Web session etiquette. Please:

• If you are using a phone, turn off your computer speakers to avoid feedback and terrible noises.

• Mute your line unless you are speaking to the group.
Today’s Agenda

Discussion:
- Step 5 review
- Monitoring discussion

Lecture:
- Talking about climate change
- Telling Your Adaptation Story
- Homework for next time
Step 5: MONITOR and evaluate effectiveness of implemented actions.
1. DEFINE area of interest, management objectives, and time frames.

2. ASSESS climate change impacts and vulnerabilities for the area of interest.

3. EVALUATE management objectives given projected impacts and vulnerabilities.

4. IDENTIFY and implement adaptation approaches and tactics.

5. MONITOR and evaluate effectiveness of implemented actions.

Vulnerability assessments, scientific literature, and other resources

Menu of Adaptation Strategies & Approaches
Purpose:

- Practice adaptive management

Step 5: MONITOR and evaluate effectiveness of implemented actions.

How do we know if the selected actions were effective?

What can we learn from these actions to inform future management?
**Step 5:** MONITOR and evaluate effectiveness of implemented actions.

<table>
<thead>
<tr>
<th>Monitoring Variable</th>
<th>Items that can tell you whether you have achieved your management goals &amp; objectives.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation Criteria</td>
<td>Use an item that also helps evaluate a particular tactic (e.g. what was the strategy/approach?)</td>
</tr>
</tbody>
</table>
| Monitoring Implementation | For example:  
  • Tree canopy diversity |
Step 5: MONITOR and evaluate effectiveness of implemented actions.

**Monitoring Variable**

**Evaluation Criteria**

**What is success?**

What you’re monitoring or measuring. **What are the units on your data?**

**For example:**
- No more than 5% of any one species
**Step 5:** MONITOR and evaluate effectiveness of implemented actions.

- **Monitoring Variable**
- **Evaluation Criteria**

**Monitoring Implementation**

How the monitoring will actually get done.

Use existing monitoring when possible!

For example:
- Citizen scientist inventories every 5 years.
- Regular post-planting stocking surveys.
What are you currently monitoring?

How does this relate to adaptation actions and your goals and objectives?
Are there any new things you plan to start monitoring after completing step 5?
Are there things you’d like to monitor but don’t currently have the resources to do so?
What tools or resources are you aware of that could help you with monitoring?
Thoughts/Suggestions for Improving Step 5?
Click “export and share plan” to create your formatted Adaptation plan.
Landing Page

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**Share your story!**

Through this course you've heard about how a variety of urban natural resource professionals are thinking about climate change and planning to respond. Often it's those stories, told in the land owner's or manager's own words, that are the most valuable for helping others think about how they too can respond to climate change.

We hope that you will consider sharing your story with others! To do this, please let the instructors know if NIACS can feature your project online as an adaptation demonstration. This will not only help us share your story, but will be a helpful piece for you to tell your partners, clients, and other stakeholders about the work that you are doing.

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**Climate Change Adaptation Plan**

**Chicago project**

January 8, 2018

Prepared by Leslie Brandt

Prepared using the Adaptation Workbook - AdaptationWorkbook.org

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**Property details**

- Acres: 2
- Size: 2
- Ownership: Federal demo
Export and Share Plan Instructions

Next Steps
If you've finished the process, congratulations! This page will help you go forward with some next steps.

To print or create a PDF of your Adaptation Workbook, use the "Print Current Version" button. If you want to create a PDF, just choose "Save to PDF" in your printer dialog menu. You can print your Workbook at any time, even if it's just a rough draft.

To get in touch with NIACS, use the "Contact Us" button to find a contact person for your geographic area. NIACS will be eager to answer questions, help share your story, and develop opportunities for collaboration, funding, and implementing your adaptation actions. It's up to you and your organization to decide how you'll use the ideas you've developed in the Adaptation Workbook, but NIACS is ready to help you move forward.

To see how other land managers have used the Adaptation Workbook to consider climate change and address their management goals, use the "Browse Other Adaptation Projects" button. This will take you to the website for the Climate Change Response Framework and our network of Adaptation Demonstration Projects. You can filter projects by location or ownership to find examples similar to your own.

