Finding Common Ground: Prioritizing Research to Meet Local Needs

Breakout Group Notes - Compiled



Table Facilitator		Team Members	Topic Information Need Assistance Need Who needs to be involved? Notes		Notes	Votes	Researchers Municipal CAW To					
4	Amanda S.	M. Lynch, R. Stephenson, C. Riley, D. Wiggin, T. Mallette, T. Ballestero, D. Foster	Economics	What are the alternative scenarios/options?; Policy options; regulatory analysis/costs; avoided costs/savings/benefits; green vs. grey infrastructure; hard vs. living shorelines	Case studies in successful communities; consider regional impacts from actions in individual communities; quantify the economic benefits; regulatory costs	Economics researchers; municipals; Army Corps working with local communities	Economics for decision makers; life cycle assessment - looking at longer time horizon; asset management - connect data within a town, e.g., watershed scale data for floodplain management; consider community growth	•••••	6	7	8	21
3	Julia P.	A. Boudreau, N. Spencer Smith, K. Howard, J. Gilbert, W. Wollheim, J. Houle	Contaminant plumes resulting from unmanaged historic sites, and exacerbated by climate change (e.g., cesspools and landfills)	What are the water quality and public health effects of changing climate conditions on downstream waters from historic landfills on the Branch River?	Projections of likelihood on contamination; trusted party to present to decision makers; relationship of contaminants and health effects; may need to identify funding to address; identify process to deal with any risks that are identified.	DES, UNH researchers and students, public health officials, local voices, local historians, hydrologists, funding agencies	Historical records synthesis would be needed; ethical-moral issues involved; any evidence of cancer clusters downstream?; what about adjacent septic lagoons?; impacts related to groundwater and water table?; there is currently no monitoring of landfill which overlies a major aquifer; is this a synthesis opportunity for existing monitoring information? There are lots of social, political changes and influences involved.		2	7	8	17
1	Lisa G.	A. Valkanos, S. Couture, P. Kinner, L. Williams, A. Lyon, B. Newhall, K. Reed, E. Chapman	Economics of adaptation - decommissioning (short vs. long-term; ID opportunities for replacement); multiple scales - state/regional/municipal/sites, sectors)	How to change zoning to deal with decommissioning and offset economic impact (property tax); case studies? (comparable); tourism - municipal, regional, state; fishing, culture, historical buildings, development	Supporting planning to sustain tourisms/economies; alternatives - transitioning, diversifying; translation and communication	Economists; policymakers (municipal and state); social scientists; tourism industry; insurance industry	Examples - Maine, Great Lakes, CA, AK - management options; Ocean Blvd. In Rye; fishing examples; Lisa follow up with Becca - examples	••••	4	5	5	14
1	Lisa G.	A. Valkanos, S. Couture, P. Kinner, L. Williams, A. Lyon, B. Newhall, K. Reed, E. Chapman	Land use planning/development in the context of climate change (municipal and private; dealing with increase in impervious cover)	Ties with groundwater rise, sea-level rise, other climate change impacts; social science - demographic/socioeconomic characteristics (options for people in different situations); case studies? Incentives? Individual cost/benefit information (esp. re: low-impact development	Education - individual landowners, DPWs; zoning/regulatory guidance (stormwater model standards> residential/small lots?)	Stormwater Center, policymakers, social science	Rye example; have inundation maps - need to bring in groundwater; small lots - getting built out; MS4 context; political challenges; looked at Cape Cod (septic - regional efforts); new vs. redevelopment	••••	4	3	6	13
5	Sherry G.	A. Watts, S. Bird, P. Stacey, A. Eberhardt, A. Laferriere, T. Mattera, C. Wake, M. Wengrove	Municipal Power Dynamics	Support/award volunteer board members; information on/of multiple benefits; sharing of what planning board thinks with conservation commission	Project based information (economic + conservation benefits); better communication between boards	Conservation commissions + municipal boards; social scientists; consultants	Exeter conservation commission has lots of data but no power	••••	6		6	12
2	Nathalie M.	P. Britz, L. Hansen, J. LaBranche, S. Miller, B. Zeiber, V. Levesque, L. Burakowski	Community outreach	Survey of community values and perceptions to inform outreach and adaptation efforts (e.g., public risk perceptions of climate change, affective images, values, policy preferences, sociodemographics)			Identify different sub-populations in a community to get a better understanding of audiences and how best to reach them; identify local champions	• • • • • • • • •	4	2	3	9
4	Amanda S.	M. Lynch, R. Stephenson, C. Riley, D. Wiggin, T. Mallette, T. Ballestero, D. Foster	Social Change Makers	How do you reward success and build political will of key leaders?; identify and cultivate champions for social change; what influences people to change their minds and how can we cultivate the change-makers; identify demographics and public sentiment; case studies - what has worked well; structures, carrots, and sticks	How communities can cultivate social change makers as community boards turn over	Social science researchers; municipals	Lack of political will is a problem; use watershed level scale	•••	4	2	3	9
1	Lisa G.	A. Valkanos, S. Couture, P. Kinner, L. Williams, A. Lyon, B. Newhall, K. Reed, E. Chapman	Groundwater rise with sea-level rise	Information about the impacts on drinking water sources and septic systems	Maps showing overlay of groundwater rise/sea-level rise + well/septic locations; translation and recommendations	Policymakers	Greenland example	•••••	2	3	3	8
2	Nathalie M.	P. Britz, L. Hansen, J. LaBranche, S. Miller, B. Zeiber, V. Levesque, L. Burakowski	Adaptation Options	Site-specific/place based menu of adaptation options; engineering/design studies				••••	2	1	4	7
5	Sherry G.	A. Watts, S. Bird, P. Stacey, A. Eberhardt, A. Laferriere, T. Mattera, C. Wake, M. Wengrove	Proactive Risk Identification	Known municipal risks; assessing past events/tipping points	Community conversations to discuss known risks and gaps; projections of future flooding	Rapid response team (social and water scientists)	Deploy instruments along coastal to collect data on the event	••••	3	2	2	7
1	Lisa G.	A. Valkanos, S. Couture, P. Kinner, L. Williams, A. Lyon, B. Newhall, K. Reed, E. Chapman	Emergency management, access, evacuation with flooding/sea-level rise/storms	Regional analysis, develop alternatives	Funding; communication	State DOT, regional, municipal, FEMA, Homeland Security		••••	0	1	4	5
5	Sherry G.	A. Watts, S. Bird, P. Stacey, A. Eberhardt, A. Laferriere, T. Mattera, C. Wake, M. Wengrove	Water Supply	Relative threats and tradeoffs; supply + demand; contributing watershed	Develop a resilience portfolio between surface and groundwater	Municipal water departments; hydrologists; consulting engineers	Limited municipal personnel (universal in all 3 topics)	••••		2	3	5
2	Nathalie M.	P. Britz, L. Hansen, J. LaBranche, S. Miller, B. Zeiber, V. Levesque, L. Burakowski	Groundwater rise with sea-level rise	Water table position (e.g., depth to water, water-table elevation); location of emergent wetlands	Maps showing estimated depth-to-water, water-table elevation, and emergent wetlands	UCIRC researchers, NHFG/GBNERR, NHDES, interested municipal officials/employees		••••	0	0	4	4
2	Nathalie M.	P. Britz, L. Hansen, J. LaBranche, S. Miller, B. Zeiber, V. Levesque, L. Burakowski	Saltwater intrusion	Quantify the extent and rate of saltwater intrusion; groundwater and drinking water quality monitoring data; control options	Maps/visualization of affected drinking/groundwater sources		Impacts to drinking water quality/quantity; ecosystem impacts; distribution of freshwater wetlands	••••	0	4	0	4

