



**DRAFT AGENDA**  
**Guidelines on the Use of Natural and Nature-Based Features**  
**for Sustainable Engineering**  
Working Meeting  
May 13-17, 2019

**Hosts: Environment Agency and Scottish Environmental Protection Agency (SEPA)**  
Edinburgh Centre for Carbon Innovation, High School Yards, Edinburgh, Scotland. EH1 1LZ  
(<https://edinburghcentre.org>)

**Workshop Outcomes**

- Incorporate final adjustments in order to complete chapter first drafts;
- Coordination across chapter teams on common/shared topics;
- Participation in 1-DAY, NNBF Symposium to learn about applicable projects and practices from NNBF practitioners;
- Participation in site visits to review and inspect NNBF projects.

**Participants**

Chapter Co-Leads, Chapter Team Members, and Editorial Board Members.

**Objectives**

The objectives for this collaborative meeting are as follows:

- Assemble Guidelines Team Members from government, NGOs, universities, and international organizations to advance the development of the Guidelines;
- Facilitate communication between Editorial Board and Chapter Teams and across Chapter Teams;
- Progress integration and consistency across chapters;
- Refine post-meeting schedule of activities and milestones leading to publication of the Guidelines.

Monday May 13, 2019

DAY 1 - JOINT MEETING		
Time	Agenda	Lead(s)
0830 – 0900	<b>Check-In - Meet &amp; Greet:</b> Edinburgh Centre for Carbon Innovation, High School Yards, Edinburgh, Scotland. EH1 1LZ	
0900 – 0915	<b>Call to Order</b> Welcome & Introductions High Water Common Ground movie trailer (5min)	Jo Guy Todd Bridges
0915 – 0945	<b>Plenary Session:</b> Review of Workshop Agenda; Where are We Now? Where are we going?	Todd Bridges
0945 – 1000	<b>Coffee break</b>	
1000 – 1030	<b>Scottish overview and welcome</b>	Vincent Fitzsimons, Head of Hydrology and Flooding, Scottish Environment Protection Agency
1030 – 1115	<b>Plenary Session: High-Level Messages from the Editorial Board</b>	Todd Bridges and Editorial Board Members
1115 – 1130	<b>Plenary Session:</b> Breakout Group Orientation	Jo Guy
1130 – 1215	<b>Breakout Session 1:</b> Teams Work on Respective Chapters – Editorial Board Members work with their respective Chapter Teams.	All
1215 – 1330	<b>Lunch provided in atrium</b>	
1330 – 1645	<b>Breakout Session 2:</b> Teams Work on Respective Chapters – Editorial Board Members work with their respective Chapter Teams.	All
14:30	<b>Coffee break</b>	
1645 – 1700	<b>Confirmation of evening arrangements</b>	Jo Guy

**Evening:**

- People find own places to eat
- Optional walk with Lydia to Arthur's Seat and Optional site visit with Larissa Naylor

## Day 2 - Tuesday May 14, 2019

DAY 2 - JOINT MEETING		
Time	Agenda	Lead(s)
0800 – 0830	<b>Check-In - Meet &amp; Greet:</b> Edinburgh Centre for Carbon Innovation, High School Yards, Edinburgh, Scotland. EH1 1LZ	
0830 – 0930	<b>Plenary Session:</b> Chapter Team Requirements <ul style="list-style-type: none"> <li>• Critical Needs</li> <li>Request for Input</li> </ul>	Chapter Co-Leads (2 mins each)
<b>0930 – 0945</b>	<b>Coffee Break</b>	
0945 – 1200	<b>Break Out Session 3:</b> Teams Work on Respective Chapters with Input from Editorial Board Members	All
<b>1200 – 1330</b>	<b>Lunch provided in atrium</b>	
1330 – 1400	<b>Plenary Session:</b> Chapter wide items: <ul style="list-style-type: none"> <li>• Formatting</li> <li>• Referencing</li> <li>• Presentation of case studies</li> <li>• Presentation of call-out boxes</li> </ul>	Todd/Jonathan [suggest direction, not discussion]
<b>1400 – 1415</b>	<b>Coffee Break</b>	
1415 – 1645	<b>A. Break Out Session 4:</b> Teams Work on Respective Chapters and Case Studies  <b>B. Editorial Board Member Meeting</b>	All  Editorial Board Members
1645 – 1700	<b>Confirmation of evening meal arrangements</b>	Jo Guy
1700	Adjourn	