Climate Change Adaptation Plan
Chicago project
January 8, 2018
Prepared by Leslie Brandt

Prepared using the Adaptation Workbook - AdaptationWorkbook.org

Property details
Acres: 2
Size: 2
Ownership: Federal demo
Export and Share Plan

“Print current version” creates a formatted document (html)
1. A new window will appear.
   Toggle to the print dialog
   Select to “change” the print Destination

2. “Select a destination”
   Toggle to “Save as PDF”
Save
You finished the workbook! You did it! Congrats!!
Today’s Agenda

Discussion:
▪ Step 5 review
▪ Monitoring discussion

Lecture:
▪ Talking about climate change
▪ Telling Your Adaptation Story
▪ Homework for next time
Talking about climate change
Increasingly, urban forestry professionals are expected to integrate climate change into plans, documents, and activities.

There is a need to understand and *effectively communicate* information about climate change to a diverse audience.
What experiences have you had regarding communicating about climate change with stakeholders?
What does your community think?

Yale Climate Opinion Maps

Estimated % of adults who support tax rebates for people who purchase energy-efficient vehicles or solar panels, 2018

SPOTLIGHT

Yale Climate Opinion Maps 2018

These maps show how Americans' climate change beliefs, risk perceptions, and policy support vary at the state, congressional district, metro area, and county...

Learn more

http://climatecommunication.yale.edu/visualizations-data/
### Risk Perceptions: Marion Co., IN

<table>
<thead>
<tr>
<th>Risk Perception</th>
<th>Worried</th>
<th>Great/Moderate</th>
<th>Little/Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worried about global warming</td>
<td>50%</td>
<td>62%</td>
<td>38%</td>
</tr>
<tr>
<td>Global warming will harm plants and animals</td>
<td></td>
<td>71%</td>
<td>18%</td>
</tr>
<tr>
<td>Global warming will harm future generations</td>
<td></td>
<td>70%</td>
<td>17%</td>
</tr>
<tr>
<td>Global warming will harm people in developing countries</td>
<td></td>
<td>63%</td>
<td>23%</td>
</tr>
<tr>
<td>Global warming will harm people in the US</td>
<td></td>
<td>59%</td>
<td>28%</td>
</tr>
<tr>
<td>Global warming will harm me personally</td>
<td></td>
<td>44%</td>
<td>43%</td>
</tr>
</tbody>
</table>

http://climatecommunication.yale.edu/visualizations-data/ycom-us-2018/?est=happening&type=value&geo=county&id=18097
REACHING YOUR AUDIENCE
Connect with People’s Values
Focus on ‘self-transcending’ values

“It increasing canopy cover helps us reduce our city’s energy use”

Vs.

“You will save money on your cooling bill”
Connect with something your community cares about

Passionate about wildlife?
Talk about how climate change may affect local birds

Love winter sports?
Talk about how climate change may reduce opportunities for skiing

Think carefully about your audience with each communication opportunity!
Use local disasters as a conversation starter

▪ 1995 Chicago Heat Wave
▪ 2010 Milwaukee Flood
▪ April 2011 Tornado Super Outbreak
▪ 2012 Drought
▪ 2014 Chicago Derecho
▪ Hurricane Maria, Harvey

Focus on how coming together as a community helped overcome these challenges!

What can we do to make sure these impacts are less severe the next time around?
Focus on solutions rather than “Gloom and Doom”

“Intense precipitation events are increasing, so it make sense to invest in green infrastructure for stormwater management”
Engage Across the Political Spectrum

These themes can resonate with a center-right audience:

- Aesthetic beauty
- Responsibility
- Energy security
- Jobs
- Innovation
- Tradition
- Sense of place.
- “The perfect past”

“This city used to have a great forest, and we should work to restore it.”
Use Trusted Messengers

- Trusted peers
- Faith networks
- Outdoor recreation organizations
- Scientists
- Health professionals

**NOT:**
- Politicians
- The media
Climate change is vague – you should be specific

“We expect that within the next 20 years, will be shift from being a zone 5 to a zone 6. That means we can plant certain species (such as…) here that would not have survived the winters previously.”
List climate change impacts as some of many reasons

“Increasing species diversity in the urban tree canopy will help reduce risks from future threats such as insect pests, disease, and warmer temperatures.”
Highlight the co-benefits of doing good urban forestry:

- Stormwater management
- Reduced energy use
- Property values
- Sense of place
- Aesthetics
- Wildlife habitat
- Food
- Urban heat island reduction
Telling Your Adaptation Story

Telling your adaptation story effectively can help you...

