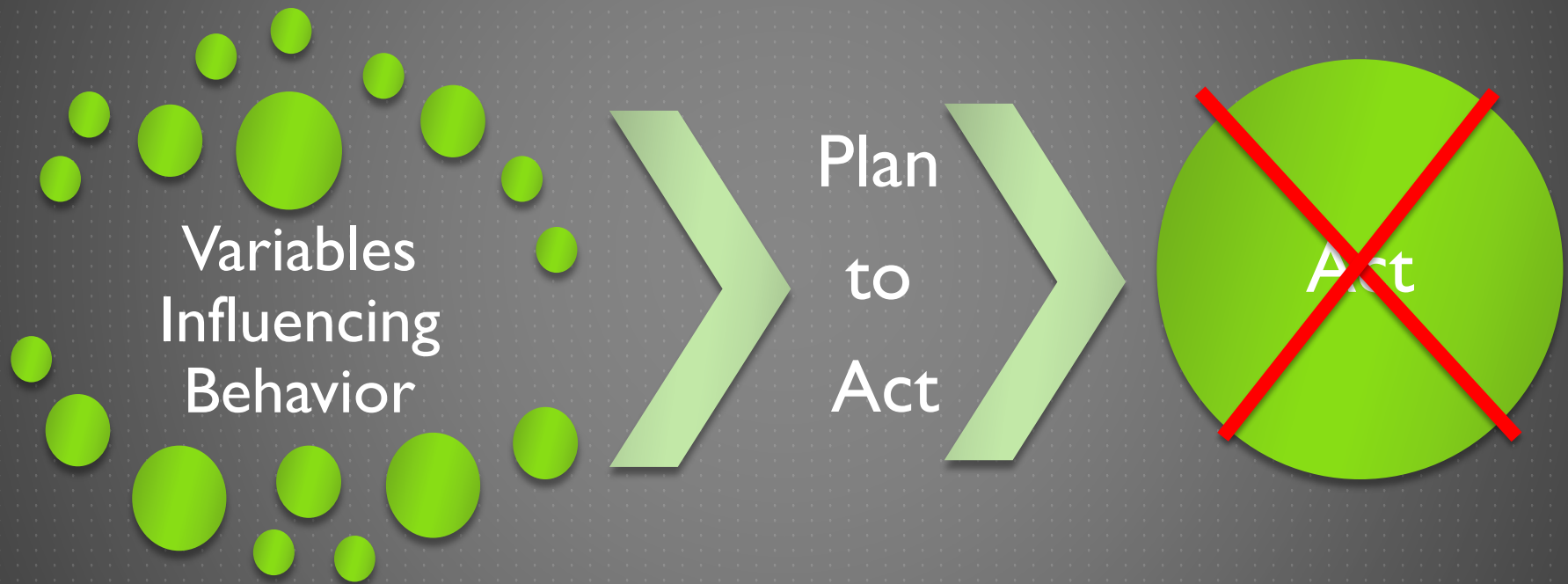
# OUTLINE

- ▶ My Bio
- ▶ Behavior Change
- ▶ Barriers to Entrepreneurship in Conservation
- ▶ Keys to Success
- ▶ Case Study: CD<sup>3</sup>





# BEHAVIOR CHANGE



# FAILURE



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# SUCCESS



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# BARRIERS

- ▶ Market size is difficult to identify
- ▶ Customers with variable funding
- ▶ Business and scientific understanding
- ▶ Intrinsic vs. extrinsic value driven entrepreneurship
- ▶ Low tech vs. high tech
- ▶ Difficult to attract funding
- ▶ Perfect is the enemy of good
  - ▶ Better really is better