Finding Common Ground: Prioritizing Research to Meet Local Needs Breakout Group Notes - Compiled



Table	Facilitator	Team Members	Topic	Information Need	Assistance Need	Who needs to be involved?	Notes	Votes	Researchers	Municipal	CAW	Total
4	Amanda S.	M. Lynch, R. Stephenson, C. Riley, D. Wiggin, T. Mallette, T. Ballestero, D. Foster	Extreme Events	Total Water Level; quantify extreme events (water quality; flooding; civil infrastructure; changes in natural resources ecosystems); resolve heterogeneity (spatial and temporal) of coastal elements - relevance for other places	Develop and use visualizations; define what an extreme weather event is; topography/digital elevation models; how to use information about extreme weather events	Researchers; designers; municipals; emergency management; Red Cross	Use existing FEMA data; policy gap - no reward for bad behavior, e.g., rebuilding in flood prone areas after repetitive loss; existing science	•••	1		2	3
2	Nathalie M.	P. Britz, L. Hansen, J. LaBranche, S. Miller, B. Zeiber, V. Levesque, L. Burakowski	Social vulnerability	Identification of vulnerable populations	Guidance for incorporating social vulnerability information into local planning			••	1	0	1	2
2	Nathalie M.	P. Britz, L. Hansen, J. LaBranche, S. Miller, B. Zeiber, V. Levesque, L. Burakowski	Economics of Climate Change	Impacts to key economic sectors; alternative livelihood/industry opportunities/labor mobility analysis for coastal communities			Example: how do we help vulnerable fisheries/fishing communities adapt to climate change impacts?	••	1	1	0	2
3	Julia P.	A. Boudreau, N. Spencer Smith, K. Howard, J. Gilbert, W. Wollheim, J. Houle			Articulating VALUE of conserved land for climate change resilience reasons							
3	Julia P.	A. Boudreau, N. Spencer Smith, K. Howard, J. Gilbert, W. Wollheim, J. Houle			Communicating and framing complex issues without being overwhelmed by uncertainties and overlapping issues		Focus on co-benefits; focus on what's do-able; does climate change increase urgency? What's do-able within short and long terms?					