**Evening:**

Group meal at 1900 at [Pibroch Scottish Restaurant](#): 20 Holyrood Rd, Edinburgh EH8 8AF

Wednesday May 15, 2019

DAY 3 - JOINT MEETING		
Time	Agenda	Lead(s)
0800 – 0830	<b>Check-In - Meet &amp; Greet:</b> Edinburgh Centre for Carbon Innovation, High School Yards, Edinburgh, Scotland. EH1 1LZ	
0830 – 0845	<b>Plan for the Day</b>	Jo Guy
0845 – 1000	<b>Break Out Session 5:</b> Teams Work on Respective Chapters and Case Studies with Input from Respective Editorial Board Members	Todd Bridges and Editorial Board Members
<b>1000 – 1030</b>	<b>Coffee Break</b>	
1030 – 1200	<b>Break Out Session 6:</b> Teams Work on Respective Chapters and Case Studies with Input from Respective Editorial Board Members	All
<b>1200 – 1330</b>	<b>Lunch provided in atrium</b>	
1330 – 1430	<b>Plenary Session:</b> Final Chapter Team Reports from Breakout Sessions <ul style="list-style-type: none"> <li>• Path Forward</li> <li>• Final comments from Editorial Board</li> <li>• Final 1<sup>st</sup> Draft Due Date</li> </ul>	Chapter Co-Leads (2 mins each)  Jonathan Todd
<b>1430 – 1500</b>	<b>Coffee Break</b>	
1500 – 1530	<b>Eddleston Water – presentations and Q&amp;A</b>	Chris Spray
1530 – 1600	<b>Belford Burn – presentations and Q&amp;A</b>	Paul Quinn
1600 – 1645	<b>Wrap Up of Working Session</b> <ul style="list-style-type: none"> <li>• Review Outcomes from First Three Days</li> <li>• Discuss Next Steps for NNBF Guidelines</li> <li>• Plans for Next Face-to-Face Meeting</li> </ul>	Todd Bridges
1645 – 1700	<b>Plans for evening site visits. Plans for symposium</b>	Jo Guy
1700	Adjourn	

### Evening:

Optional site visit – (1720 – 1900) Gordon McOmish at Edinburgh Council will meet us and show us the Water of Leith flood defence works in the Murrayfield area of Edinburgh. This includes a variety of flood risk management assets including temporary flood storage on the park, bunds, more traditional hard defences, pump stations and a few different types of flood gates, it has the bonus of being next to Murrayfield stadium! Travel will be via tram leaving at 1720 and getting to Murrayfield at 1729.

Thursday May 16, 2019

## Natural and Nature Based Features (NNBF) Symposium - Thursday May 16, 2019

[Edinburgh Centre for Carbon Innovation](#), High School Yards, Edinburgh, Scotland. EH1 1LZ

### Overview

Experts from around the world will discuss the challenges and opportunities of designing, implementing, and maintaining nature-based features in conjunction with flood risk reduction measures.

Join us to share, learn and advance science and engineering practices that support the use of natural and nature-based features. The symposium will feature 8 speakers with diverse expertise in the field.

### Who is Attending?

Approximately 15 countries<sup>1</sup> from across the globe who are all working on NNBF will be attending. This includes representatives from the following projects/working groups:

- [Natural & Nature Based Features International Guidelines](#)
- [EU LAND4FLOOD Cost Action](#)
- [EU Interreg North Sea Region Building with Nature](#)

### Site visits

The following day (Friday 17 May) there will be the opportunity to attend one of two NNBF sites visiting either to [Belford Burn](#) and [Eddleston Water](#).

### Agenda – Thursday May 16, 2019

Time	Agenda
0900 – 1000	<b>Registration and International networking at:</b> Edinburgh Centre for Carbon Innovation, High School Yards, Edinburgh, Scotland. EH1 1LZ
0900 – 1000	<b>Coffee on arrival</b>
1000 – 1010	Housekeeping, Agenda for the day and summary of the different groups in attendance <b>Jo Guy, Environment Manager, Environment Agency</b>
1010 – 1025	Welcome to Scotland Natural Flood Management the Scottish context <b>Roseanna Cunningham, Cabinet Secretary for Environment, Climate Change and Land Reform, Scottish Government</b>
1025 – 1040	Natural Flood Management the English context