# KEYS TO SUCCESS

## ▶ Public

- ▶ BMP
- ▶ Outreach and education
- ▶ Participate

## ▶ Private

- ▶ Vision
- ▶ Execution
- ▶ Seek stakeholder input

## ▶ Non-Profit

- ▶ Bridge builder
- ▶ Fiscal agents
- ▶ Outreach and education



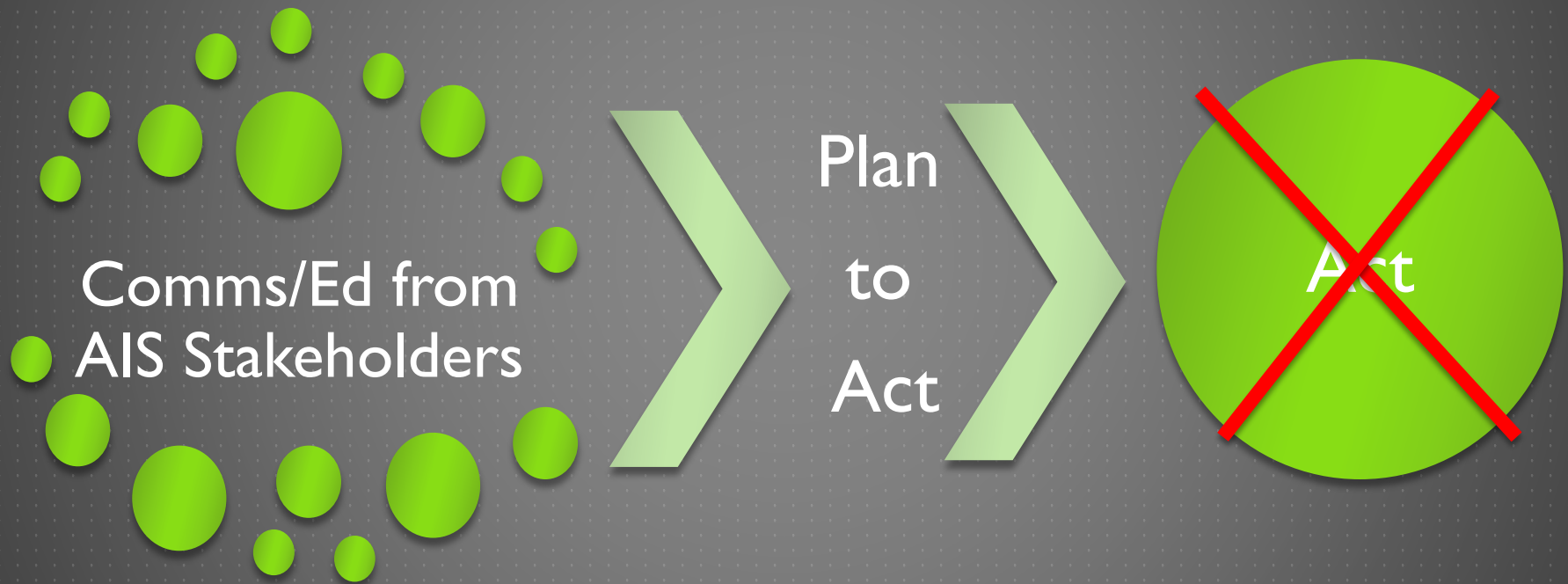


# AIS PREVENTATIVE BMPS

- ▶ Clean
- ▶ Drain
- ▶ Dry
- ▶ Dispose (Minnesota DNR)



# AIS BMP BEHAVIOR



# POTENTIAL BARRIERS

- ▶ With decon
  - ▶ Decontamination only at certain places/time
  - ▶ Need for two trained staff at decon stations (cost)
  - ▶ Decontamination focuses on zebra mussels
- ▶ Without decon
  - ▶ Dark
  - ▶ Can't reach under boat
  - ▶ Generally do not have the tools for BMPs



# AIS STAKEHOLDER ID

- ▶ Aquatic invasive species stakeholders:
  - ▶ Phone calls to nearly every AIS county lead in Minnesota
  - ▶ Minnesota DNR, Texas Parks and Wildlife
  - ▶ Non-profits with AIS focus: Wildlife Forever
  - ▶ LGUs (watershed districts, etc.)
  - ▶ Federal stakeholders: SeaGrant, USFWS, etc.



