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Haasnoot, Marjolijn, "Dynamic Adaptive Policy Pathways" (2020). *All ECSTATIC Materials*. Paper 92.
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Dynamic Adaptive Policy Pathways

Dr. Marjolijn Haasnoot
Deltares, Netherlands

November 12, 1 PM Mountain Time

By Zoom:



<https://usu-edu.zoom.us/j/84342900372?pwd=SW5CNU5rdWVWVK3Z1YW9iWlo2Wm0zQT09>

- Dynamic Adaptive Policy Pathways (DAPP) is a decision making approach that explicitly includes decision making over time. The essence is proactive and dynamic planning in response to how the future actually unfolds.
- DAPP explores alternative sequences of decisions (adaptation pathways) for multiple futures and illuminates the path dependency of alternative strategies. It opens the decision space and helps to overcome policy paralysis due to deep uncertainty. There are different routes that can achieve the objectives under changing conditions (like ‘different roads leading to Rome’).
- Policy actions have an uncertain design life and might fail sooner or later to continue achieving objectives as the operating conditions change (i.e. they reach an adaptation tipping point (ATP)). Similarly, opportunity tipping points may occur.
- Multiple pathways are typically visualized in a metro map or decision tree, with time or changing conditions on one of the axes.
- DAPP supports the design of a dynamic adaptive strategy that includes initial actions, long-term options, and adaptation signals to identify when to implement the long-term options or revisit decisions.

Bio -- Dr. Haasnoot is an environmental scientist specialized in water management, integrated assessment modeling and decision making under deep uncertainty. She is a founder of the Dynamic Adaptive Policy Pathways approach. Her current research focuses on (adaptive) delta management and planning, and climate change adaptation. Model based adaptation pathways, fast integrated models and signals for timely adaptation are key tools in this research. Current studies focus on San Francisco, Miami, the Netherlands, Bangladesh, and Vietnam. Serious gaming is one of tools she uses to socialize people with decision making under uncertainty and adaptation pathways. Marjolijn is leading the research program on adaptation to climate change and sea level rise, is a member of the leadership team of the Society for Decision Making under Deep Uncertainty, and will be a lead author for the Sixth Assessment Report of the IPCC. Marjolijn is Associate Professor at University Utrecht.

Series Schedule

Date / Time (Mountain)	Person	Title	Video
Oct. 28, 10:30 AM	Dr. Jian Wang (USU)	Strategies for Managing the Colorado River in an Uncertain Future	Link
Nov. 4, 10:30 AM	Dr. Jon Herman – University of California, Davis	Adaptive policy design in water resources systems under uncertain climate and human stressors	Link
Nov. 9, 10:30 AM	Dr. Sarah Fletcher – Stanford University	Adaptive Water Infrastructure Planning for a Changing World	Link (start at 1:03:00)
Nov. 12, 1:00 PM	Dr. Marjolijn Haasnoot – Deltares, Netherlands	Dynamic Adaptive Policy Pathways	
Nov. 13, 10:30 AM	Dr. Patrick Ray – University of Cincinnati	Water Resources International Development: What On Earth Are We Doing?	