<sup>1</sup> Belgium, Canada, Czech Republic, England, Germany, Hungary, Ireland, Israel, Malta, Netherlands, Norway, Poland, Scotland, Sweden, USA

	<b>Julie Foley - Director of Flood Risk Strategy &amp; National Adaptation, Environment Agency</b>
1040 – 1100	Keynote speaker – Holding Water in the Landscape : Working with communities in India and Latin America <b>Minni Jain - Director, The Flow Partnership</b>
1100 – 1115	Q&A
<b>1115 – 1130</b>	<b>Coffee</b>
1130 – 1140	Communicating about Opportunities and Best Practice: Engineering With Nature - An Atlas 2 and Natural and Nature Based Features Guidelines <b>Todd Bridges, Senior Research Scientist, USACE</b>
1140-1145	Orientation for breakout session <b>Lydia Burgess-Gamble, Principal Scientist, Environment Agency</b>
1145 – 1300	<b>Breakout Session</b> Delivering Nature-Based Solutions: Learning from international best practice. This session is about attendees sharing their best practice via short one pagers in relevant groups and discussing key issues and solutions
<b>1300 – 1415</b>	<b>Lunch</b>
1415 – 1430	Recap on next steps from break-out session from USACE, Cost and BWN perspectives <b>Lydia Burgess-Gamble, Principal Scientist, Environment Agency</b>
1430 – 1450	Recovering from Storm Desmond, the role of Natural Flood Management in Cumbria <b>Daniel Bond, Area Flood Risk Manager, Environment Agency</b>
1450 – 1510	Land4Flood the EU Cost Action <b>Thomas Hartman, Assistant Professor Wageningen University, Netherlands</b>
1510 – 1520	Q&A
<b>1520 – 1530</b>	<b>Coffee</b>
1530 – 1550	Sandy Reinforcement Houtribdijk <b>Rinse Wilmink, Advisor Coastal Flood Risk, Rijkswaterstaat</b>
1550 – 1610	Building With Nature <b>Chris Spray, Senior Research Fellow and Emeritus Professor, Dundee University</b>
1610 – 1630	Natural and Nature Based Features the US context <b>Todd Bridges, Senior Research Scientist, USACE</b>
1630 – 1640	• Q&A
1640 – 1655	Wrap up, summary of the day and next steps <b>Hans Pietersen, Senior Advisor International Affairs, Rijkswaterstaat</b>
1655 – 1700	Plans for next day's site visits <b>Jo Guy, Environment Manager, Environment Agency</b>
<b>1700</b>	<b>Reception hosted by Scottish Government</b>

## Site Visits – Friday May 17, 2019

Time	Agenda	Lead(s)
0800	<p><b>Check in for Site Visits:</b> Edinburgh Centre for Carbon Innovation, High School Yards, Edinburgh, Scotland. EH1 1LZ</p> <p><b>45mins Commute to <a href="#">Eddleston Water</a></b></p> <p><b>1hr 45mins Commute to <a href="#">Belford Burn</a></b></p>	<p>Lydia B-G</p> <p>Jo Guy</p>
1700	Return to Edinburgh Centre for Carbon Innovation	

### **Site Visit Information:**

#### **What site visit am I going on?**

We will try our best to allocate you to the site visit you selected as your preference. We will write on your name badge, the site you have been allocated.

#### **How will we get there?**

You will be travelling by coach to the sites, we aim to leave just after 800 and return to Edinburgh for 1700.

#### **Do I need to bring food and drink?**

We will confirm this with you on Thursday during the symposium.

#### **What do I need to wear?**

Please bring clothing suited to field-related activities. All sites are easily accessible. However, we will be outdoors, and it will be important to dress appropriately. Field shoes and long pants/trousers are recommended. Also, please remember to bring rain gear. Rain or shine, we will be visiting the sites.

### **Attire for Working Sessions:**

During our working sessions and NNBF Symposium (13-17 May), business casual is the appropriate attire.

### **Contacts While Traveling and During Meeting**

While traveling or during our meeting, you may need to contact one of our conference organizers. Please don't hesitate to contact the following people if you have any questions or need any assistance during the meeting.

- Todd Bridges – email: [todd.s.bridges@usace.army.mil](mailto:todd.s.bridges@usace.army.mil); cell phone/text: +01 601-831-0691
- Jo Guy – email: [jo.guy@environment-agency.gov.uk](mailto:jo.guy@environment-agency.gov.uk); cell phone/text: +44 (0) 7826512559