# GETTING STARTED

- ▶ 2016 Green Chemistry Innovators Internship Grant MPCA
- ▶ UW Stout Internship Program
- ▶ Starting the conversations early
- ▶ Iterative rapid design process
- ▶ Pilot partners take a leap of faith:
  - ▶ Hennepin County
  - ▶ Three Rivers Park District
  - ▶ Meeker County
  - ▶ Big Sandy Lake Association
  - ▶ Forest Lake Comfort Lake Watershed District



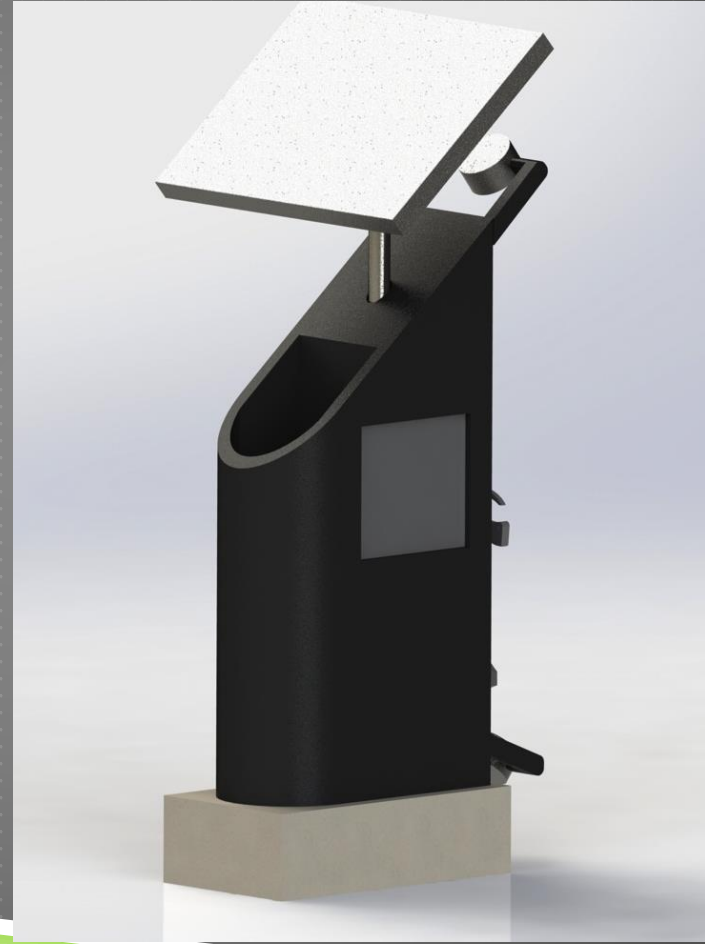
# NON PROFIT PARTNER

- ▶ Passion for AIS
- ▶ Cutting edge outreach/education
- ▶ Capacity and interest