▪ Gather support
  • Institutional
  • Financial
▪ Reach a larger audience
▪ Communicate key lessons
A Practical Example

The Climate Adaptation Fund provides grant awards to non-profit conservation organizations for applied, on-the-ground projects focused on implementing priority conservation actions for climate adaptation at a landscape scale.

Pre-proposal applications usually due in early spring

www.wcsclimateadaptationfund.org
What makes a good story?

Get used to doing a few key things when you’re telling your adaptation story:

▪ Tailor the message to the audience
▪ Follow a logical sequence of ideas (connect the dots)
▪ Be clear about intentionality
▪ Include specific details
▪ Connect your actions to the bigger picture
Example storyline

Place & purpose

Key risks from climate change

Adaptation actions to address key risks

Outcomes & Benefits

Feel familiar?

You’ve already done all of this thinking!
Example Story: Riverside, IL

- National Historic Landmark (Frederick Law Olmsted design)
- Tree mortality from emerald ash borer
- A reforestation program has been implemented to replace 11% canopy loss.
Example story: Riverside IL

Goals:

- Mitigate losses associated with emerald ash borer in parks, parkways and natural areas within the community.
- Continue to develop and improve their tree planting cost share program
- Engage the community following reforestation
Example story: Riverside IL

Impacts/challenges:

• Increase in the duration and frequency of drought conditions
• Increase in the frequency of flooding and severe weather
• Increased tree mortality due to shifting climate conditions
Adaptation tactics:

- Increasing native species genetic and species diversity (especially oaks)
- Develop a watering program and outreach to residents with new parkway/boulevard trees
- Plant trees that are expected to do well under future climate conditions that are native south of the area
Example story: Riverside IL

Outcomes and benefits:

- Maintain the overall character and aesthetics of the village
- Reduce risks to future stressors (pests, diseases, storms)
Next week: Special Session!

- You are the stars!
- **You will be given a 5 minute slot to share your story**
- If you cannot attend the final class, send us your slides along with a recorded presentation

Be creative! What’s your future vision, and how will adaptation help you get there?
Poster Time!
Tell your story!

- Place & purpose
- Key risks from climate change
- Adaptation actions to address key risks
- Outcomes & Benefits
Template Slide #1
(replace with your name location)

Project: Place & Purpose
Tell us the key info about your place!
- Tell us the major management goals that relate to your story

Audience: who’s your target?

Delete this box and insert a picture or map here

Synthesize your work from Step 1

Delete this box and insert a picture or map here

Reformat the templates, get creative!
Template Slide #2: Climate Change Impacts, Challenges, Opportunities

Climate Change Impacts or Opportunities

Share 2-4 impacts or opportunities that are most important for this project and for your story.

Synthesize your work from
  - Step 2
  - Step 3
Template Slide #3 Adaptation actions

Adaptation Tactics

- What are the adaptation actions that will help you address your key climate impacts?
- What about these ideas is new/different from the “business as usual” management approach?

Synthesize your work from Step 4

Delete this box and insert a picture or map here

Delete this box and insert a picture or map here

Reformat the templates, get creative!
Outcomes

- What are the key outcomes you hope to achieve through this project?
- How will you measure this outcome *(briefly describe do not get into the nitty gritty of monitoring)*

Delete this box and insert a picture or map here

Delete this box and insert a picture or map here
Recommended Reading

  

- Communicating climate change adaptation: A practical guide to values-based communication
  

- Vibrant Communities “Trees Are the Key” online resource center and communications toolkit.
  
  https://treesarethekey.org/trees-are-the-key-online-toolkit/
Close-out Video

- EVERYONE does a video
- Record a close-out message on flipgrid: https://flipgrid.com/f5f7e121
- Introduce yourself (again).
  - Name, organization
- Tell us what you learned in the course.
- How will you use your adaptation plan going forward?
To-do list for Session 7:

- **Refine or Complete prior Steps** (including **Homework** sections after each Step)
  - Try Output / Export PDF of your plan – examine and clean up prior Steps as desired
- Record a close-out message on flipgrid: [https://flipgrid.com/f5f7e121](https://flipgrid.com/f5f7e121)
- Fill in your project’s details in the **Adaptation Story Template Slides**
- Email your filled-in Template slides to Leslie no later than **Sunday, December 16**
- Come to Session 7 (Tuesday, December 18th) ready to share your adaptation story!

Thanks everyone!