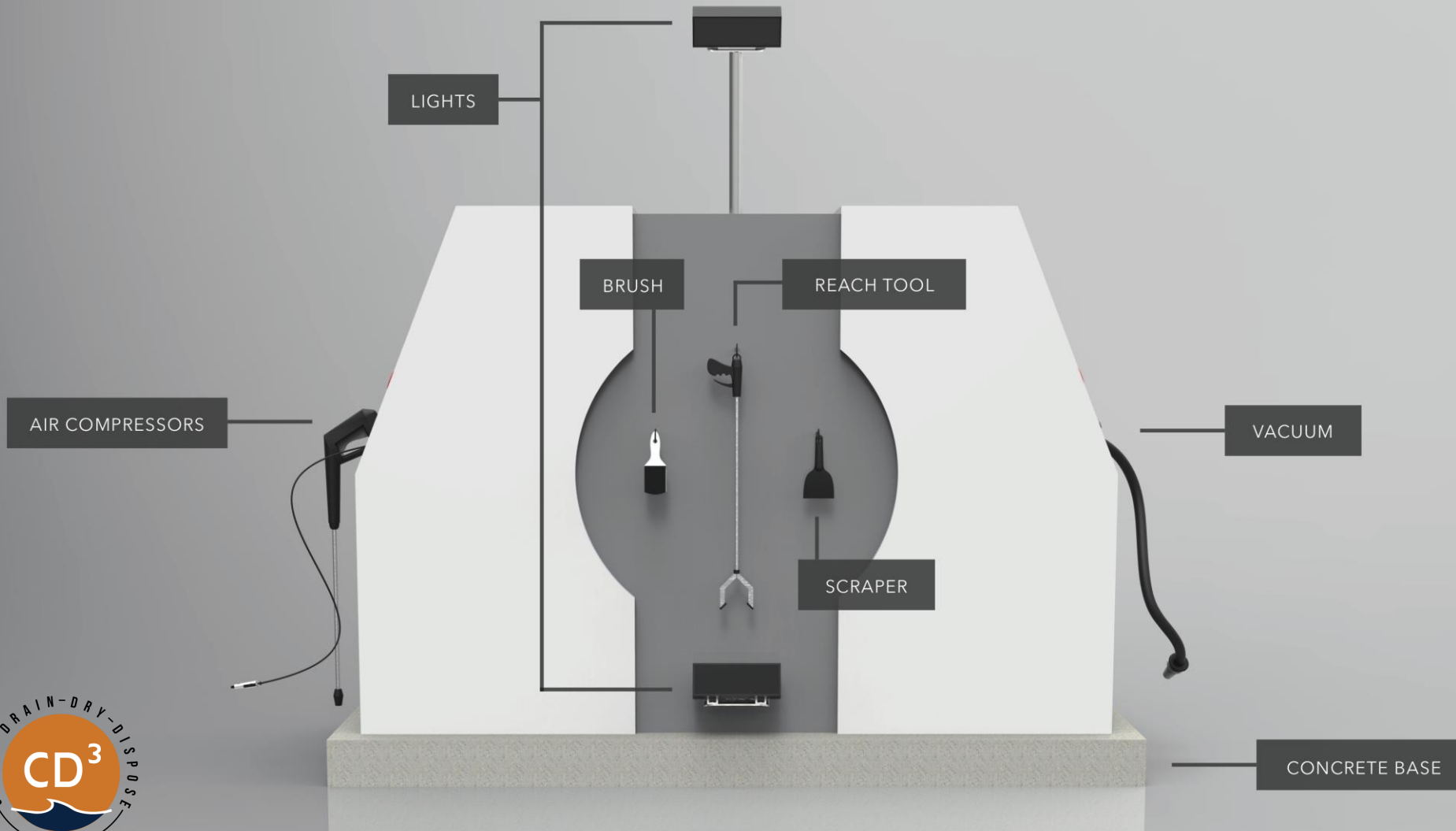




# ITERATIVE DESIGN



# SECOND ITERATION



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# NEXT STEPS

- ▶ Securing grants for pilot
- ▶ Additional iteration of design with stakeholders
- ▶ Finalizing engineering specs
- ▶ Build
- ▶ Launch
- ▶ Evaluate
- ▶ Redesign
- ▶ Commercialize



# TAKEAWAYS

- ▶ Be advocates: all the cool kids are doing it
  - ▶ Departments of health, FDA, departments of ag
- ▶ It's hard, but listen to ideas
- ▶ Participate
- ▶ Allow (encourage) moonlighting
- ▶ Sponsor business plan competitions around conservation issues
- ▶ Grants of varying sizes- make it right not right now
- ▶ Better really is better



# THANK YOU

- ▶ MPCA
- ▶ MNDNR
- ▶ Wildlife Forever
- ▶ Project pilot sponsors
- ▶ Doug Jensen SeaGrant
- ▶ NFWF
- ▶ Initiative Foundation



# QUESTIONS? WILLING TO GIVE FEEDBACK?

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